THE INFLUENCE OF DAYTIME SLEEP PROPENSITY ON ACADEMIC PROCRASTINATION AMONGST UNDERGRADUATES IN SOUTH WESTERN NIGERIA

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ABSTRACT
This study examined the influence of daytime sleep propensity on academic procrastination among Nigerian undergraduates. A cross-sectional survey was conducted, and data were obtained from 460 students selected using systematic random sampling from Covenant University and the University of Lagos. The research instruments included the Academic Procrastination Scale (APS) developed by McCloskey (2011) and the Epworth Sleepiness Scale (ESS) by Johns (1991), used to measure academic procrastination and daytime sleep propensity, respectively. The data were analysed using SPSS version 25, and hypothesis testing was carried out using linear regression. The findings revealed a weak but statistically significant positive relationship between daytime sleep propensity and academic procrastination ($R = 0.174$; $R^2 = 0.030$; $F(1, 458) = 14.369$, $p < .001$). The study highlights the impact of sleepiness on academic delays and recommends interventions promoting healthy sleep habits among students.

Keywords*:* Procrastination, Academic procrastination, Daytime Sleep Propensity, and Undergraduates

1. Introduction

Many of us have succumbed to the widespread problem of procrastination in our contemporary society, where there are diversions everywhere and deadlines loom large. It is the insatiable desire

to put off starting or finishing duties, sacrificing productivity in exchange for fleeting enjoyment. Procrastination may appear innocuous at first, but it can have serious repercussions, particularly in the academic setting. The harmful impacts of academic procrastination, such as a loss in performance, increased stress, and compromised well-being, have been well-documented in studies (McCloskey, 2011). However, there are still gaps in our understanding of this conduct, particularly about an important factor: daytime sleep inclination. Recent research by Zhang & Li (2023) and Steel *et al*. (2021) has further supported the detrimental effects of academic procrastination, connecting it to both academic achievement and mental health.

Procrastination is the deliberate and brief postponement of beginning or finishing work (Amin, 2019). Despite its usually ignored effects, procrastination is a common undesirable activity that people routinely engage in. Individuals may have adverse consequences in their lives, including negative psychological and economic implications (Moonaghi and Beydokhti, 2017). Many people have lost out on important opportunities because they did not prepare in time. According to Kiam's (1986) book "Going for It! How to Succeed as an Entrepreneur" (p. 182), "Procrastination is the natural assassin of opportunity."

Academic procrastination is a practice that many students can attest to having indulged in at some point during their academic careers. However, the degree of intensity of the behaviour varies. Students who intentionally and needlessly put off finishing papers and tasks are explicitly referred to as academic procrastinators. It has been connected to higher levels of stress, a drop in well-being, and a decline in academic performance (McCloskey, 2011). Postponing the beginning of a task, putting off finishing or turning in assignments, and choosing to engage in enjoyable activities rather than finishing the necessary work are some of the behaviours that define academic procrastination (Hussain & Sultan, 2010; Rabin, Fogel & Nutter-Upham, 2011; Hadiwijaya *et al*., 2014; Peng & Kamil, 2017 as cited in Amin, 2019). For instance, academic procrastination is when a student waits until the deadline approaches to begin an assignment or opts to watch a movie instead of focusing on their research work. It can also occur when a student continuously postpones the commencement and submission of class projects or assignments indefinitely. Delaying exam preparation until the last minute or substituting studying with sleep are other examples of academic procrastination. This behaviour is commonly observed among university students throughout their studies.

Lack of motivation, internet use or addiction, a propensity for excessive sleep, self-efficacy, time management, and stress are some of the elements that can affect academic procrastination (Amin, 2019). Given its substantial influence on students' academic achievement, more research into the relevant components is important. The purpose of this study is to investigate how academic procrastination is impacted by daytime sleep tendency.

Sleep plays a vital role in our lives. Sleep is a vital restorative function that offers people the energy they need to tackle academic work while also restoring the body and mind. Sleep is crucial for the body's recovery as well as for homeostasis and an individual's overall functioning (Magalhaes *et*

al., 2021). The sensation of vigour and wellness after waking up is a symptom of good sleep. Sleep quality includes objective characteristics like sleep length and sleep latency in addition to qualitative ones like peacefulness and depth of sleep (Pusparini *et al.,* 2022). According to research by Alfonsi *et al*. (2020), teenage sleep patterns have a big impact on academic performance and cognitive functioning.

The likelihood of falling asleep under a range of circumstances is known as sleep propensity. It is the probability of going from alert wakefulness to slumber under various conditions (Johns, 2015). The degree to which human beings fall asleep during the day is known as daytime sleep propensity, and it might influence academic procrastination.

There has not been much research on the connection between academic procrastination and daytime sleep tendency. It is important to comprehend the complex connection between academic procrastination and daytime sleep tendency. It enables us to learn more about the fundamental causes of this widespread habit among college students. The study can identify ways to counteract these tendencies and promote more effective study habits by shedding light on the relationship between academic procrastination and daytime sleep tendency.

