

Personality Types A and B and Undergraduate Students' Academic Procrastination at the University of Abuja, Nigeria

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Abstract: This study investigated the influence of Personality Types A and B on academic procrastination among undergraduate students of the University of Abuja, Nigeria. A correlational research design was adopted for the study. The population comprised all undergraduate students of the University of Abuja, from which a sample of 586 students were selected using a multistage sampling technique. Data were collected using two adapted instruments: the Personality Type A and B Questionnaire and the Academic Procrastination Scale. Descriptive statistics (mean, standard deviation, frequency, and percentage) were used to answer the research questions, while inferential statistics (Pearson Product Moment Correlation, independent samples t-test, and one-way ANOVA) were employed to test the null hypotheses at the 0.05 level of significance. Findings revealed that a higher proportion of the students exhibited Type A personality (59.6%) compared to Type B (40.4%). The results further indicated that undergraduate students demonstrated a moderate level of academic procrastination (grand mean = 2.65). A significant positive relationship was found between personality types and academic procrastination ($r = .829, p < .05$). However, no significant differences were observed in personality types and academic procrastination on the basis of gender. With respect to geopolitical zones, a significant difference was found in personality types, while no significant difference was observed in academic procrastination. The study concludes that personality types play a significant role in understanding academic procrastination among undergraduates. It was recommended, among others, that universities provide personality-sensitive counselling and time-management interventions to help reduce maladaptive procrastination behaviours among students.

Keywords: Relationship, Personality Types, Academic Procrastination, Undergraduate.

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I. INTRODUCTION

Personality is a central construct in educational psychology due to its significant influence on students' academic behaviours and outcomes. Individuals differ in their thoughts, emotions, motivations, and behavioural responses, and these differences largely explain why students react differently to similar academic situations. Such variations in response are closely tied to personality, which represents relatively enduring patterns of thinking, feeling, and behaving that shape how individuals engage with their environment (McAdams & Pauls, 2016; John, Robins, & Pervin, 2019). Understanding personality therefore provides a framework for explaining individual differences in learning, motivation, and academic success.

Personality has been conceptualised by psychologists as a consistent pattern of behaviours, traits, and characteristics that distinguish one individual from another. These traits include attributes such as sociability, dominance, achievement orientation, emotional stability, and conscientiousness, all of which are relevant to academic functioning (Seema et al., 2009; McCrae & Costa, 2018). Cross-cultural perspectives further emphasise that while humans share universal characteristics, each individual also possesses unique personality features shaped by cultural, social, and developmental contexts (Bruner, Oliver, & Greenfield, 1996; John et al., 2019). In educational settings, such personality differences are particularly evident and have been found to relate significantly to students' academic engagement, persistence, and performance.

Personality is often described as the totality of qualities that define who a person is, integrating biological predispositions with social experiences, culture, and environmental influences. It reflects stable characteristics that show continuity over time and across situations, rather than momentary reactions to immediate pressures (Barens, 1999; Larsen & Buss, 2021). These enduring characteristics influence cognitive processes, emotional regulation, motivation, and social behaviour, all of which are critical to learning and academic adjustment (Mayer, 2005; John et al., 2019). Consequently, educational psychologists have long been interested in how personality traits and types contribute to academic performance and learning behaviours.

One prominent approach to understanding personality in educational contexts is the classification of individuals into personality types. Personality type refers to the psychological categorisation of individuals based on shared behavioural and emotional characteristics (Nuhu, 2009). This typological approach has been widely applied in education, counselling, and career development because it simplifies complex personality differences into meaningful patterns that can guide instructional planning and learner support (Olowonirejuaro, 2007; Larsen & Buss, 2021). Among the various typologies, the Type A and Type B personality classification remains one of the most widely discussed.

