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Study on conscientiousness, academic self-efficacy and self-esteem predictive power on academic procrastination among counselling students

Ibiam Dike, & Stephen Oluwaseun Emmanuel¹⁾
Adeyemi College of Education, Ondo, Nigeria

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Correspondence regarding this article should be addressed to:

Stephen Oluwaseun Emmanuel. Department of Educational Foundations and Counselling, Adeyemi College of Education, Ondo, Nigeria, E-Mail: emmanuelstephen977@gmail.com

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Original Article

Study on conscientiousness, academic self-efficacy and self-esteem predictive power on academic procrastination among counselling students


Ibiam Dike, & Stephen Oluwaseun Emmanuel*

Adeyemi College of Education, Ondo, Nigeria

Abstract. The purpose of this study is to investigate the predictive effect of Conscientiousness, Academic Self-Efficacy and Self-Esteem on Academic Procrastination among Counselling Students. Three hundred students studying Counselling in a College of Education in Nigeria, West Africa were selected through the simple random method and completed the measures of Conscientiousness, Academic Self-efficacy, Self-esteem, and Academic Procrastination. The result from the correlation matrix and hierarchical regression model shows that academic procrastination behavior of students is explained by conscientiousness, academic self-efficacy, and self-esteem. It was also shown from the model that all the predictor variables contributed 54% of the total variance in academic procrastination among counselling students. Research results are discussed in the light of related literature and practicable recommendations were provided.

Keywords: Conscientiousness; academic self-efficacy; self-esteem; academic procrastination; counselling students; college students

Corresponding author: **Stephen Oluwaseun Emmanuel**. Department of Educational Foundations and Counselling, Adeyemi College of Education, Ondo, Nigeria, E-Mail: emmanuelstephen977@gmail.com

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Introduction

Recently, the rate of academic failure has been on the increase among university students. Procrastination is unarguably one of the reasons for academic failures among students at all levels of academic learning. There are two basic structures which procrastination types can be grouped into; personality trait and conditional. Academic procrastination can be classified as conditional. Academic procrastination is a common phenomenon among high school and college-level students (Agokei, Ogudu, & Emmanuel, 2019). It is known that academic procrastination behavior is the most common type of procrastination (Balkis & Duru, 2009). As a result of the effect of academic procrastination among students, research has been undertaken to recognize the factors that cause and maintain this problematic behavior (Rabin, Fogel, & Nutter-Upham, 2011).

The concept of procrastination like many other constructs is challenged with having a generally acceptable definition by scholars. Therefore, researchers have not reached a consensus on the definition of procrastination. However, Steel (2007) recommends that all conceptualizations of procrastination must involve postponement, delay, or putting off tasks or decisions. Therefore, parallel to this recommendation, Ferrari, Johnson, and McCown (1995)

and Steel (2007) proposed the definition of procrastination as the Intentional delay in doing something. This recommendation holds true for academic procrastination also. Kandemir, İlhan, Özpolat, and Palancı (2014) observed that all of the definitions about academic procrastination emphasize delaying academic duties and related negative results. According to Ferrari et al. (1995) procrastination behavior is the behavior of avoiding academic duties which result in student academic failure. F. M. Sirois and Pychyl (2002), argue academic procrastination is about high stress and avoidance strategies. According to Tice and Baumeister (1985) making academic procrastination is escaping from a stress resource for a specific time period. Burns, Dittmann, Nguyen, and Mitchelson (2000) state that students who want to cope with academic duties that include stress factor make academic procrastination by using avoidant coping strategy. Senecal, Koestner, and Vallerand (1995) define academic procrastination as; staying out of academic duties until stress level increases to high level as these duties aren't completed in time.

Literature reveals that the predictors of academic procrastination behavior include; personality variables and individual differences along self-esteem, self-efficacy, perfectionism, and neuroticism (Klassen, Krawchuk, & Rajani, 2008; Van Eerde, 2003), including motivational factors, goals, and planning skills (Dietz, Hofer, & Fries, 2007; Howell, Watson, Powell, & Buro, 2006); distress related to the accomplishment of task, irrational thoughts, inability to concentrate, fear of failure, poor time management skills, poor problem-solving skills, working habits (Alexander & Onwuegbuzie, 2007; Watson, 2001) including difficulty of works in lack of knowledge and skills needed, poor stress coping skill, low time planning skill (Milgram, Marshevsky, & Sadeh, 1995). From the foregoing, it is observed that the reasons provided by researchers seem contradictory. This may be because their findings are based on the research conducted from the different population using different methods. Academic procrastination is a common phenomenon among university students have been found to produce certain unpleasant results; such as failure, anxiety, failing the course, not going to school (Kandemir et al., 2014); not attending the school and dropping out, having academic failure (Knaus, 1998); falling behind in the class (Rothblum, Solomon, & Murakami, 1986). Furthermore, Steel (2007) pointed out that procrastination affects the self-efficacy, distractibility, impulsiveness, self-control, and organizational behavior of the students.

