KNOWLEDGE, PERCEPTION AND PRACTICE OF WORK-STUDY-LIFE BALANCE AND ITS IMPLICATION AMONGST MEDICAL STUDENTS IN THE UNIVERSITY OF BENIN, BENIN CITY, EDO STATE, NIGERIA.

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APRIL,2026.

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A ONE YEAR PROJECT PRESENTED TO THE DEPARTMENT OF COMMUNITY HEALTH IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF A BACHELOR OF MEDICINE AND BACHELOR OF SURGERY (MBBS) DEGREE.

SUPERVISOR

PROF. A.N. OFILI

APRIL,2026.

DECLARATION

We hereby declare that this project work titled **"KNOWLEDGE, PERCEPTION, PRACTICE OF WORK-STUDY-LIFE BALANCE AND ITS IMPLICATION AMONGST MEDICAL STUDENTS IN THE UNIVERSITY OF BENIN**", was conducted under supervision and has neither been presented nor published anywhere else in part or in full for any other purpose.

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CERTIFICATION

This is to certify that this research study titled **"KNOWLEDGE, PERCEPTION AND PRACTICE OF WORK-STUDY-LIFE BALANCE AND ITS IMPLICATION AMONGST MEDICAL STUDENTS IN THE UNIVERSITY OF BENIN"** was conducted by **ISICHEI JOAN ISIOMA** with matriculation number **MED1807425** and **IYAMU JOY OSARUGUE** with matriculation number **MED1807427** under the supervision of Prof. A.N. Ofili in the Department of Public Health and Community Medicine, College of Medical Sciences, University of Benin as part of the requirements for the award of Bachelor of Medicine, Bachelor of Surgery (MBBS) degree.

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DEDICATION

We want to dedicate the success of this work to God Almighty, for his steadfast love, grace and mercy for he has been the source of our strength and wisdom. Also, to our families and friends for their counsel, moral and financial support, motivation and encouragement. Our sincere gratitude goes to our teachers, for their immeasurable guidance and support throughout the course of this project.

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LIST OF ABBREVIATIONS

ANOVA: Analysis of Variance

CHED: Commissioner of Higher Education

COR: Conservation of Resources

COPE: Coping Orientation to Problems Experienced

CSI: Coping Strategies Inventory

GMC: General Medical Council

PLIW: Personal Life Interference Work

PSQI: Pittsburgh Sleep Quality

UBTH: University of Benin Teaching Hospital

UNIBEN: University of Benin

WIPL: Work Interference with Personal Life

ABSTRACT

Background: Balancing medical training, work, and personal life can be highly demanding and can be associated with burn out and increased stress and therefore requiring various balance and coping mechanisms to be employed by these students and these could include shorter sleep, modified learning methods, social isolation, and anxiety. Thus, this study examines the knowledge, perception, practice and implications of work-study-life balance among medical students at the University of Benin, with the aim of identifying gaps, understanding the challenges and informing strategies that can improve students' ability to effectively balance academic, work and personal life commitments

Objectives: To assess the knowledge, perception, practice and the implications of work-study-life balance among medical students in the University of Benin, Edo state, Nigeria.

Methods: A descriptive cross-sectional study was conducted among 509 undergraduate medical students at the University of Benin from January 2025 to February 2026 to assess the knowledge, perception, practice of work-study-life balance among medical students and its possible impact on psychosocial and academic performance. A multi-stage sampling technique was used to select participants. The minimum sample size was determined using the Cochran formula with a 10% non-response rate. Data was collected through a structured, pre-tested self-administered questionnaire that included two standard instruments: the Pittsburgh Sleep Quality Index (PSQI), Work-study-life balance Scale (WSLBS), Coping strategies inventory, perceived stress scale (PSS). The data were analyzed using IBM SPSS version 27. The level of statistical significance was set at $p < 0.05$. Ethical approval was obtained from the Health Research Ethics Committee of the University of Benin Teaching Hospital.

Results: A total of 509 respondents participated in the study and the response rate was 100%. There were 382 (75.0%) male respondents and 127 (25.0%) female respondents. The study showed that 377(74.1%) had good knowledge of work-study-life balance. The study revealed a significant association between age group and knowledge, $\chi^2 = 45.44$, $p < .001$. There was a statistically significant association between employment status and overall perception, $\chi^2 = 6.49$, $p = .038$. Majority (51.7%) assigned their current work-study-life balance a neutral rating of 3 on a 5-point scale. 73.9% proportion of the respondents reported that they do prioritize self-care. The biggest challenges respondents face in maintaining a work-study-life balance was a lack of free time, 365(71.7%). Demanding curriculum 338 (66.4%), followed by Clinical rotation hours, 240 (47.2%). Two hundred and twenty eight (44.8%) respondents had an Adaptive (Engagement Dominant) category, 194 (38.1%) had a Maladaptive (Disengagement Dominant) coping mechanism. 87 (17.1%) had a Mixed or Equal Use of coping styles. Majority (60.7%) were classified as experiencing Low Stress, while the remaining 39.3% were categorized as experiencing High Stress. 38.9% rated their sleep quality as Fair. followed by 32.2% who rated their sleep as Good and 17.8% as Very Good. A smaller minority rated their overall sleep quality as Poor (8.7%) or Very Poor (2.4%).

Conclusion: This study demonstrated that while a majority of undergraduate medical students at the University of Benin possess good knowledge of work–study–life balance, their perception of balance remains largely neutral and although a significant proportion of students employ adaptive coping mechanisms, a considerable number continue to rely on maladaptive strategies, which may predispose them to psychological distress.

While most students reported low stress levels and relatively acceptable sleep quality, a clinically meaningful proportion experienced high stress and suboptimal sleep.

Overall, the findings indicate that knowledge alone is insufficient to ensure healthy work–study–life balance. Practical institutional support systems, structured resilience training, mental health monitoring, and cultural shifts within medical education are essential to translate awareness into sustainable well-being practices.

Keywords: sleep quality, medical students, work-study-life balance.

DEFINITION OF TERMS

ADAPTIVE COPING: cognitive and behavioral efforts to manage stressful conditions or associated emotional distress

BURNOUT: a state of emotional, physical, and mental exhaustion caused by prolonged stress, often characterized by reduced motivation, fatigue, and decreased performance

EMOTIONAL EXHAUSTION: a chronic state of physical and emotional depletion resulting from excessive academic or work demands

MALADAPTIVE COPING: ineffective cognitive and behavioral effort employed by individuals to manage stressors

SLEEP QUALITY: an individual's subjective assessment of how well they sleep, including aspects such as duration, depth, and restfulness

WORK-STUDY-LIFE BALANCE: the ability to effectively manage and allocate time and energy between academic responsibilities, work obligations, and personal life activities to maintain overall well-being

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF STUDY

The concept of work-study-life balance is based on the notion that paid work and personal life should be seen less as competing priorities than as complementary elements of a full life. A career in medicine, even a beginning one, is synonymous with missing holidays, occasions, and even a good night's sleep. A student's time and energy is divided between medical school and non-academic matters, rest, and recreation. Reduction in emotional exhaustion was independently associated with reduced number of work hours in a week.[1] Students are expected to meet physical demands, to have the strength and stamina to physically attend classes and clinical rotations. They also need to meet the mental demands: to concentrate, to balance academic load, and to meet assessment standards and professors' expectations. Academic assessment is associated with psychological distress among medical students.[1]

The balance between work and personal life is a delicate one that individuals strive to maintain alongside their job obligations. Maintaining this balance is essential for overall well-being. At its core, work-study-life balance is the ability to allocate time and energy to work-related tasks while nurturing personal relationships, pursuing hobbies, and attending to one's general needs. Achieving this balance does not just involve equally dividing time across different spheres of life, but rather ensuring that each sphere of life complements the other.[2] Striking an effective balance between work and personal life varies significantly among individuals. It is not a one-size-fits-all concept; instead, it demands self-awareness, continuous reflection, and adaptability. Each person's definition of balance is shaped by their lifestyle, priorities, and responsibilities. [2]

Work-study-life balance contributes greatly to a doctor's well-being and plays a vital role in their career decisions. The General Medical Council (GMC) guidelines consider the importance of work-study-life balance as part of compassionate self-care, and self-care should begin at the undergraduate level when the academic workload can contribute to stress, anxiety, and burnout.[2] Studies show that for many years, achieving work-study-life balance is a continuous journey that requires conscious effort, adaptability, and a willingness to prioritize one's holistic needs. [2] Research demonstrates that the link between work-study-life balance and physical, emotional, and mental health of individuals who cannot maintain a balance is at greater risk of burnout, stress, and bad health outcomes.[2]