Type A individuals are typically characterised as competitive, time-urgent, achievement-oriented, impatient, and highly driven, whereas Type B individuals are generally more relaxed, calm, patient, and less pressured by deadlines (Friedman & Rosenman, 1974; Melgosa, 1996; Anna, 2018). Although these categories represent dominant behavioural tendencies, research suggests that individuals may exhibit features of both types to varying degrees rather than fitting rigidly into one category (John et al., 2019). Nonetheless, the Type A–Type B framework remains useful for examining behavioural differences relevant to academic settings, particularly in relation to time management and task completion.

Academic procrastination has emerged as a major concern in higher education institutions globally. It refers to the irrational and unnecessary delay of academic tasks despite awareness of potential negative consequences (Steel, 2007; Kim & Seo, 2015). Procrastination among undergraduate students has been associated with poor academic performance, heightened stress, low self-esteem, anxiety, and depression (Sirois & Pychyl, 2016; Wäschle et al., 2019). Given its prevalence and detrimental effects, academic procrastination is increasingly viewed as a serious educational and psychological problem rather than a trivial habit.

Gender has also been examined as a variable influencing academic procrastination, but findings remain inconsistent. While some studies report that male students procrastinate more than females, others suggest the opposite, and several studies indicate no significant gender differences (Steel, 2007; Balkis & Duru, 2009; Kim & Seo, 2015).

These inconsistencies suggest that gender effects may be context-dependent and mediated by other factors such as personality and motivation.

Research exploring the relationship between personality types and procrastination has also produced mixed results. Although Type A individuals are generally assumed to procrastinate less due to their achievement-driven and time-conscious nature, empirical findings indicate that Type A students may still engage in academic procrastination, possibly due to stress, perfectionism, and fear of failure (Arsalan, 2009; Sirois & Pychyl, 2016). Conversely, some studies suggest that Type B students may procrastinate less due to their lower stress levels and more adaptive coping strategies.

Against this backdrop of inconsistent findings, there is a need for further empirical investigation into the relationship between personality types and academic procrastination, particularly within the Nigerian context. Therefore, this study examines the influence of Personality Types A and B on academic procrastination among undergraduate students in the university of Abuja, Nigeria.

➤ *Statement of the Problem*

Academic procrastination is seen as a problem of great concern to students, psychologists and school administrators especially, at the higher institutions of learning. Students' irrational delay of academic tasks until the last minutes or hours to the examination or tests has resulted in great consequences such as lack of self-efficacy, self-esteem, wasting of time, increased stress, lower grades, poor health and eventually drop out of school due to excessive procrastination and academic failure. It is a chronic problem in education which calls for possible way forward.

Personality types are important variables psychologists used to determine individual differences among learners in their behaviour patterns most importantly in academic settings. These different patterns of behaviours comprised types A and B. It is against this background that the researcher intends to critically examine undergraduate students procrastination in their academic tasks and suggest possible ways of curbing this behavioural problem.

➤ *Objectives of the Study*

This study primary goal is to investigate the connection between undergraduate students' academic procrastination at the University of Abuja in Nigeria and personality types A and B. In particular, this research would look at the:

- University of Abuja undergraduate students' personality types.
- University of Abuja undergraduate students' extent of academic procrastination.
- The connection between personality types and University of Abuja undergraduate students' academic procrastination.
- Gender differences in personality types and academic procrastination.

- Variations in personality types and academic procrastination according to geographical zones.

➤ *Research Questions*

To direct the investigation, the following research questions were put forth. They are:

- What kind of personality do University of Abuja undergraduate students have?
- How much do University of Abuja undergraduate students put off their academic work?
- How do personality types and academic procrastination relate to each other among University of Abuja undergraduate students?
- Do personality types and academic procrastination differ significantly based on gender?
- Does the geopolitical zone significantly affect the personality types and academic procrastination of undergraduate students at the University of Abuja, Nigeria?