Restoration and Repair Theory of Sleep

Among the most well-known sleep theories is this one. The repair and restorative idea states that sleep helps the body restore and repair vital cellular components that are lost during the course of a day of waking. Sleep is essential for a number of biological processes, including muscle repair, tissue growth, protein synthesis, and the release of different growth-promoting hormones. There is proof that sleep and rest are when the rates of mitotic division and protein synthesis are maximum. This point of view holds that sleep is crucial for the body's renewal. The physiological processes that allow the body and mind to function at their best are renewed and stimulated when we sleep. According to this idea, NREM sleep boosts physiological function, whereas REM sleep improves cognitive performance.

Neuroplasticity theory

Sleep is essential for the neuronal-level remodelling and growth of the structure and function of the brain, according to the notion of brain plasticity. It is founded on studies showing a link between sleep and modifications in the structure and architecture of the brain. Sleep is used to integrate new information acquired throughout the day and solidify preexisting memories, according to the brain plasticity concept. It implies that the brain uses sleep time to arrange and go over the things it has learnt and done during the day, as well as to store them in long-term memory.

Hypothesis

Daytime sleep propensity will significantly influence academic procrastination.

2. Methods

2.1 Design

The research design chosen for this study is the survey design. The survey method allows for the collection of both qualitative and quantitative data from a large sample size. Specifically, a cross-sectional survey design was employed. The sampling technique employed was systematic random sampling. The distribution of the questionnaires followed a systematic random sampling technique to ensure representative participation. This means that every participant had an equal chance of being selected.

2.2 Setting

The study was carried out in two different locations: the University of Lagos, Akoka, Lagos State, and Covenant University, Ota, Ogun State. The University of Lagos is a federal university, while Covenant University is a private university. The reason why both universities were chosen was to make the sample more representative. The questionnaires were administered in the hostels, relaxation centres, and classes of both universities.

2.3 Population

The study population comprises male and female undergraduates from the university across all levels.

2.4 Participants

The participants included male and female undergraduates from Covenant University and the University of Lagos across all levels of study. The estimated population size for Covenant University undergraduates is 7,500, while for the University of Lagos, it is 40,000. 500 questionnaires were distributed, and 460 valid responses were obtained. 56.5% of the participants were between the ages of 15 and 20, while the other 43.5% of the participants were between the ages of 21 and 29. 26.7% of the participants were from 100 level, 24.1% from 200 level, 15.9% from 300 level, 23.3% from 400 level, and 10.0% from 500 level. 48.9% were males and 51.1% were females.

2.5 Instruments

2.5.1 Academic Procrastination Scale (APS)

Relevance: Precisely measures academic procrastination. Developed by McCloskey (2011), widely used and validated.
Reliability: Cronbach's alpha = .94 – excellent reliability.

2.5.2 Epworth Sleepiness Scale (ESS)

Relevance: The standard tool for measuring daytime sleep propensity, directly aligning with your study variable.
Reliability: Cronbach's alpha between .73–.90, and strong test-retest reliability.

2.5.3 Statistics

Both descriptive and inferential statistical methods were used to analyse the data. The statistical program IBM Statistical Package for Social Sciences (SPSSv25) was used to encode and analyse the data. The idea was tested using regression analysis. The predicted association between the dependent variable (academic procrastination) and the independent variable (daytime sleep propensity) was investigated using regression analysis. It will assist in determining the degree to which academic procrastination is influenced by daytime sleep tendency.

3. Results

Research Hypothesis: Daytime sleep propensity will significantly influence academic procrastination among undergraduates.

Table 1: Regression analysis of the influence of daytime sleep propensity on academic procrastination.

Model	R	R^2	Adjusted R^2	B	F	t	Sig.
(Constant)							
Daytime Sleep Propensity	.174	.030	.028	.174	14.369	3.791	.000

a. Predictor (Constant), Daytime sleep propensity, b. Dependent variable: Academic procrastination

Table 3 shows that daytime sleep propensity significantly influences academic procrastination (R= 0.174; R^2 = 0.030; F = (1, 458) = 14.369, p < .001). The model's correlation coefficient (R) is 0.174, showing a weak positive relationship between daytime sleepiness and academic procrastination. The R-squared is 0.030, suggesting that 3% of the variance in academic procrastination can be explained by the predictor variable "daytime sleep propensity". The t-value for "Daytime Sleepiness" is 3.791, with an associated p-value of 0.000. This indicates that the coefficient for "daytime sleep propensity" is statistically significant in predicting academic procrastination at a conventional significance level of 0.05. Thus, the alternate hypothesis is accepted. Therefore, daytime sleep propensity has a significant influence on academic procrastination among undergraduates. The weak positive relationship suggests that higher levels of daytime sleepiness are associated with increased academic procrastination.