Many tertiary school students have experienced the struggles of juggling deadlines, assignments, examinations, and extracurricular activities alongside work and personal responsibilities. Work-study-life balance involves prioritizing and allocating time and energy effectively to meet the demands of work, academic and personal life, aiming at an overall well-being and fulfillment in all areas.[2]

The term 'Work-study-life balance' was first coined in 1986 in reaction to the unhealthy choices which occurred in favor of the workplace, as they chose to neglect family, friends, and leisure activities in the pursuit of corporate / work goals.[3]

Higher education is a time-consuming and challenging enterprise that requires students to devote substantial amounts of time and effort to their academic studies. However, many students in higher education must work to support themselves financially, which presents the issue of balancing work and academic duties. The importance of support systems and resources for these students to navigate the challenges and maintain a healthy work-study-life balance cannot be overemphasized. [4]

The primary reasons for students working while their studying are addressing basic needs, and budgetary constraints, and helping them reach goals for the future.[4]According to the 2022 survey of the Commission on Higher Education (CHED), about 216,000 students in the country from graduating senior high school to college are still juggling school and work.[5] These students are not only striving in their studies but also in their work to gain money to support their selves financially. The amount of stress varies from one student to another based on the different institutes and workplaces in which they study and work.[6]

According to a research study, students often experience a significant reduction in time allocated for academic reading due to work-related responsibilities. This challenge becomes particularly pronounced during peak business periods or special events, when students are required to work overtime. As a result, academic tasks such as assignments are frequently postponed until the last possible moment. To navigate these demands, students must demonstrate effective time management skills and prioritize essential tasks to meet deadlines and sustain a functional balance. Nonetheless, the demands of juggling academic and occupational roles frequently leave them with minimal time for personal well-being or family engagement, representing a substantial personal sacrifice.[6]

One would expect medical students to be better off than their peers in other walks of life when it comes to health, and this does hold true to certain extent as far as medical ailments are concerned. When we look at stress however, this particular population seems to be on the receiving end of the spectrum. Multiple studies have found significantly high-stress levels in medical students and the high stress has been reported from multiple countries, spanning different continents. This indicates to certain extent that high stress among medical students is a phenomenon that transcends sociocultural factors, economic status, course patterns, and the alike.[7]

1.2 STATEMENT OF PROBLEMS

Balancing academic responsibilities with work obligations poses a significant challenge for many medical students. Being a working student requires juggling both school and employment tasks, often resulting in divided attention and limited effort in each domain. The core issue is not necessarily the act of working itself, but the substantial amount of time it consumes—time that might otherwise be allocated to academic engagement. Students who work while studying often find it difficult to maintain full attentiveness during lectures or commit adequate time to their studies.

Studies showed that most working students were not satisfied with their school and work life balance. Working while studying can add more pressure, but it also creates benefits through building a support network of people who can help achieve both your personal and professional goals.

A study titled Learning and Earning: Working in College states that since 1984, the fraction of college students aged 16 to 24 who also work full- or part-time has increased from 49 to 57 percent.[8] Despite this trend, international systematic reviews have identified alarmingly high rates of anxiety, depression, and stress among medical students. If left unaddressed, these stressors may result in burnout, reduced empathy, and other long-term mental health consequences.

In the Philippines, the students who have financial problems can still support themselves by working. [4] They have different job options, such as online jobs, paid internships, fast-food crew, and school jobs. However, it is difficult for them because they have to meet work requirements to keep their jobs and also maintain good grades in school. [4] Around 216,000 students in the Philippines are currently working while studying, which is about 8% of all College students.[4] The study discovered that because of their employment responsibilities,

students who work typically register in fewer academic hours or courses, and this can negatively affect their academic performance and cause their grades to drop.[4] In some cases, students may even drop out of their school entirely and seek stable employment. Supporting this, 34.1% of high school graduates between January and October 2013 were already part of the workforce, indicating a significant proportion of students transitioning directly into employment rather than pursuing higher education.[4] A significant trend among college students with eight out of ten undergraduates work part-time to meet their financial needs while pursuing their education.[4] The Nigerian working environment has been observed to be volatile, degrading, precarious, and unfriendly. Also, in the Nigerian working environment, work-life imbalances have become a common occurrence and have consequences on organizations, such as low productivity and growth trajectory.[9]

1.3 JUSTIFICATION

The journey of a medical student is demanding in terms of time, energy, and other resources, as the discipline tends to be one of the most demanding amongst others. During the course of medical school, there is a lot of academic work load which translates to long hours of study, frequent examinations and the huge responsibility that comes with patient care.

Research showed that out of 505 medical students from 25 Nigerian medical schools 54.5% experienced psychological distress, with 77.0% meeting criteria for exhaustion and 84.6% showing signs of disengagement. Despite this, less than 5% of affected students received mental health support. Academic workload (75.6%), financial strain (52.3%), and relationship challenges (30.1%) were identified as major stressors, while the prevalence of anxiety and depression increased during medical training.[10] The findings emphasize the need to be knowledgeable of the situation of medical students in the University of Benin (UNIBEN) and know how it affects them and how they cope with the dual roles as students and workers.

Hence, this study was conceptualized to bridge the gap of information lacking for medical students as part-timers. It is also aimed at revealing the extra demands placed on medical students who are managing their lives and give actionable recommendations to the students, and policy makers

1.4 AIMS AND OBJECTIVES

1.4.1 GENERAL OBJECTIVE

To assess the knowledge and perception of work-study-life balance among medical students as well as identifying the implications on their sleep quality and stress levels; and examine the practices adopted, with the aim of contributing to existing data on work-study-life balance among medical students and informing strategies to enhance their psychological well-being, academic performance, and overall development as future physicians.

1.4.2 SPECIFIC OBJECTIVES

1. To assess medical students' knowledge on work-study-life balance in UNIBEN
2. To ascertain medical students' perception on work-study-life balance in UNIBEN
3. To identify the various practices adopted by UNIBEN medical students to achieve work-study-life balance.
4. To determine the implications on their sleep quality and stress levels when it comes to work-study-life balance for UNIBEN medical students.

1.5 RESEARCH QUESTIONS

At the end of this study, these concerns should be addressed:

1. How do UNIBEN medical students conceptualize or define work-study-life balance?
2. What is the level of stress that UNIBEN medical students' experience?
3. Is the sleep quality of UNIBEN medical students negatively affected?
4. What coping mechanisms do the UNIBEN medical students do to cope with working while studying?

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

Defining work-study-life balance is a complex task and has multiple definitions[11] Although there is no universally accepted definition of work-study-life balance, it is generally viewed as the individual's perception that work, study activities, and personal life commitments are compatible, and promotes growth in accordance with an individual's current life priorities.[12]

The concept of work-study-life balance was first recognized as far back as the nineteenth century in Melbourne, Australia. Australian stonemasons were at the forefront of a fight to demand improvement on their harsh working conditions that were incommensurate with their wages. The arguments for reducing working hours in Australia emphasized the harsh climate, the need for workers' education to improve their social and moral well-being, and the belief that leisure time would help workers become better family members and citizens. The following was their mantra[13]:

Eight hours to work,

Eight hours to play,

Eight hours to sleep,

Eight bob a day.

A fair day's work,

For a fair day's pay[13]

The Australian stone masons were victorious in their fight and became one of the first in the world to achieve the 8hour working day. The nineteenth-century movement for a 40-hour working week effectively preempted and shaped the modern concept of work–life balance.[14]

Work-study-life balance has been extensively studied by occupational and organizational psychologists, particularly in the context of how employees manage their work and family responsibilities.[14] However, similar concerns now arise among students, especially those balancing school and life.

2.2 CONCEPTUAL FRAMEWORK

The conceptual framework for this study is based on a comprehensive, multi-theoretical approach that explains how medical students manage the complex interplay of academic, clinical, personal, and social roles. The framework integrates role conflict and strain theory, role balance and enrichment theory, Conservation of Resources (COR) theory, and work–life integration theory, providing a nuanced understanding of how stressors, coping strategies, and perceived work–study–life balance interact to influence psychological outcomes and academic performance. It is specifically adapted to the experiences of medical students at UNIBEN, who navigate rigorous academic programs, extended clinical rotations, frequent institutional disruptions such as strikes, and social and personal responsibilities. By situating work–study–life balance at the center of this framework, the study emphasizes the subjective perception of balance rather than simply the time allocated to each role.