➤ *Null Hypotheses*

This study would test the following null hypotheses:

- University of Abuja Nigeria undergraduate students' academic procrastination and personality types do not significantly correlate.
- Personality types and academic procrastination among undergraduate students at the University of Abuja, Nigeria, do not significantly differ based on gender.
- Based on geopolitical zones, there is no discernible difference between personality types and academic procrastination among undergraduate students at the University of Abuja, Nigeria.

II. METHODOLOGY

A correlational design was used in the study. The direction and magnitude of relationships between two or more variables are the focus of correlational research. Because it would allow the researcher to appropriately and accurately interpret the variables of interest and their interrelationships, this approach is deemed suitable for the study.

All University of Abuja undergraduate students make up the study's population. The number of students in the 104 departments and 17 faculties varies. Excluding postgraduate students, there are 45364 undergraduate students (University Data Center).

For this investigation, a multistage sampling technique was used. This is consistent with Sambo's (2013) theory that

a multistage approach is the most effective method a researcher can use when a population comprises two or more clusters. Purposive random sampling was used in the first step to choose five departments and faculties from the university's faculties. Science, Social Science, Management Science, Education, and Clinical Sciences were the faculties. In the second phase, 200L students from these departments are sampled; 586 students are chosen for the study using a proportionate and stratified sampling technique.

Alao's (1989) modified personality type A and B questionnaire, which had 65 items, served as the study's instrument. The four main components of the type A and B pattern—achievement striving, aggressiveness/hostility and impatience, competitiveness, and a sense of time urgency—were represented by the 29 items on this instrument, which was modified by Abidoye in 2011. Using the test-retest method, Abidoye obtained a reliability coefficient index of 0.84. There are two sections to this instrument. Section B contained twenty-nine items to elicit responses from the respondents and were rated on a four-point Likert scale: A} always true of me (4), B} sometimes true of me (3), C} rarely true of me (2), and D} never true of me (1). Section A contained the respondents' demographic information. The mean scores of the respondents were used to determine their personality types. Using SPSS, individuals with mean scores of 2.50 or higher were categorized as Type A, and those with mean scores below 2.50 were categorized as Type B.

The Academic Procrastination Scale, created by Lay (1986), was the second tool that would be modified and used in this investigation. The 30 items in the instrument were split into two sections: section B included the 30 items used to elicit responses from the respondents, while section A contained the respondents' demographic information. Several authors, including Lay (1987, 1988; Kusyszyn, 1990; Ferrari, 1989), have determined the instrument's validity and reliability. It was scored as follows: A = always 5, B = frequently 4, C = occasionally 3, D = infrequently 2, and E = never 1.

III. RESULTS

➤ *Research Question One:*

What kind of personality do University of Abuja undergraduate students have? Frequency counts and percentage were used to answer this particular question. Respondents' personality types were determined by computing their mean scores. The ones with mean scores of 2.50 and above were classified as Type A, while those with mean scores below 2.50 were classified as Type B using SPSS Software.

Table 1 Students' Personality in the University of Abuja

Personality Types	Frequency	Percentage %
Type A	349	59.6%
Type B	237	40.4%
Total	586	100

The distribution of respondents by personality type is displayed in Table 1. It is evident from the table that students with type A personalities outnumber those with type B personalities. For personality type A, there were 349 respondents, or 59.6%, whereas for personality type B, there were 237 respondents, or 40.4%.

➤ *Research Question Two:*

How much do University of Abuja undergraduate students procrastinate in their academic work?