Extant literature shows that personality traits have a significant relationship with procrastination behavior (Costa Jr & McCrae, 1994). Two main personality traits-neuroticism and conscientiousness are strongly linked to procrastination (Johnson & Bloom, 1995; Schouwenburg & Lay, 1995). This study examines the predictive strength of conscientiousness on academic procrastination behavior. Conscientiousness has to do with the will to achieve, self-control, persistence, and dependability (Karatas, 2015). Conscientiousness factor has consistently proven to have a positive effect on the academic achievement of students. It means that students, who are dutiful and lead an organized life, excel in their academics. These results are consistent with prior work (Martey & Aborakwa-Larbi, 2016).

Existing literature reveals that conscientiousness has a strong inverse relationship with trait procrastination (Costa Jr & McCrae, 1994; Johnson & Bloom, 1995; Scher & Osterman, 2002; Schouwenburg & Lay, 1995). As demonstrated in Johnson and Bloom (1995) research, all conscientiousness facets are found to be inversely related to procrastination, with self-discipline being the strongest predictor. Complementary to this, a study by Laverdière, Morin, and St-Hilaire (2013) revealed that trait procrastination is highly negatively related to conscientiousness. Conceptually, procrastination is strongly related to conscientiousness, which itself is consistently linked to better performance (Barrick & Mount, 2003; Hurtz & Donovan, 2000). Consequently, procrastinators should tend to be worse off in terms of both how they feel and what they achieve (Steel, 2007). To elaborate, structural equation modelling analysis by Lee, Kelly, and Edwards (2006) showed that neuroticism has no direct links to procrastination and that any relationship is fully mediated by conscientiousness.

Foundational to this is a recent study by [Agokei et al. \(2019\)](#) that confirmed conscientiousness to have a significant positive relationship with entrepreneurial self-efficacy. Conscientiousness is positively correlated to self-efficacy. Academic self-efficacy is defined as the belief of students that they can be successful in academic duties ([Bandura, 1997](#)). As explained by [Fuschia M. Sirois \(2004\)](#), academic self-efficacy is the perception of a student about his/her abilities and aspects that direct him/her to the way of success. In the same way, [Farran \(2004\)](#) confirmed that students' belief in their abilities and talents will contribute to preventing academic procrastination behavior.

Over time, academic self-efficacy consistently recording an inverse relationship with academic procrastination has been a trend in the literature ([Steel, 2007](#); [Wolters, 2003](#)). To elucidate on this, a study by [Ocal \(2016\)](#) found a significant inverse relationship between academic self-efficacy and procrastination. Prior to this, a meta-analysis study by [Van Eerde \(2003\)](#) about academic procrastination confirmed that self-efficacy belief affects procrastination behavior negatively. Similarly, research by [Klassen et al. \(2008\)](#) found that there is a negative correlation between the increase in self-efficacy belief and academic procrastination. These findings further confirm the reverse relationship between the academic self-efficacy of learners and their tendency to engage in procrastination behavior. Then again, [Chow \(2011\)](#) study on 288 university students, using the regression model found that students' self-efficacy belief negatively explains academic procrastination. Subsequently, A study by [Hajloo \(2014\)](#) showed that Self-Efficacy weakly mediated the relationship between Self-Esteem and academic procrastination. To sum up, [Kandemir et al. \(2014\)](#) research found academic self-efficacy to explain academic procrastination behavior at -.11 level in total.