Role conflict and role strain theory, as proposed by Goode, posits that individuals occupying multiple roles may experience conflicting demands, which, when combined with insufficient resources, can result in psychological distress.[15] In the context of medical students, **role strain** manifests when the academic workload alone (lectures, clinical postings, laboratory assignments, and continuous assessments) overwhelms the student's available time

and energy[15]. **Role conflict**, on the other hand, occurs when demands from academic, personal, social, or part-time employment roles compete or cannot be simultaneously met. For instance, a medical student preparing for clinical evaluations may also be expected to support family responsibilities, participate in student societies, or engage in part-time work to supplement living expenses. The simultaneous pressure of these roles can produce stress, frustration, and emotional exhaustion, contributing to higher vulnerability to burnout. These phenomena are particularly relevant at UNIBEN, where students often contend with extended lecture hours, mandatory clinical rotations, and unpredictable strike periods that disrupt academic schedules[15]

In contrast, **role balance and role enrichment theory** highlight the potential positive outcomes of multi-role engagement. This perspective suggests that participation in diverse life domains can enhance transferable skills and personal growth. For example, students who engage in peer mentoring, research projects, student leadership, or community health initiatives often develop skills in communication, leadership, teamwork, and time management that reinforce both academic and professional competencies. Similarly, a student participating in an extracurricular debate club or volunteering in health outreach programs may strengthen problem-solving, public speaking, and organizational skills, which contribute to academic success and future career readiness. This demonstrates that multiple roles can be synergistic rather than purely stressful, and that the negative impact of role overload can be mitigated by recognizing the potential for enrichment and skill development. [16]

The **Conservation of Resources (COR) theory** offers a complementary perspective by emphasizing the role of resource management in reducing stress. COR theory posits that stress arises when individuals perceive threats to their resources (time, energy, health, or social support) or experience actual resource depletion[17]. Among medical students, the demands of coursework, clinical rotations, financial responsibilities, and part-time

employment can deplete these critical resources, increasing susceptibility to burnout and negatively affecting performance in academic, clinical, and personal domains. For example, a student juggling a part-time online business or social media activity alongside clinical duties may experience significant time and energy depletion, which limits opportunities for rest, social engagement, or academic review. Conversely, adopting resource-conserving strategies, such as structured study schedules, disciplined time management, prioritization, and support networks, can protect essential resources, reduce stress, and enhance the ability to maintain work–study–life balance. COR theory thus emphasizes that not all stress arises from role demands themselves, but from the depletion of the resources necessary to navigate those demands effectively.

The **work–life integration perspective** challenges traditional assumptions that work, study, and personal life must be rigidly separated or equally divided. This theory advocates for the harmonization of roles, allowing one domain to complement the other rather than compete. [12]For instance, a medical student who integrates freelance photography into their academic routine exemplifies work–life integration. The student may use detailed photographs of anatomical specimens to enhance learning and improve observational skills while also pursuing personal creative interests that serve as stress relief. Editing images during study breaks or scheduling photography sessions around clinical rotations allows the student to pursue multiple objectives simultaneously, improving mental well-being and reinforcing skills such as attention to detail, communication, and time management. Such integration illustrates that balance is not about strict compartmentalization but strategic blending, enabling students to harmonize diverse pursuits while maintaining academic success.

Within this framework, **socio-demographic characteristics** serve as antecedent variables that shape exposure to stressors and influence perception of balance. Factors such as age, sex, marital status, level of study, and living arrangements affect both the intensity of academic

demands and the resources available to manage them. For example, senior medical students at UNIBEN often face heavier clinical responsibilities, longer rotations, and higher examination pressure, while students living away from family may encounter additional emotional, financial, and logistical challenges. Socio-demographic variables, therefore, influence not only the magnitude of stressors encountered but also students' capacity to perceive and maintain balance across their roles. [12]

Similarly, **academic stressors** including intensive coursework, frequent examinations, clinical rotations, institutional disruptions such as strikes, and peer or faculty expectations; serve as predictors of perceived imbalance. At the University of Benin, medical students frequently contend with prolonged strikes, rescheduled clinical postings, and compressed curricula that exacerbate role overload and conflict. These stressors require students to employ strategic planning, prioritize tasks, and adjust schedules, underscoring the importance of adaptive coping mechanisms in maintaining perceived balance. [12]

The framework identifies **perceived work–study–life balance** as a central mediating construct. It reflects the student's subjective evaluation of their ability to manage multiple roles effectively. Imbalance manifests as feelings of overwhelm, fatigue, inability to allocate time efficiently, and neglect of personal needs. By focusing on perception rather than objective workload, the framework captures the individual and context-specific nature of balance, recognizing that identical workloads may be experienced differently by students depending on coping resources, personal motivation, and support systems. [12]

Psychological outcomes constitute the dependent variables of this framework. These include perceived stress, emotional exhaustion, burnout, and impacts on academic performance. Prolonged imbalance and unmanaged stress can impair concentration, reduce motivation, and compromise clinical and academic performance. For example, a student who neglects rest

and personal care to meet clinical deadlines may experience cognitive fatigue, reduced retention of clinical knowledge, and decreased capacity for patient engagement. These outcomes illustrate the practical consequences of imbalance and highlight the importance of interventions to support student wellbeing. [12]

Coping mechanisms are conceptualized as moderating variables that influence the magnitude and direction of the relationships between stressors, perceived balance, and outcomes. Adaptive strategies, including planning, active coping, seeking support, and problem-solving, can buffer the negative effects of stressors and enhance perceived balance, whereas maladaptive strategies such as denial, avoidance, or substance use exacerbate imbalance and intensify psychological strain.[14] In the context of UNIBEN medical students, coping strategies may involve peer study groups, mentorship from senior students or faculty, time management applications, or structured relaxation techniques to mitigate stress during peak academic periods.. [12]

In summary, this conceptual framework integrates role conflict and strain theory, role balance and enrichment theory, COR theory, and work–life integration theory to provide a holistic explanation of work–study–life balance among medical students. Socio-demographic factors and academic stressors are conceptualized as predictors, perceived balance as a mediator, coping mechanisms as moderators, and psychological outcomes as dependent variables. By contextualizing theoretical insights within the lived experiences of UNIBEN students, including clinical rotations, strikes, part-time work, and extracurricular engagement, the framework provides a robust foundation for investigating both the mechanisms of stress and imbalance and the strategies for positive adaptation. This approach offers practical guidance for interventions aimed at improving student wellbeing, academic performance, and professional development.

2.3 ASSESSMENT OF KNOWLEDGE OF WORK-STUDY-LIFE BALANCE

A 2016 mixed-methods study at the University of Birmingham (UK) involved 145 medical students (Years 3–5) and included both questionnaires and 44 interviews. The study aimed to explore how medical students define and perceive work-study-life balance, their expectations for balance after graduation, and the sources of support available to them. Participants defined work-study-life balance as a multidimensional concept with three core elements: [2]

1. Enjoyment: The ability to engage in personal activities, relax, and maintain social relationships alongside academic responsibilities, for example: prioritizing life: should always find time to do things that you enjoy. (Year 3 student)[2]

2. Meeting Work Requirements: Ensuring that academic and clinical responsibilities are met without excessive stress, for example: I complete what is expected of me. (Year 3 student)[2]
3. Time Management: Actively organizing tasks to create a sustainable balance between personal and professional life, for example: devoting enough time and energy. (Year 5 student)[2]

The students also identified several external factors that shape their work-study-life balance:[2]

1. Peer Influence: Many students felt pressured to match their peers' study habits, sometimes leading to guilt and anxiety when not working.
2. Study Skills: Some students struggled initially but improved with experience.
3. Family Expectations: Parental work-life patterns shaped students' perceptions of balance.

4. Medical Culture: A professional culture of self-sacrifice influenced students' ability to maintain balance. Let me know if you need any other refinements

The interview also revealed that some students reported that they actively managed their work-study-life balance by making a conscious effort to take breaks and engage in enjoyable activities. Others admitted that they rarely thought about their balance and did not actively monitor it. A few students expressed skepticism, believing that achieving a true work-study-life balance in medicine was unrealistic. [2]

2.4 ASSESSMENT OF MEDICAL STUDENTS' PERCEPTION OF WORK-STUDY-LIFE BALANCE

A cross-sectional observational study was conducted in 2024 aimed to evaluate work-study-life balance among medical students in India. The study was carried out across multiple medical institutions in India among 416 medical students using convenience sampling technique. The study assessed time spent on academic responsibilities versus personal and family activities, as well as perceived stress related to study-life balance. Findings revealed that a significant proportion of respondents reported limited personal time, with 47.4% spending less than 1–2 hours per day with family, and 26% indicating that their study-life was stressful, highlighting a considerable imbalance between academic demands and personal well-being.[11]

A descriptive cross-sectional study was conducted during 2018 at the University of the Philippines Manila College of Medicine aimed to assess the factors affecting the well-being of medical students and determine which domains significantly influenced overall well-being. The study included 301 medical students and revealed that work-study-life balance had the lowest mean score (2.5 ± 0.7) among all measured domains, indicating that students experienced significant difficulty balancing academic responsibilities with personal life.