4.1 Discussion

The regression analysis's findings confirmed the hypothesis that undergraduates' academic procrastination is significantly influenced by their daytime sleep propensity. The results showed that academic procrastination and daytime sleepiness had a weak but statistically significant positive association. In particular, the model revealed that daytime sleep propensity accounted for 3% of the variance in academic procrastination, suggesting that even slight increases in daytime sleepiness can cause delays in finishing academic assignments.

This finding is consistent with other research indicating that motivation, focus, and task management are adversely impacted by sleep disruptions and decreased sleep quality. Higher levels of daytime sleepiness might make it harder for certain people to stay motivated and focused, which can cause academic assignments to be delayed or postponed. For example, Liu *et al*. (2022) discovered a substantial correlation between students' task avoidance behaviours and bad sleep patterns. Alfonsi *et al*. (2020) further stressed the significance of sleep hygiene for academic performance and engagement. Additionally, Zhang and Li (2023) observed that academic procrastination is exacerbated by psychological and behavioural fatigue, which can be amplified by inadequate sleep and poor rest quality.

Students who experience excessive daytime sleepiness may struggle with cognitive clarity, executive function, and time management, which can result in procrastination. These findings are consistent with the neuroplasticity theory, which holds that adequate and high-quality sleep is necessary for optimal cognitive processing and memory consolidation, both of which are critical for academic efficiency and task execution.

4.2 Conclusion

To address this issue, educational institutions should prioritise the promotion of healthy sleep habits and emphasise the importance of maintaining a regular sleep schedule. They should also provide resources and support for students to manage their sleep patterns effectively, such as creating designated nap areas on campus and offering stress reduction programmes. The study found a weak positive relationship between daytime sleep propensity and academic procrastination, suggesting that students with higher levels of daytime sleepiness may be more likely to engage in academic procrastination.

4.3 Policy implications

The research's conclusions have important policy ramifications for academic institutions. Institutions must prioritise the creation of policies and programmes that address the effects of internet addiction and the tendency to sleep during the day on academic procrastination. Some potential policy implications include:

- Integration of time management and wellness programmes into the curriculum to equip students with effective strategies for managing and promoting healthy sleep habits.
- Academic advisors, counsellors, and faculty members work together to recognise and assist students who show symptoms of daytime sleepiness by offering them the right resources and interventions.
- Establishing a campus environment that encourages healthy sleep habits, like setting aside specific spaces for rest and naps and instituting quiet hours in residential areas.

4.4 Recommendations

These recommendations are proposed to mitigate academic procrastination among undergraduates:

Promotion of Sleep Hygiene Programmes
Universities ought to raise awareness of the value of good sleep and the dangers of being overly sleepy during the day. Establishing healthy sleep habits should be the main goal of wellness workshops or educational seminars.

Sleep-Focused Interventions
For students who have a high propensity for sleep, campus health centres should provide personalised counselling or therapy in addition to sleep assessments using instruments such as the Epworth Sleepiness Scale.

Curriculum Support and Flexibility
Academic institutions could accommodate students who struggle with sleep-related issues by implementing flexible deadlines or adaptive schedules. This is particularly important during stressful times like tests or project due dates.

Integrated Counselling Services
Sleep issues should be screened for in academic and psychological counselling units as part of procrastination interventions. Recent studies have demonstrated that emotional and behavioural regulation, which are both impacted by sleep quality, can enhance academic performance (Steel *et al*., 2021; Zhang & Li, 2023).

Collaborative Mental Health Strategies
For students who are susceptible to academic procrastination as a result of sleep disruptions, a support network can be established through a cooperative approach involving psychologists, academic mentors, and healthcare professionals.

4.5 Limitations of the Study

Cross-sectional Design
The research utilised a cross-sectional survey design, which gathers information at one particular moment in time. It thus makes it more difficult to conclude the causal relationship between academic procrastination and daytime sleep propensity. A deeper understanding of the long-term effects of sleep patterns on procrastination would be possible through longitudinal research.

Self-report Bias
Self-administered questionnaires were used to gather the data, and these are prone to recall and social desirability biases. The accuracy of the results may have been impacted by participants' over-reporting or under-reporting of their procrastination or sleepiness levels.

Limited Generalizability
The results may not be as applicable to students in other institutions or areas with distinct academic pressures, cultural norms, or sleeping environments because the sample was limited to two Nigerian universities: Covenant University and the University of Lagos.

Uncontrolled Confounding Variables

The analysis did not account for other variables that might affect academic procrastination, such as academic workload, personality traits (such as conscientiousness), anxiety, or depression. These might have had an impact on the observed relationship's direction or strength.

Measurement Tool Limitations

Even though the Academic Procrastination Scale (APS) and the Epworth Sleepiness Scale (ESS) have received extensive validation, it's possible that they don't fully account for the variety of sleep-related behaviours and contextual academic difficulties that Nigerian university students face.

Lack of Objective Sleep Data

The study did not include objective sleep measurements (e.g., actigraphy or sleep diaries), which would have strengthened the findings by validating subjective reports of daytime sleepiness.

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