A look at the relationship between self-esteem and academic procrastination. Self-esteem, which is defined as perceiving oneself as talented, important, successful and valuable, is a variable that has a negative relation to procrastination behavior, the negative correlation is assumed to be between self-esteem and academic procrastination ([Van Eerde, 2003](#)) Data from several studies indicate a relationship between self-esteem and academic procrastination ([Pahlavani, Nezhad, & Nezhad, 2015](#)). Procrastinators probably suffer from low self-esteem and they lack the ability to achieve success in their works, so this belief leads to the delay in carrying out their works ([Ferrari & Emmons, 1995](#)). For instance, in a meta-analysis study by [Van Eerde \(2003\)](#), it was found that when students give more importance to themselves, academic procrastination behavior decreases. Just as self-esteem significantly predicts academic procrastination among learners, a pattern of procrastination behavior will also invariably affect the self-esteem of the individuals who make a practice of it. [Kandemir et al. \(2014\)](#) explains that when students delay academic duties such as preparing for exam or doing homework, they may have some negative results which may decrease self-esteem. This is why; it is possible to decrease academic procrastination behavior in order to prevent negative results and decrease of self-esteem. Correspondingly, according to the research results by [Ferrari \(1991\)](#) individuals who have strong academic procrastination tendency have the tendency not to perceive or distort the experiences that may affect self-esteem in order to protect it.

The literature on academic procrastination has consistently found conscientiousness, self-efficacy and self-esteem to be significant predictors of academic procrastination behavior among college students. While some studies found a negative relationship ([Balkis & Duru, 2009](#); [Beheshtifar & Azadi, 2013](#)); and some records a positive relationship ([Pahlavani et al., 2015](#)) with academic procrastination behavior. However, there exists paucity of studies that were conducted to test the predictive effect of these variables among Counselling students in college. Consequently, this study is born out of the concern of the researchers as to how counselling students are found to be involved in academic procrastination.

This study aims to understand the factors that contribute to the Academic procrastination behavior of College students by exploring how variables such as, self-esteem, and self-efficacy predict Academic procrastination. The researchers anticipate that a better understanding of the relationship among these variables will have implications for the training modules for the

preparation of future Counsellors who are expected to apply their knowledge of Counselling to assist school students.

The main hypothesis on this research are: (1) H₀₁: There would be no direct relationship between the predictors and the criterion variables, (2) H₀₂: There would be no relative effect of the predictor variables on the criterion variables?, (3) H₀₃: Conscientiousness, self-efficacy and self-esteem (when taken as a set) would significantly predict academic procrastination behavior among college students, and; (4) H₀₄: Self-esteem would account for a significant amount of variance above and beyond conscientiousness and self-efficacy scores.

Method

Participants

The sample of the study comprised of a total of 300 college undergraduate students studying Guidance and Counselling of whom 204 are females (68%) while 96 are males (32%). Their ages range from 18 and 33years with a mean age of 22.8years, SD (3.04). The participants for this study were purposively selected. The participants selected for the study were counselling students in their penultimate and final year, who are also referred to as pre-practical trainee.

Instrumentation

The following standardized instruments were used for this study.

Conscientiousness Scale

The scale used is the sub-section of the NEO-PI scale developed by [Costa Jr and McCrae \(2008\)](#) and [Costa Jr and McCrae \(1994\)](#) to measuring conscientiousness. Was adopted to measure conscientiousness in this study. The section contains 10 items. The scale is developed in a 4-point Likert format ranging from strongly disagree to strongly agree. In this study, the reliability coefficients alpha of 0.871 was recorded for this scale and this demonstrates internal consistency.

Rosenberg self-esteem scale

The Rosenberg self-esteem scale developed by [Rosenberg \(1965\)](#). It is a 10-item scale that measures global self-worth by measuring both positive and negative feelings about the self. The scale is believed to be unidimensional. All items are answered using a 4-point Likert scale format ranging from strongly disagree to strongly agree. In the current study, the Cronbach-alpha reliability coefficient of the Rosenberg self-esteem scale was found to be 0.971.

Academic Self-efficacy

The Schwarzer's 10-items General Self-Efficacy (GSE) scale was used ([Luszczynska, Scholz, & Schwarzer, 2005](#); [Schwarzer, 1999](#); [Schwarzer & Scholz, 2000](#)). The GSE scale was created to assess a general sense of perceived self-efficacy with the aim in mind to predict coping with daily hassles as well as adaptation after experiencing all kinds of stressful life events. Responses are made on a 4-point scale (1 to 4). Summing the responses to all 10 items yields the final composite score with a range from 10 to 40. Higher scores on the scale indicated more levels of perceived general self-efficacy. Reliability coefficients were calculated for the self-efficacy scale ($\alpha = 0.972$) and demonstrate internal consistency.