Additionally, work-study-life balance was significantly associated with sex and year level, highlighting disparities in how different groups perceived this aspect of well-being.[1]

2.5 IMPLICATIONS (STRESS) OF WORK-STUDY-LIFE BALANCE

In year 2021-2023, a mixed study (quantitative and qualitative) approach was carried out on 258 medical students in the University of Nottingham, United Kingdom, to investigate medical students' psychological well-being, coping strategies, and personality traits. The results reported an average score at 21.96 with a standard deviation of 6.82, indicating high levels of stress; however, how much they experience it varies considerably. The results also indicated a slightly low level of life satisfaction, borderline to high levels of depression, and high levels of anxiety.[18]

A cross-sectional study conducted in 2017 at King Khalid University Medical College, Saudi Arabia, investigating 267 medical students on perceived stress levels, showed that only 16.5% of the students reported high stress levels, while 23.6% and 26.6% reported mild and moderate stress levels and one-third (33.3%) reported no stress.[19]

A 2020 cross-sectional study investigating 500 medical students (including pre-clinical and clinical students) on the burnout and associated factors among undergraduate students at a South African medical school revealed that an average of 31.5% had no/minor degree of stress, 51.3% had a mild degree of stress, and 17.15% had a severe degree of stress. [20]

A cross-sectional study done in Gombe State University among 225 medical students selected using the stratified random sampling technique, which investigated the association between sleep quality and mental health outcomes among medical students revealed that stress levels

were alarmingly high, with 43.1% reporting moderate stress, 28.9% severe, and 9.3% extremely severe.[21]

2.6 IMPLICATIONS (SLEEP QUALITY) OF WORK-STUDY-LIFE BALANCE

A cross-sectional study conducted in 2024 among 300 Indian medical undergraduates using a convenient sampling technique to assess sleep disturbances found that 34% of the students had poor sleep. [22]

A cross-sectional study conducted in among 504 medical students at Tanta University, Egypt, using a random two-stage cluster sampling technique to evaluate the sleep quality among the students revealed that the prevalence of poor sleep quality among the study participants was 71.2%.[23]

A cross-sectional study done in three South Western states (University of Ilorin, Ladoke Akintola University of Technology and Osun State University) in Nigeria to investigate sleep patterns and quality among Nigerian medical students involved 802 medical students (whom were selected using a convenience sampling technique and found that the results showed that the average sleep duration was 5.74 hours per night, reflecting generally insufficient sleep. About 17.6% of students reported using sleeping pills occasionally, and only about 6.7% usedx them regularly. Also, the study revealed 63.7%, reported never snoring. Overall, 12.1% reported excellent sleep quality, 29.9% reported good sleep quality, 28.3% reported having satisfactory sleep quality while 29.7% reported poor sleep quality. On sleep patterns, sleep talking and nightmares were reported among 63% and 39.3% of the participants respectively.

Working during the day had a positive correlation with sleep quality and working during the night had a negative correlation with the sleep quality.[24]

A cross-sectional study done in Gombe State University among 225 medical students selected using the stratified random sampling technique, which investigated the association between sleep quality and mental health outcomes among medical students, revealed that 70.7% of the medical students had poor sleep quality, while 33.3% had good sleep quality[21]

A cross-sectional study done at Igbinedion University, Okada, Edo State examined 255 medical students in their fifth year to determine the prevalence and factors associated with poor sleep quality among medical students at a Nigerian university, the study revealed that 32.5% had poor sleep quality with use of medications, irregular sleep schedules having a significant association negatively with sleep quality[25]

2.7 PRACTICE OF WORK-STUDY-LIFE BALANCE

In Nottingham University in United Kingdom, 258 medical students participated in a mixed study (qualitative and quantitative) from 2021-2023 to investigate medical students' psychological well-being, coping strategies, and personality traits. On the aspect of their coping strategies, it was reported that out of the three coping approaches mentioned in the study; emotion focused coping strategy was the predominant followed by the problem focused one, and the least, avoidance focused coping strategy. Considering the relationship between these coping strategies and the perceived stress, only the problem focused coping strategy was associated with lower levels of stress, unlike the other two that indicated higher perceived stress levels with the reliance on those methods.[26] While the above statements were the results of the quantitative study(questionnaires), the qualitative(semi-structured interviews) had these replies from the respondents:

1. Managing time through calendars and planners and sticking to a routine or schedule helped in feeling in control.

2. The act of journal-ling also helped as it helped them clarify and label their emotions, helped them better think through obstacles and reflect on different situations.

3. Time blocking their day for their various activities helped them in managing their stress.

4. Lastly, the medical students on interviewed gave the reply that in managing the stressful moments, some cases they tried adapting to the situation and some cases they accept the stressful situations as medical school is hardly going to be stress-free.[18]

A descriptive cross-sectional study conducted in 2021 at Arsi University, South East Ethiopia assessed stressors and coping strategies among 260 undergraduate medical students using systematic random sampling technique. The study revealed that for coping strategies, religious coping had one of the highest mean scores (≈6.3 ± 1.8), followed by active coping (≈5.8 ± 1.6), planning (≈5.7 ± 1.5), and positive reframing (≈5.6 ± 1.7), indicating that adaptive coping strategies were predominantly used. In contrast, maladaptive strategies such as behavioral disengagement (≈3.2 ± 1.4) and denial (≈2.9 ± 1.3) had lower mean scores. [27]

A descriptive cross-sectional study was carried out on 399 medical students in the University of Ibadan using a three-stage sampling technique for the aim of evaluating their coping mechanisms. The findings include: A study found that most students (96.5%) believed stress can be minimized through personal efforts. Common strategies included self-encouragement (95.0%), understanding learning styles (94.7%), and engaging in recreational activities (92.0%). While 63.4% emphasized using individually effective methods and 31.0% highlighted planning and time management, only 5.6% reported seeking support from loved ones. [7]

A descriptive cross-sectional study was carried out from December 2021 to February 2023 among 611 undergraduate medical students in the School of Medicine, UNIBEN, Nigeria, to assess the stressors and coping mechanisms. A standard tool, the brief Coping Orientation to Problems Experienced (the brief COPE), which is designed to measure effective and ineffective ways to cope with a stressful life event was used. The result showed that, the most predominant academic stressors among respondents were frequent strikes (38.3%) and excessive academic workload (13.9%), while the least predominant academic stressors were poor performance in examinations (4.1%) and victimization by lecturers (3.8%). About half of the respondents reported feeling nervous, anxious, or on edge in the preceding two weeks (50.2%), while (48.4%) respondents reported not being able to stop or control worrying in the preceding two weeks. (37.5%) were feeling down, depressed or hopeless and (46.0%) had little interest or pleasure in doing things. Reflected in this study as the coping strategies most often employed by the respondents were the adaptive coping styles (planning, active coping and religion), while the least used coping strategies among undergraduate medical students were the maladaptive ones (substance use, behavioral disengagement and denial). [28]

2.8 SURVEY INSTRUMENTS FOR ASSESSING PERCEPTION OF WORK-STUDY-LIFE BALANCE, STRESS LEVEL, SLEEP QUALITY, AND COPING STRATEGIES FOR MEDICAL STUDENTS

Medical students experience high levels of stress due to the demanding nature of their education, clinical responsibilities, and the need for academic excellence. To understand the impact of stress, sleep disturbances, and coping mechanisms, researchers rely on standardized psychometric instruments. Three widely validated instruments: the Work-study-life balance (WSLB) the Perceived Stress Scale (PSS), the Pittsburgh Sleep Quality Index (PSQI), and the Coping Strategies Inventory (CSI) are frequently employed in survey-based research. This

literature review explores these instruments, their scale systems, and their efficacy in assessing stress, sleep patterns, and coping strategies among medical students.