Table 2 Level of Procrastination Among Undergraduate Students

S/N	Statement	Mean	S.D	Decision
1	I often find myself performing tasks that I had intended to do days before.	2.90	0.87	Sometimes
2	When it is time to get up in the morning, I most often get right out of bed.	3.00	0.78	Sometimes
3	An assignment may sit for days after I write it before submitting it.	2.82	0.90	Sometimes
4	I generally return phone calls promptly.	2.62	0.94	Sometimes
5	Even with assignments that require little else except sitting down and doing them, I find they seldom get done for days.	2.92	0.82	Sometimes
6	I usually make academic decisions as soon as possible.	3.16	0.82	Sometimes
7	I generally delay before starting on work I have to do	2.95	1.55	Sometimes
8	I usually forget to prepare things for studying.	2.84	1.02	Sometimes
9	In preparing for some deadlines, I often waste time by doing other things	2.88	1.00	Sometimes
10	I often have a task finished sooner than necessary.	2.60	1.02	Sometimes
11	I always seems to end up shopping for birthday at the last minute.	2.55	1.01	Sometimes
12	I usually buy even an essential item for study at the last minute.	2.57	0.86	Sometimes
13	I usually accomplish all the things I plan to do in a day	2.18	1.03	Rarely
14	I am continually saying "I will do it tomorrow"	3.27	0.79	Sometimes
15	I usually take care of all the tasks I have to do before I settle down and relax for the evening	2.57	0.94	Sometimes
16	I put things off so long that my wellbeing or efficiency unnecessarily suffers	3.12	0.94	Sometimes
17	I delay tasks beyond what is reasonable	2.91	1.03	Sometimes
18	When I should be doing one thing, I will do another	1.74	0.94	Rarely
19	At the end of the day, I know I could have spent the time better	2.14	0.99	Rarely
20	My life would be better if I do some activities tasks earlier	1.80	0.89	Rarely
21	I work better under pressure	2.67	1.00	Sometimes
22	I am just waiting for the best time to do it	2.63	0.87	Sometimes
23	I am not in the mood to study	2.38	1.06	Rarely
24	I know I can pull this study out at the last minute	3.16	0.83	Sometimes
25	I put off the completion of a task	2.66	0.94	Sometimes
26	I give up study because I don't feel well	3.11	0.94	Sometimes
27	I have no energy to study	2.92	0.98	Sometimes
28	I think that I have enough time left so that I don't need to start studying	2.04	1.09	Rarely
29	I study early in order to do more pleasant things	2.33	1.02	Rarely
30	I engage in so many other things that there is insufficient time left for studying.	2.04	0.99	Rarely
	Grand Mean/S.D/Decision	2.65		Sometimes

The degree of procrastination among University of Abuja undergraduate students is displayed in Table 2 according to student ratings. The grand mean score of 2.65 on the procrastination scale indicates a moderate level of procrastination among the respondents, indicating that they occasionally engage in behaviors related to procrastination, according to the item means.

➤ *H01:*

University of Abuja Nigeria undergraduate students' academic procrastination and personality types do not significantly correlate.

Table 3 Result of Correlation Test Between Personality Types and Procrastination

Variables	N	r--cal	Sig. (2 tailed)	Decision
Personality Types (A&B) and Academic Procrastination	586	.829	<.001	Significant

The correlational results between personality types (A and B) and academic procrastination among students at the University of Abuja, Nigeria, are displayed in Table 3. The null hypothesis is rejected with a significant value of .001

(less than .05). It is determined that students' academic procrastination and personality types (A and B) are significantly correlated. An increase in one variable is

correlated with an increase in the other because the relationship is positive and significant.

➤ *HO2:*

Personality types and academic procrastination among undergraduate students at the University of Abuja, Nigeria, do not significantly differ based on gender.

Table 4 T-Test on Gender Difference in Personality Types and Procrastination

Variables	Gender	N	Mean	S.D	t-value	df	Sig (2 tailed)	Decision
Personality Types A and B	Male	293	2.66	0.67	1.56	248	.121	Not Significant
	Female	293	2.56	0.66				
Academic Procrastination	Male	293	2.68	0.44	1.19	248	.243	Not Significant
	Female	293	2.62	0.44				

The purpose of the analysis in Table 4 was to determine whether personality types and academic procrastination differed significantly between male and female students. There is no significant difference, as indicated by significant values of .121 and .243 (above the .05 level of significance). As a result, the hypothesis is approved. This suggests that undergraduate students' personality types and academic procrastination do not significantly differ based on their gender; that is, students' academic

procrastination and personality types are independent of their gender.