Academic procrastination behavior

The Steel (2007) Academic procrastination scale was used in this research. The instrument consists of 7 important characteristics which are closely related to academic procrastination. This inventory includes 20 questions; each question includes 5 items using the Likert method that its range is grading from strongly disagree (1) to strongly agree (5). Cronbach Alpha level obtained from the inventory, in this research was reported as 0.812.

Procedures

The study adopted a descriptive survey research design. This research was approved by the institutional review board and ethics regarding researches involving human were followed. Informed consent was given to participants before completing the self-reported questionnaires.

Data Analysis

Prior to data analysis, we tested assumptions of normality. Skewness and kurtosis were used to assess the normality of the data so as to ensure normal distribution of scores. This is to ensure that all the data meet the assumptions necessary to complete the proposed analyses. The collected data were analyzed using Pearson Product Moment Correlation Coefficient and Hierarchical Multiple Regression Model. All the data were analyzed using SPSS 25 (Landau & Everitt, 2003; Wagner Iii, 2019).

Results

Table 1 showing the descriptive and correlation matrix of the four variables.

Variables	1	2	3	4
1. Conscientiousness	1	.484	.597	-.542
2. Self-efficacy	.484	1	.689	-.636
3. Self-esteem	.597	.689	1	-.685
4. Academic procrastination	-.542	-.636	-.685	1
Mean	2.74	2.59	2.52	2.49
Standard Deviation	.93	.92	.98	1.03

The results from table 1 showed that a significant but negative relationship exists between the predictor variables and the criterion variables. The table showed that there were significant correlations between academic procrastination and conscientiousness ($r = -.542$, $p < 0.05$), academic procrastination and self-efficacy ($r = -.636$, $p < 0.05$), academic procrastination and self-esteem ($r = -.685$, $p < 0.05$). The table showed that there exists a correlation among the four variables with self-efficacy and self-esteem recording the strongest relationship at .689.

From the model 1, showing the effect of conscientiousness to the prediction of academic procrastination among the students. $R^2 = .29$ (from the model summary) ANOVA results for model 1 shows that $F_{(1,298)} = 124.01$, $p < .005$. It can be concluded from this model that Conscientiousness is a significant predictor of academic procrastination behavior. From the model 2, describing the combined effect of two predictor variables when self-efficacy was added to the model. The result, R^2 of 0.48, $F_{(2,297)} = 134.87$, $p < 0.05$ showed that conscientiousness and

self-efficacy were significant predictors of academic procrastination behavior of Counselling students.

Table 2. Summary of Hierarchical Regression Analysis for Variables Predicting Academic procrastination behavior among College Counselling Students.

	b	SE b	β	R²	F
Step 1				.29	124.01
Conscientiousness	-.60	.054	-.54		
Step 2				.48	134.87
Conscientiousness	-.34	.05	-.31		
Self-efficacy	-.55	.05	-.49		
Step 3				.54	115.64
Conscientiousness	-.19	.06	-.17		
Self-efficacy	-.32	.06	-.29		
Self-esteem	-.40	.06	-.38		

On the joint contribution of all the predictor variables (conscientiousness, self-efficacy and self-esteem) to the prediction of academic procrastination among Counselling students, results from Table 2 indicates that all the predictor variables when pulled together yield a multiple regression R^2 of 0.54 $F_{(3,296)} = 115.64, p > 0.05$). This is an indication that all the predictor variables contributed to 54% of the total variance in academic procrastination among counselling students. It can be seen from model 3 that conscientiousness, self-efficacy and self-esteem when taken together as a group, are significant predictors of academic procrastination behavior among college Counselling students.

Discussion

This study examined the predictive effect of conscientiousness, self-efficacy and self-esteem on the academic procrastination behavior of Counselling students. The result from the study revealed that all the independent variables were significant predictors of academic procrastination among the students. The result of the study showed that a significant negative relationship existed between conscientiousness and procrastination. This finding is consistent with previous studies in the literature (Johnson & Bloom, 1995; Laverdière et al., 2013; Scher & Osterman, 2002; Schouwenburg & Lay, 1995; Watson, 2001). More recently, Karatas (2015) found that there is a significant negative correlation between academic procrastination and conscientiousness ($r = -.28, p < .01$).