The **Work-study-life balance Scale**, developed by Jerome Hayman in 2005, is designed to measure individuals' perceived balance between their professional and personal lives. The scale consists of 15 items rated on a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). It comprises three subscales: Work Interference with Personal Life (WIPL), Personal Life Interference with Work (PLIW), and Work/Personal Life Enhancement (WPLE), with five items in each subscale. Sample items include statements such as "My work keeps me from my family activities more than I would like" and "Personal life drains me of the energy I need to do my job." Each subscale is scored independently on a scale of 1 to 5, where 5 represents strongly agree, 4 agree, 3 indifferent, 2 disagree, and 1 strongly disagree. Scores between 1 and 2 indicate a strongly negative perception, a score of 3 indicates a neutral perception, and scores between 4 and 5 indicate a positive perception.[29] The scale demonstrates good psychometric properties, with Cronbach's alpha values ranging from 0.76 to 0.88, and its validity has been confirmed through factor analysis, showing strong correlations with job satisfaction and burnout metrics.[29]

The **Perceived Stress Scale (PSS-10)** measures perceived stress, particularly focusing on how unpredictable, uncontrollable, and overloaded individuals perceive their lives to be. The instrument contains 10 items rated on a 5-point Likert scale from 0 (Never) to 4 (Very Often). It includes two subcomponents: Perceived Helplessness, which consists of six items, and Perceived Self-Efficacy, which includes four reverse-scored items. The PSS-10 is justified for use in studies involving medical students because stress is a common challenge in this population, and understanding how students perceive stress in their daily lives is essential. The instrument is widely used and has demonstrated strong predictive validity in health research, especially concerning mental health and academic outcomes. Its reliability is

supported by Cronbach's alpha values ranging from 0.78 to 0.91, and it has been validated across multiple populations, with significant correlations reported between perceived stress, mental health indicators, and life-event stress.[30]

The **Pittsburgh Sleep Quality Index** (PSQI) assesses subjective sleep quality and disturbances over a one-month period. It consists of 19 self-rated items and five optional observer-rated items that are not included in scoring. The instrument evaluates seven subscales: Subjective Sleep Quality, Sleep Latency, Sleep Duration, Sleep Efficiency, Sleep Disturbances, Use of Sleep Medication, and Daytime Dysfunction. Each subscale is scored from 0 to 3, and the total global score is the sum of the seven component scores, ranging from 0 to 21. Interpretation of the total score is as follows: 0–4 indicate good sleep quality, 5–10 indicate average sleep quality, 11–14 indicate poor sleep quality, and 15–21 indicate very poor sleep quality. The PSQI is particularly relevant for medical students, who often experience disrupted sleep due to academic pressures and clinical responsibilities. Assessing sleep quality is critical because it is directly associated with cognitive performance, mood, and overall well-being. The PSQI provides both detailed component scores and a global measure of sleep quality, making it a comprehensive tool for examining sleep disturbances in relation to stress and coping strategies. It demonstrates strong psychometric properties, with a Cronbach's alpha of 0.83 and high sensitivity (89.6%) and specificity (86.5%) for identifying sleep disturbances.[31]

The **Coping Strategies Inventory** (CSI) identifies the coping strategies individuals use when dealing with stressors. The full version contains 72 items, while a short form includes 32 items. Responses are rated on a 5-point Likert scale from 1 (Not at all) to 5 (Very much). The instrument comprises eight subscales: Problem Solving, Cognitive Restructuring, Expressing Emotions, Seeking Social Support, Problem Avoidance, Wishful Thinking, Self-Criticism, and Social Withdrawal. The CSI is appropriate for use in research involving medical students

because understanding how they cope with stress is essential for designing interventions to enhance resilience and reduce burnout. The inventory provides a comprehensive measure of both positive coping strategies, such as problem-solving, and negative coping strategies, such as social withdrawal. Additionally, its ability to categorize coping strategies into engagement and disengagement dimensions enhances its usefulness in assessing overall coping styles. The CSI has demonstrated acceptable psychometric properties, with Cronbach's alpha values greater than 0.70, and its construct and criterion validity have been confirmed across various populations.[32]

In conclusion, the selected instruments—the Work-study-life balance Scale, the Perceived Stress Scale (PSS-10), the Pittsburgh Sleep Quality Index (PSQI), and the Coping Strategies Inventory (CSI)—are widely recognized for their strong psychometric properties and relevance to the study of stress, coping, and well-being among medical students. Each tool provides a distinct and comprehensive measure that contributes to understanding the factors influencing medical students' academic and personal life balance. Their established reliability, validity, and application in previous studies support their suitability for this research.

CHAPTER THREE

METHODOLOGY

3.1 STUDY AREA

The study was conducted in UNIBEN, Ugbowo campus, located in Egor Local Government Area (LGA), Benin City, Edo State, Nigeria. University of Benin popularly known as UNIBEN lies within latitude 6°23'30'' longitude 5°36'30'' and latitude 6°24'30'' longitude 5°38'0''.[33]

It is situated in Benin City along the Benin-Lagos expressway. Its terrain is typically flat. It is bounded in the North by Ekosodin community and in the South by the institution's teaching hospital, University of Benin Teaching Hospital (UBTH). In the West, it is bounded by the Bendel Development and Property Authority (BDPA) estate and in the Eastern end of the university beyond the Ikpoba river bounded by Akiuwa and Edosowan communities.[33]

UNIBEN was founded in 1970 but was originally called Midwest Institute of Technology; after attaining the status of a full-fledged university in line with the requirements of the National Universities Commission in 1971 and became a federal government owned university on 1975.[34]

The University has two campuses: Ugbowo and Ekehuan and the total population across the two campuses is estimated to be 60,000 students. UNIBEN boasts of three (3) institutes and five (5) Centers of Excellence:

Institute of Child Health, Institute of Education, Institute of Public Administration and Extensive Services, Centre of Excellence in Reproductive Health, Centre for Forensic Programmes and DNA Studies, Centre of Excellence in Geosciences and Petroleum

Engineering, Centre of Entrepreneurship Development, Centre of Sustainable Procurement, Environmental and Social Standards Enhancement [34]

The University also have fifteen (15) faculties including:

Arts, Agriculture, Basic Medical Sciences, Dentistry, Education, Engineering, Environmental Sciences, Law, Life Sciences, Management Science, Medicine and Surgery, Pharmacy, Physical Sciences, Social Sciences, Veterinary Medicine.[34]

3.2 STUDY DESIGN

A descriptive cross-sectional study design was used for this study.

3.3 STUDY DURATION

The project was conducted over the course of one year as follows:

1. Topic submission: January, 2025
2. Introduction: January, 2025
3. Literature review: February, 2025
4. Methodology: March-May, 2025
5. Ethical clearance: May, 2025
6. Data collection: January, 2026
7. Data analysis and interpretation: February, 2026
8. Discussion, conclusion and final submission: February, 2026

3.4 STUDY POPULATION

The study population consisted of registered undergraduate medical students at UNIBEN

Inclusion criteria

Medical students from 200 level to 600 level

Exclusion criteria

Medical students who were ill to fill in the questionnaire.

3.5 SCOPE OF STUDY

This study was aimed to explore the concept and impact of work-study-life balance among medical students at UNIBEN, focusing on students from the 200-level to final year. The research sought to understand how these students navigate the demands of rigorous academic and clinical training alongside personal and, in some cases, professional responsibilities.

1. Sociodemographic characteristics

The Section A collected data on characteristics such as age, gender, ethnic group, religion, monthly income etc. The section also investigated the extent to which medical students engage in part-time employment such as the nature of the job, hours committed per week, duration of employment.

2. Knowledge of Work-study-life balance

Understanding students' awareness and comprehension of work-study-life balance is crucial. Section B of the questionnaire assessed this by inquiring about students' familiarity with the concept, sources of information, and personal definitions. This aligned with findings that highlighted the importance of self-awareness in managing work-study-life balance effectively.

3. Perception of Work-study-life balance

Beyond knowledge, the study examined students' attitudes towards work-study-life balance and this is done through Section B which further explores perceptions, including beliefs about the attainability and importance of maintaining balance during medical training using the

Work Life Balance (WSLB) Scale. This aspect is informed by research indicating that perceptions significantly influence behavior and coping strategies.

4. Coping Strategies Employed

Identifying the mechanisms students use to manage stress and balance responsibilities is essential. Section C utilizes the Brief COPE Inventory to evaluate various coping strategies, distinguishing between adaptive and maladaptive methods. Understanding these strategies provides insight into students' resilience and areas needing support. This section also collects on the students' study habits in terms of preferred location of study, method of study and number of hours used in study.

5. Implications of Work-Study-Life balance

The study assessed the impact of work-study-life balance on students' mental health and well-being. Sections D and E employed the Perceived Stress Scale (PSS-10) and the Pittsburgh Sleep Quality Index (PSQI), respectively, to measure stress levels and sleep quality. These tools were widely recognized for their reliability in evaluating psychological and physiological aspects of well-being.

This study is aimed at assessing knowledge, perception, practices of work-study-life balance and its implications amongst medical students in UNIBEN.

3.6 SAMPLE SIZE DETERMINATION

The minimum sample size for this study was determined by using Cochran's formula for descriptive study. $n = \frac{z^2pq}{d^2}$ [31]

Where,

n =minimum sample size

z =standard normal deviation equals 1.96 at 95% confidence interval

p =the prevalence of the characteristics of interest

q =1-p

d =degree of precision.