➤ *HO3:*

Based on geopolitical zones, there is no discernible difference between personality types and academic procrastination among undergraduate students at the University of Abuja, Nigeria.

Table 5 One-Way ANOVA for the Difference in Personality Types and Academic Procrastination Due to Geo-Political Zones

Variables	Geo Pol. Zones	Sum of Squares	df	Mean Squares	F	Sig.	Decision
Personality Types A and B	BetweenGroups	5.144	5	1.029	2.352	.041	Significant
	Within Groups	106.705	580	.437			
	Total	111.849	585				
Academic Procrastination	BetweenGroups	1.493	5	.299	1.541	.178	Not Significant
	Within Groups	47.268	580	.194			
	Total	48.761	585				

The aforementioned analysis was done to determine whether students' academic procrastination and personality behaviors (A and B) differed significantly based on their geopolitical zones or regions of origin. A significant difference in personality behavior is indicated by a significant value of .041, which is less than the significance level of .05. This implies that the geopolitical zones from which students originate have an impact on their personality behaviors. As a result, the hypothesis is disproved. This suggests that personality traits, particularly types A and B, are influenced by geopolitical zones; in other words, students' personality traits are influenced by the regions or zones in which they live.

University of Abuja possess Type A personality compared to Type B. Specifically, 59.6% of the respondents were classified as Type A, while 40.4% were Type B. This suggests that most students in the University of Abuja exhibit characteristics such as competitiveness, time urgency, impatience, achievement striving, and high task involvement.

There is no significant difference in academic procrastination, as indicated by a significant value of .178, which is greater than the .05 level of significance. As a result, the hypothesis is approved. This suggests that students' regions or zones have no discernible impact on academic procrastination. This suggests that regardless of their zone of origin, students have a tendency to procrastinate.

This finding aligns with the nature of university academic environments, which are typically competitive and deadline-driven. Undergraduate students are often exposed to academic pressure, continuous assessments, examinations, and performance comparisons, which may encourage or reinforce Type A behavioural tendencies. This result supports the position of Friedman and Rosenman (1974), who noted that Type A behaviour patterns are common among individuals operating in high-demand and achievement-oriented environments. Similarly, Nuhu (2009) observed that academic settings tend to attract or cultivate personality traits associated with urgency and competitiveness.

IV. DISCUSSION OF FINDINGS

This study examined the influence of personality types A and B on academic procrastination among undergraduate students of the University of Abuja. The first major finding in this study is the determination of the personality Types of Undergraduate Students. The findings of the study revealed that a greater proportion of undergraduate students in the

The second major finding is the extent of academic procrastination among undergraduate students. The results on academic procrastination indicated a moderate level of procrastination among undergraduate students of the University of Abuja. The grand mean score of approximately 2.65 falls within the "sometimes" category on the Likert scale used, suggesting that procrastination is neither minimal nor extreme but a fairly common academic behaviour among students. Several items in the scale

revealed frequent delays in starting or completing academic tasks, postponement of studying, reliance on last-minute efforts, and feelings of inefficiency resulting from delayed action. This finding confirms that academic procrastination remains a prevalent issue in Nigerian universities, consistent with earlier studies by Lay (1986), Ferrari (1989), and Critchfield and Collins (2011), who reported that procrastination is widespread among tertiary-level students globally. The moderate level of procrastination observed may be attributed to factors such as academic workload, poor time management skills, stress, lack of motivation, and competing social or economic demands, which are common challenges among Nigerian undergraduates.