The study also revealed that a significant negative relationship exists between academic self-efficacy and academic procrastination. The findings of this research gained support from the previous researchers (Steel, 2007; Wolters, 2003) reports that a relationship exists between self-efficacy beliefs and academic procrastination. Similarly, In the research by (Klassen et al., 2008) stated negative relation between the increase in self-efficacy belief and academic procrastination was found. Furthermore, Van Eerde (2003) in a meta-analytic study about academic procrastination, found self-efficacy beliefs to affect academic procrastination behavior negatively. Chow (2011) study on 288 university students, using the regression model found that students' self-efficacy belief negatively explains academic procrastination. The findings of this study as revealed in the correlation matrix in table one show that the strongest relationship existed between self-efficacy and self-esteem. This result is supported by the findings of Pahlavani et al. (2015), in prior research conducted by Caprara, Alessandri, Barbaranelli, and

Vecchione (2013), they concluded that self-esteem was the predictor for levels of self-efficacy in managing negative emotions and expression of positive emotions.

The findings of the study as revealed in the regression model explained that self-esteem measures recorded the most potent impact on the academic procrastination of the students. This result gained support from the works of previous researchers. As far back as 1984, Vasconsloz had conducted research to assess perfectionism and self-esteem as a basis for academic procrastination and concluded that there was a meaningful relationship between self-esteem, perfectionism and academic procrastination. Although, Vasconsloz result did not explain if the relationship was negative or positive (Pahlavani et al., 2015). The study by Balkis and Duru (2009) found that there is a negative and meaningful relation between self-esteem and academic procrastination. This result was equally supported by Beheshtifar and Azadi (2013) who found that there is a meaningful and negative relation between students' organization-based self-esteem and procrastination. Their results showed that people who displayed a high level of academic procrastination are more likely to report high perfectionism and low self-esteem.

Consistent to this, is the findings by Pahlavani et al. (2015) which showed that there was a negative and meaningful correlation between self-esteem overall scores with self-control, organizing, progress and academic procrastination overall scores and high self-esteem led to delay in preparing for the examination, which is a form of academic procrastination behavior. Essentially, the findings of these studies apprise that students' self-esteem levels is very important in their academic life. More importantly, among Counselling students who are thought to be better informed on the psychological issues. Since the relationship is a negative relationship, the higher the self-esteem levels, the lower the academic procrastination behavior. Which is expected to culminate in an outstanding academic performance.

Recommendation

Low self-esteem scores among students can weaken their academic self-efficacy belief which may result in academic procrastination. It is assumed that frequent academic procrastination may result in the poor academic record which may portend a further decrease in their self-esteem which might result in future academic pressure for the students. Therefore, it is recommended that procrastinators' level of self-esteem, self-efficacy and personality type should be evaluated in an attempt to assist them to overcome procrastination tendencies. It is expected that assisting students, (especially counselling students who are the focus of this study) reinforce their self-efficacy and building their self-esteem may lower procrastinating tendencies. Nevertheless, the authors posit based on the findings of this study; a comprehensive approach to dealing with academic procrastination among counselling students and ultimately college students will involve addressing the psychological as well as the social predictors of academic procrastination behavior.

Limitation/Suggestion for future findings

1. The independent variables in this study are limited to self-efficacy and self-esteem. Future studies on factors that predict academic procrastination are recommended in their study. Other variables; for example, demographic variables are suggested to be assessed in future studies to see the relative strength of these variables in predicting academic procrastination.
2. In order to see the real effects of independent variables on academic procrastination, experimental and longitudinal researches are necessary. This is why one should be careful while analyzing results. On the other hand, in order to understand the reasons for students' academic procrastination behaviors better, some qualitative studies, such as interviews, can be carried out.
3. This study is conducted on college students who were studying counselling. Therefore, the results of this study cannot be generalized to other population.

4. The social desirability factor and the issue of common method variance is a possibility in this study following the fact that this study utilized self-reported questionnaires for its data collection.

Conclusion

This study provided more explanation on the relationship of Conscientiousness, academic self-efficacy, self-esteem and Academic Procrastination behavior among Counselling Students. This study is unique in the choice of predictor variables and the participants to study. The study has implications for, Counsellors, educational psychologists, and lecturers that personality trait of students, especially conscientiousness, academic self-efficacy and self-esteem of students play a critical role in curbing their academic procrastination behavior which invariably helps them to complete their assignments, prepare for tests and examination without delay in order to secure good grades. The author hopes that the findings of this study will be used to address procrastination issues among students and more importantly, prepare pre-practical trainees for their work as a professional Counsellor.

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