The prevalence (p) was set at 73% based on a prevalence of medical students who are working.[11]

q = 1 – 0.73 = 0.29

Therefore $n = \frac{1.96^2 \times 0.73 \times 0.29}{0.05^2}$

$$n = \frac{0.75717936}{0.0025}$$

$$n = 302.871744 \sim 303$$

To account for non-response, the non-response rate of 10% was added to the sample size utilizing the formula of non-response rate.

nf = n/ 1-nr

Where:

- n_f= final sample size
- n= minimum sample size

- n_r= non-response rate = 10% = 0.10

nf = 302 / 1 – 0.10 =335

Design effect:

For the purpose of using a multi-stage sampling technique, a design effect of 1.5 is employed.

$N_{adjusted=}$ 335x 1.5= 503

Therefore, the sample size is 503 students. A pre-test study will be conducted with 51 medical students (10% of 503) to validate the research instruments**.**

3.7 SAMPLING TECHNIQUE

A multistage sampling technique was used:

1. **Stratified Sampling**: The population was divided into subgroups based on academic level (200-level, 300-level, etc.). This ensured that students across different stages of training were represented.

2. **Simple Random Sampling:** Within each stratum, students were randomly selected using a lottery method. This reduced selection bias and ensured fairness in the selection process. This technique ensured that the sample was both representative and proportionally distributed across academic levels.

The number of students in each of these classes was obtained from the various class representative.

The total number of the students in the selection criteria was 1126.

Each stratum was given an identifier using the course of study and year of admission i.e. MED180

1. 600 level (MED170 and MED180): 310
2. 500 level (MED190): 132
3. 400 level (MED200 and MED210): 345
4. 300 level (MED220): 155
5. 200 level (MED230): 184

Each stratum has

Sampling fraction =n/N

Where n =sample size = 503

N= Total population =1126

Sampling fraction = $\frac{503}{1126}$ = 0.447

The sample size of each stratum (class) was calculated using the formula;

Sample size = sampling fraction x population of students each class

Proportional allocation for each class;

MED170 and MED180 = 0.447 × 310 = 139

MED190 = 0.447 × 132 = 59

MED200 and MED210= 0.447 × 348= 154

MED220= 0.447 × 155 = 69

MED230 = 0.447 × 184 = 82

TOTAL = 503

3.8 DATA MANAGEMENT

3.8.1 TOOLS FOR DATA COLLECTION

Data was collected using a structured, self-administered questionnaire, incorporating standardized instruments which included open ended and closed ended questions.

The questionnaire was divided into 5 sections

Section A: Socio-demographic characteristics

Section B: Knowledge and perception of work-study-life balance

Section C: Practice of work-study-life balance

Section D: Implications (stress levels) of work-study-life balance

Section E: Implications (sleep quality) of work-study-life balance

3.8.2 METHOD OF DATA COLLECTION

The standardized self-administered questionnaire was distributed electronically via Google Forms and in print via representatives in each class.

3.8.3 PRETESTING

Pretesting was conducted among medical students in Lagos State University, Lagos State. A sample size of 51 respondents was derived from the 10% of the sample size of 503. The aim

of the exercise was to test the questionnaire's accuracy and to assess the understanding of the questions by the respondents and adjust if the need arises

3.8.4 DATA ANALYSIS

Data collected was checked for completeness to ensure no missing items. The IBM SPSS version 27.0 software was used for data analysis. A statistical significance was at $p < 0.05$ was for inferential analysis.

Univariate analysis was used in terms of the frequency tables to evaluate the frequency distribution of variables

The association between variables was evaluated through the use of bivariate analysis to determine the relationship between them.

SCORING SYSTEM

- **Knowledge of work-study-life balance**

This was assessed by evaluating awareness and correct understanding of the concept. Each correct response was assigned a score of **1**, while incorrect responses were scored **0**. The total knowledge score was 2, and respondents were categorized as having **good knowledge** if they scored **50% or more**, and **poor knowledge** if they scored **less than 50%.**

Component 1: Awareness

Yes	1
No	0

Component 2: Definition

Correct option (option C) 1

Incorrect option 0

- **Perception of work-study-life balance**

This set of questions used a Likert scale rating Strongly Agree [SA] (5) to Strongly Disagree [SD] (1) and two dichotomous questions (Yes/No):[29]

1. Job doesn't make life difficult
2. Don't neglect personal needs
3. Don't struggle to juggle
4. Happy with personal time
5. Better mood overall
6. Neglecting affects career
7. The school needs to support more
8. Not drained of energy
9. **Only this question was reversed: Felt nervous/stressed.** Hence, Strongly Disagree had a score of 5 and Strongly Agree had a score of 1.
10. School has initiatives

    Yes 1

    No 0

11. Prioritize self-care

    Yes 1

    No 0

The total score is at 47, using a 50% cut-off point, this indicates a positive perception of work–study–life balance.

< 50% = Negative perception

≥ 50% = Positive perception

- **Practice of work-study-life balance**

This involves classifying behaviors based on adaptive (problem-solving), maladaptive avoidance, denial, withdrawal, or emotional distress responses) then mixed (when there is an equal proportion between the two). Each question is rated on a scale of 1-5, where 1 indicates never, and 5 indicates always. The coping mechanism of the respondent will have the highest rating.[32]

Adaptive coping:

a. Resolve myself
b. Avoid overthinking
c. Push harder
d. Defend boundaries
e. Accept the mistake
f. Ask support
g. Friends support

Maladaptive coping:

a) Regret commitments
b) Wish away
c) Forget stress
d) Withdraw

e) Downplay

f) Emotional outburst

g) Express emotions (venting

- **Implication of work-study-life balance (stress levels)**

The Perceived Stress Scale (PSS-10) was used to assess perceived stress among respondents. The instrument consists of 10 items scored on a 5-point Likert scale ranging from 0 (Never) to 4 (Very often).[30] Positively worded items (items 4, 5, 7, and 8) were reverse-scored before analysis. The total score was obtained by summing all item scores, with possible scores ranging from 0 to 36, where higher scores indicate higher perceived stress.

For this study, stress levels were categorized into two groups using a dichotomous classification: low levels and high levels

In the last month, how often have you:

1. Been upset because of something that happened unexpectedly?
2. Felt nervous or stressed?
3. Felt confident about your ability to handle personal problems? *(Reverse)*
4. Felt that things were going your way? *(Reverse)*
5. Felt that you could not cope with all the things you had to do?
6. Felt that you were on top of things? *(Reverse)*
7. Been angered because of things that were outside your control?

8. Found yourself thinking about tasks you still had to complete?

9. Felt that you were able to control how you spend your time? *(Reverse)*

Low stress: <50%

High stress: ≥ 50%

- **Implication of work-study-life balance (sleep quality)**

In scoring the PSQI, seven component scores were derived, each scoring 0 (no difficulty) to 3 (severe difficulty). The component scores were summed to produce a global score (ranging from 0 to 21). [31]

Component 1: Subjective sleep quality—question 9

Response to Q9	Component 1 score
Very good	0
Fairly good	1
Fairly bad	2
Very bad	3

Component 2: Sleep latency—questions 2 and 5a

Response to Q2	Component 2/Q2 subscore
< 15 minutes	0

16-30 minutes	1
31-60 minutes	2
> 60 minutes	3

Response to Q5a	Component 2/Q5a subscore
Not during the past month	0
Less than once a week	1
Once or twice a week	2
Three or more times a week	3

Sum of Q2 and Q5a subscores	Component 2 score
0	0
1-2	1
3-4	2
5-6	3

Component 3: Sleep duration—question 4

Response to Q4	Component 3 score
> 7 hours	0
6-7 hours	1

5-6 hours	2
< 5 hours	3

Component 4: Sleep efficiency—questions 1, 3, and 4

Sleep efficiency = (# hours slept/# hours in bed) X 100%

hours slept—question 4

hours in bed—calculated from responses to questions 1 and 3

Sleep efficiency	Component 4 score
> 85%	0
75-84%	1
65-74%	2
< 65%	3

Component 5: Sleep disturbance—questions 5b-5j

Questions 5b to 5j should be scored as follows:

Not during past month	0
Less than once a week	1
Once or twice a week	2
Three or more times a week	3

Sum of 5b to 5j scores	Component 5 score
0	0
1-9	1
10-18	2
19-27	3

Component 6: Use of sleep medication—question 6

Response to Q6	Component 6 score
Not during past month	0
Less than once a week	1
Once or twice a week	2
Three or more times a week	3

Component 7: Daytime dysfunction—questions 7 and 8

Response to Q7	Component 7/Q7 subscore
Not during past month	0
Less than once a week	1
Once or twice a week	2
Three or more times a week	3
Response to Q8	Component 7/Q8 subscore

No problem at all	0
Only a very slight problem	1
Somewhat of a problem	2
A very big problem	3

Sum of Q7 and Q8 subscores	Component 7 score
0	0
1-2	1
3-4	2
5-6	3

The Global PSQI Score will be the sum of seven component scores,

0 = Good (Score 0-5),

1 = Poor (Score > 5)

3.8.5 DATA PRESENTATION

The data obtained were presented using prose, frequency tables, and charts.