Another major finding is the relationship between personality types and academic Procrastination. The finding of the study revealed a positive and significant relationship between personality types and academic procrastination among undergraduate students. This implies that students' personality dispositions play a meaningful role in determining their tendency to procrastinate academically. Contrary to the common assumption that Type A individuals procrastinate less because of their time urgency and achievement orientation, the findings suggest that Type A students still exhibit notable levels of academic procrastination. This supports the findings of Arsalan (2009), who reported that although Type A individuals are driven and time-conscious, they may procrastinate due to stress, perfectionism, fear of failure, or excessive workload.

Type A students may delay tasks not out of laziness, but due to overcommitment, unrealistic goal-setting, or anxiety associated with high performance standards. On the other hand, Type B students, who are generally calmer and less pressured by time, may manage academic tasks with less emotional strain, potentially reducing dysfunctional procrastination. This finding reinforces the view that procrastination is a complex behavioural phenomenon influenced not only by motivation but also by emotional and personality-related factors.

Gender differences in personality types and academic procrastination is another major finding in this study. The finding indicated no significant difference between personality types and academic procrastination based on gender. This suggests that male and female undergraduate students in the University of Abuja exhibit similar procrastination tendencies and personality distributions. This result is consistent with studies by Steel (2007), Balkis and Duru (2009), Akinsola et al. (2007), and Wegbuzzy (2004), who reported that gender does not significantly influence academic procrastination behaviour. The similarity in procrastination levels across gender may be attributed to equal exposure to academic demands, institutional expectations, and learning environments within the university setting. However, this finding contradicts some earlier studies (e.g., Senecal, 1995; Prohaska, 2000) that reported gender differences in procrastination tendencies. The inconsistency in findings across studies suggests that cultural context, academic discipline, and

institutional factors may moderate the relationship between gender and procrastination.

Another major finding in this study indicated that geopolitical zone significantly influences personality tendencies but does not influence academic procrastination by undergraduate students of the university of Abuja. The study also found no significant difference in personality types and academic procrastination based on students' geopolitical zones. This implies that students from different regions of Nigeria exhibit similar personality patterns and procrastination behaviours within the University of Abuja.

This finding may be explained by the unifying influence of the university environment, which exposes students to shared academic norms, expectations, and learning conditions regardless of cultural or regional background. The University of Abuja, being a federal institution with a diverse student population, provides a common academic culture that may reduce regional behavioural differences. This result supports the cross-cultural perspective highlighted by Bruner, Oliver, and Greenfield (1996), which emphasizes that while individuals may differ culturally, situational and institutional contexts significantly shape behaviour.

V. CONCLUSION

The study concluded that Type A personality is more prevalent among undergraduate students in the University of Abuja, academic procrastination exists at a moderate level among students, Personality types significantly influence academic procrastination, and Gender and geopolitical zones do not significantly influence the relationship between personality types and academic procrastination.

RECOMMENDATIONS

➤ *Personality-Based Counselling Interventions:*

Since personality types significantly influence academic procrastination, the University of Abuja should strengthen personality-informed counselling services. Students should be helped to understand how their personality traits contribute to procrastination and be guided on appropriate coping strategies, especially for stress, time pressure, and task avoidance.

➤ *General Time-Management and Study Skills Training:*

Given the moderate level of academic procrastination among students, the university should implement regular time-management and study-skills programmes for all undergraduates. These programmes should focus on task planning, goal setting, and early task initiation to reduce unnecessary delays.

➤ *Early Academic Support Across All Student Groups:*

As procrastination does not significantly differ by gender or geopolitical zone, intervention programmes should target all students rather than specific demographic groups. Academic advisers and lecturers should provide

early support through structured assignments, clear deadlines, and timely feedback.

➤ *Strengthening Guidance and Counselling Units:*

The counselling units should be adequately equipped to address procrastination as both an academic and psychological issue. Evidence-based strategies such as self-regulation training and stress management should be integrated into student support services.