3.9 ETHICAL CONSIDERATIONS

Ethical clearance was obtained from the Research and Ethics Committee of University of Benin Teaching Hospital (UBTH) with the protocol number; ADM/E 22/A/VOL VII/148654912568 before data collection. This ensured that the processes of this study were conducted within the guidelines set by the committee.

Additionally, during the data collection, informed consent was obtained. Participants were informed about the study being carried out and assured of the safety of no compromise on their identity status.

All responses were kept anonymous, and there was no information that could be used to identify the respondent.

Requests for the withdrawal of consents from the respondents were also duly accepted.

3.10 LIMITATIONS OF THE STUDY

This study was based on self-administered hence, some participants might have provided socially desirable answers.

CHAPTER FOUR

RESULTS

A total of 509 respondents participated in the study, and the response rate was 100%. The results are presented in the following sections in line with the specific objectives.

SECTION A: Sociodemographic characteristics of respondents

SECTION B: Knowledge and perception of work-study-life balance

SECTION C: Practice of work-study-life balance

SECTION D: Implications of work-study-life balance (Stress levels)

SECTION E: Implications of work-study-life balance (Sleep quality)

SECTION A

SOCIODEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

Table 1: Socio-demographics characteristics of respondents

Variables	Frequency (n = 509)	Percent (%)
Age Group (years)		
18 – 21	148	29.1
22 – 23	314	61.7
24 – 32	47	9.2
Gender		
Male	382	75.0
Female	127	25.0
Level of Study		
200 Level	82	16.1
300 Level	69	13.6
400 Level	154	30.3
500 Level	59	11.6
600 Level	145	28.5
Marital Status		
Single	484	95.1
Married	19	3.7
Separated	4	0.8
Divorced	1	0.2
Widowed	1	0.2
Religion		
Christianity	483	94.9
Islam	23	4.5
Others	3	0.6
Ethnicity		
Bini	146	28.7
Igbo	99	19.4
Esan	93	18.3
Yoruba	65	12.8
Etsako	62	12.2
Urhobo	15	2.9
Owan	8	1.6
Itsekiri	7	1.4
Isoko	6	1.2
Others	8	1.6
Residence		
On Campus	256	50.3
Off Campus	253	49.7

A total of 509 respondents participated in the study. A descriptive analysis of their sociodemographic characteristics reveals that the majority of the respondents were aged between 22 and 23 years (61.7%), with male students constituting a significant majority of the respondents (75.0%). In terms of academic standing, the respondents were distributed across various levels of study, showing the highest concentrations among students in the 400 level (30.3%) and 600 level (28.5%). Nearly all respondents reported being single (95.1%) and the overwhelming majority identified as Christians (94.9%).

Table 1B: Socio-economic characteristics of respondents (continued)

Employment Status	Frequency (n = 509)	Percent (%)
Unemployed	343	67.4
Self-employed	146	28.7
Employed	20	3.9
Monthly Income (₦)		
< 20,000	13	2.6
20,000 – 50,000	129	25.3
50,000 – 70,000	189	37.1
70,000 – 100,000	43	8.4
> 100,000	135	26.5

Regarding their socio-economic profile, most respondents were currently unemployed (67.4%), though a notable proportion engaged in self-employment (28.7%). Furthermore, the most frequently reported monthly income or allowance fell between ₦50,000 and ₦70,000 (37.1%), followed by a sizable segment receiving above ₦100,000 (26.5%).

SECTION B

KNOWLEDGE AND PERCEPTION OF WORK-STUDY-LIFE BALANCE

Variables	Frequency (n = 509)	Percent (%)
Awareness of the term "work-study-life balance”		
Yes	461	90
No	48	9.4
Understanding of work-study-life balance		
The ability to fix an equilibrium in the face of an intersection between work/academics and personal life	377	74.1
Putting equal (50-50) time between personal time and academic/professional activities	70	13.8
The ability of an individual to work/study while he/she has time for his/her personal life	49	9.6
Being able to have self-care days off from work/school	13	2.6
Source of Information*		
Social media	384	75.4
Books	242	47.5
Family, friends, neighbors	143	28.1
Health institutions	141	27.7
Magazine	102	20.0
Teachers	100	19.6
Television/Radio	86	16.9

Table 2: Knowledge of work-study-life balance among respondents

*Multiple choice

A descriptive analysis was conducted assess respondents' knowledge regarding work-study-life balance. The data indicate a remarkably high level of general awareness, with the vast

majority of the respondents (90.6%) reporting familiarity with the term "work-study-life balance."

When assessing their conceptual understanding of the term, nearly three-quarters of the respondents (74.1%) correctly identified it as the ability to fix an equilibrium in the face of an intersection between work/academics and personal life. However, a notable minority exhibited misconceptions regarding the concept; 13.8% of respondents inaccurately defined it as putting a strict, equal (50-50) time split between personal and academic/professional activities, while smaller fractions viewed it simply as having time for a personal life (9.6%) or taking self-care days off (2.6%).

Regarding information sources on work-study-life balance, social media was the most frequently selected source of information, reported by 384 individuals (75.4%). Books were the second most common source, selected by 242 respondents (47.5%). Interpersonal and institutional sources such as Family, friends, and neighbors (28.1%) and Health institutions (27.7%) were reported at similar frequencies. The least frequently reported sources in this cohort were Magazines (20.0%), Teachers (19.6%), and Television/Radio (16.9%).