REFERENCES

- [1]. Abidoye, A. B. (2011). Behaviour pattern, parenting styles and friendship influence as correlates of at-risk behaviour among in-school adolescents in Nigeria (Unpublished doctoral thesis). University of Ilorin, Ilorin, Nigeria.
- [2]. Adegoke, A. A. (1995). Undertaking a review of existing literature. In S. A. Jimoh (Ed.), *Research methodology in education: An interdisciplinary approach*. University of Ilorin.
- [3]. Adesina, O. J. (2011). Influence of personality types and academic procrastination on the achievements of senior secondary school adolescents in Ibadan metropolis. *Ife Psychologia: An International Journal of Psychology in Africa*, 19(1), 109–115.
- [4]. Ajayi, K. (2003). Minimum standards and accountability in university education. *Nigerian Journal of Educational Research and Evaluation*, 11(2).
- [5]. Akinnade, E. A. (2001). *Modern concise psychology*. Pumarck Nigeria Limited.
- [6]. Akinsola, M. K., Tella, A. D., & Tella, A. Y. (2007). Correlates of academic procrastination and mathematics achievement of university undergraduate students. *Eurasia Journal of Mathematics, Science and Technology Education*, 3(4), 363–370.
- [7]. Akinsola, O. E., Hussaini, P. O., Oyenuga, S. O., & Fatokun, A. O. (2012). Critical factors influencing facility maintenance management of tertiary institutional buildings in South West Nigeria, 3(11).
- [8]. Aremu, A. O., Williams, T. M., & Adesina, F. T. (2011). Influence of academic procrastination and personality types on academic achievement in Ibadan. *Ife Psychologia: An International Journal of Psychology in Africa*, 19(1).
- [9]. Arsalan, S. (2009). Level of procrastination. Department of Psychology, University of Karachi.
- [10]. Asikhia, O. A. (2010). Academic procrastination in mathematics: Causes, dangers and implications of counselling for effective learning. *International Journal of Education Studies*, 3(3), 205–210.
- [11]. Balkis, M., & Duru, E. (2009). Prevalence of academic procrastination behavior among preservice teachers and its relationship with demographic and individual preferences. *Journal of Theory and Practice in Education*, 5(1), 18–32.
- [12]. Barnes, L. V. (1999). *Dynamics of personality types: Understanding and applying Jung's cognitive processes*. Telos Publications.
- [13]. Friedman, M., & Rosenman, R. H. (2017). *Type A behavior and your heart*. McGill.
- [14]. Johnson, J. L., & Bloom, A. M. (2015). An analysis of the contributions of the five factors of personality to variance in academic procrastination. *Personality and Individual Differences*, 18(1), 127–133.
- [15]. Larson, R. J., & Buss, D. M. (2018). *Personality psychology: Domains of knowledge about human nature* (3rd ed.). McGraw-Hill.
- [16]. McAdams, D. P., & Pals, J. L. (2016). *A new Big Five: Fundamental principles for an integrative science of personality*. *American Psychologist*, 67, 204–217.
- [17]. Mayer, J. D. (2015). A classification of DSM-IV-TR mental disorders according to their relation to the personality system. In J. C. Thomas & D. L. Segal (Eds.), *Comprehensive handbook of personality and psychopathology (CHOPP): Personality and everyday functioning*. John Wiley & Sons.
- [18]. Nuhu, M. A. (2019). Relationship between personality type and examination malpractice in Kwara State (Unpublished M.Ed. thesis). University of Ilorin, Ilorin, Nigeria.
- [19]. Seema, M., Unifat, N., Azra, S., Sadiq, H., & Farhan, I. (2009). Personality type, gender, and age difference: A study of customers' brand loyalty. *Bahria Journal of Professional Psychology*, 5, 38–53.
- [20]. Steel, P. (2007). The nature of procrastination: A meta-analytic and theoretical review of quintessential self-regulatory failure. *Psychological Bulletin*, 133, 65–94. <https://doi.org/10.1037/0033-2909.133.1.65>