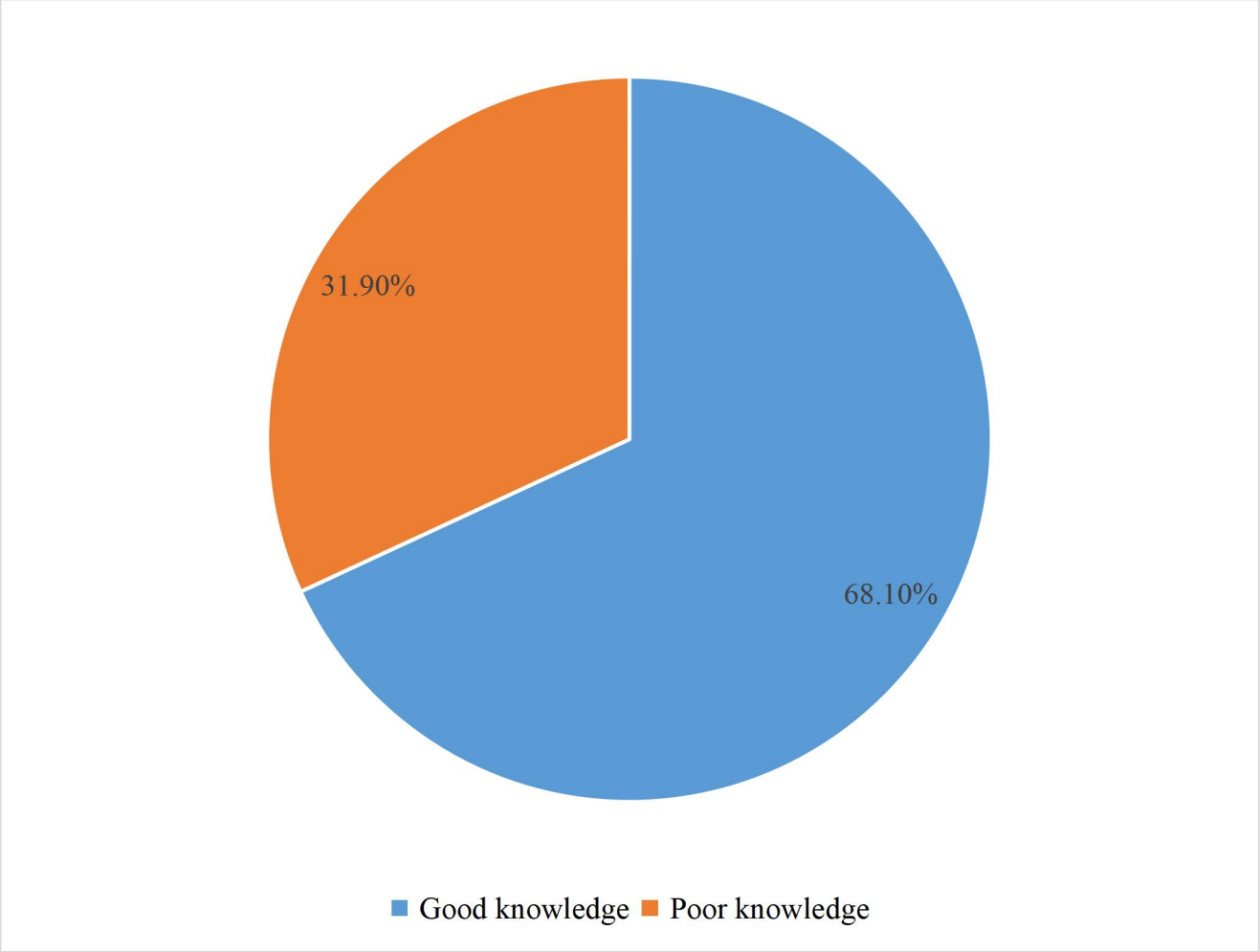

Figure 1: Overall knowledge of work-study-life balance among respondents

Majority of respondents 347 (68.10%), had poor knowledge of work-study-life balance, 162 (31.90%) of respondents had good knowledge of work-study-life balance

Table 3: Socio-demographic characteristics and level of knowledge

Variable	Poor Knowledge (n=347) Freq(%)	Good Knowledge (n= 162) Freq(%)	χ^2	p-value
Age Group (years)			45.44	< 0.001
18–21	114 (77.0%)	34 (23.0%)		
22–23	221 (70.4%)	93 (29.6%)		
24–32	12 (25.5%)	35 (74.5%)		
Gender			2.78	0.100
Male	268 (70.2%)	114 (29.8%)		
Female	79 (62.2%)	48 (37.8%)		
Level of Study			39.29	< 0.001
200 Level	36 (43.9%)	46 (56.1%)		
300 Level	53 (76.8%)	16 (23.2%)		
400 Level	111 (72.1%)	43 (27.9%)		
500 Level	32 (54.2%)	27 (45.8%)		
600 Level	115 (79.3%)	30 (20.7%)		
Marital Status			4.76	0.045
Ever married	22 (88.0%)	3 (12.0%)		
Never married	325 (67.1%)	159 (32.9%)		
Religion			1.13	0.717
Christianity	327 (67.7%)	156 (32.3%)		
Islam	18 (78.3%)	5 (21.7%)		
Others	2 (66.7%)	1 (33.3%)		
Ethnic Group			2.55	0.128
Edo-indigenes	160 (64.8%)	87 (35.2%)		
Non Edo-indigenes	187 (71.4%)	75 (28.6%)		
Residence			27.44	<0.001
On Campus	147 (57.4%)	109 (42.6%)		
Off Campus	200 (79.1%)	53 (20.9%)		
Employment Status			8.70	0.012
Unemployed	243 (70.8%)	100 (29.2%)		
Self-employed	87 (59.6%)	59 (40.4%)		
Employed	17 (85.0%)	3 (15.0%)		
Monthly Income/Allowance (₦)			20.45	<0 .001
< 20,000	7 (53.8%)	6 (46.2%)		
20,000 – 50,000	70 (54.3%)	59 (45.7%)		
50,000 – 70,000	140 (74.1%)	49 (25.9%)		
70,000 – 100,000	27 (62.8%)	16 (37.2%)		
> 100,000	103 (76.3%)	32 (23.7%)		

Chi-square tests of independence were performed to examine the relationships between various sociodemographic characteristics and respondents' overall knowledge category regarding work-study-life balance. The data revealed a statistically significant association between age group and knowledge, $\chi^2 = 45.44$, $p < .001$. This suggests a progressive increase in understanding with age, as the oldest cohort (24–32 years) demonstrated the highest proportion of good knowledge (74.5%) compared to their younger counterparts. Furthermore, a highly significant relationship was observed across academic levels, $\chi = 39.29$, $p < 0.001$. Interestingly, 200-level students exhibited the highest rate of good knowledge (56.1%), whereas students in their final or advanced clinical years (600-level) demonstrated the lowest proportion of good knowledge (20.7%).

Among respondents who have ever been married, the vast majority (88.0%) fell into the poor knowledge category, while 12.0% demonstrated good knowledge. In contrast, among respondents who have never been married, 67.1% exhibited poor knowledge and 32.9% exhibited good knowledge. The Chi-square test of independence revealed a statistically significant association between marital status and WSLB knowledge category, $\chi^2 = 4.76$, p = 0.045.

Living arrangements also significantly influenced knowledge levels, $\chi^2 = 27.44$, $p < 0.001$; respondents residing on campus were considerably more likely to possess good knowledge (42.6%) than those living off-campus (20.9%). Regarding economic and employment profiles, employment status demonstrated a significant relationship with knowledge, $\chi^2= 8.70$, $p = .013$, with self-employed students exhibiting better knowledge (40.4%) than completely unemployed (29.2%) or fully employed (15.0%) students. Similarly, a significant association was found across monthly income brackets, $\chi^2 = 20.45$, $p < .001$, indicating that students in the lower income brackets (earning below ₦50,000) possessed proportionally better knowledge than those earning above ₦100,000.

Table 4: Perception of work-study-life balance among respondents

Variables	Strongly Disagree n (%)	Disagree n (%)	Indifferent n (%)	Agree n (%)	Strongly Agree n (%)
I am happy with the amount of personal time I have.	52 (10.2%)	164 (32.2%)	159 (31.2%)	98 (19.3%)	36 (7.1%)
I have a better mood because my studies/life are going well.	23 (4.5%)	92 (18.1%)	175 (34.4%)	149 (29.3%)	70 (13.8%)
Neglecting balance affects my future career.	8 (1.6%)	44 (8.6%)	111 (21.8%)	220 (43.2%)	126 (24.8%)
My job/school does not make my personal life difficult.	34 (6.7%)	140 (27.5%)	133 (26.1%)	141 (27.7%)	61 (12.0%)
I do not neglect my personal needs.	34 (6.7%)	114 (22.4%)	121 (23.8%)	191 (37.5%)	49 (9.6%)
I have felt nervous and stressed. (Reverse coded in source)	13 (2.6%)	50 (9.8%)	102 (20.0%)	219 (43.0%)	125 (24.6%)
I do not struggle to juggle work/school.	44 (8.6%)	199 (39.1%)	135 (26.5%)	104 (20.4%)	27 (5.3%)
The school needs to do more to support balance.	10 (2.0%)	40 (7.9%)	89 (17.5%)	207 (40.7%)	163 (32.0%)

Table 4 details the frequencies and percentages of respondents' level of agreement with various statements related to their experiences and perceptions of work-study-life balance, measured on a 5-point Likert scale. When asked if they were happy with the amount of personal time they had, the largest proportion of respondents (32.2%) disagreed, followed closely by those who were indifferent (31.2%). In terms of mood relating to their studies/life going well, the most frequent response was indifferent (34.4%), with 29.3% agreeing. A large

majority agreed (43.2%) or strongly agreed (24.8%) that neglecting balance affects their future career.

Responses were somewhat polarized regarding whether their job/school makes their personal life difficult; 27.5% disagreed that it does not, while 27.7% agreed. Regarding personal needs, 37.5% agreed that they do not neglect them, while 23.8% were indifferent. A substantial proportion reported feeling nervous and stressed, with 43.0% agreeing and 24.6% strongly agreeing. The statement "I do not struggle to juggle work/school" yielded high disagreement, with 39.1% disagreeing and an additional 8.6% strongly disagreeing. Finally, a strong consensus emerged regarding institutional support, as 40.7% agreed and 32.0% strongly agreed that the school needs to do more to support balance.

Table 5: Perceived importance of work-study-life balance among respondent

Variables	Frequency (n = 509)	Percent (%)
Importance Rating of Work-Life Balance (1 = Lowest 5 = Highest)		
1	10	2.0
2	10	2.0
3	95	18.7
4	122	24.0
5	272	53.4
Does the school offer initiatives to support balance?		
No	469	92.1
Yes	40	7.9
Have you used these initiatives? (n=40)		
Yes	29	72.5
No	11	27.5
Was the initiative effective? (n=29)		
Yes	27	93.1
No	0	6.9

Table 5 presents the distribution of respondents' perceived importance of work-study-life balance and their engagement with institutional support initiatives. When asked to rate the importance of work-life balance on a scale of 1 to 5, more than half of the respondents (53.4%) selected the highest rating of 5, while 24.0% selected a rating of 4. A rating of 3 was selected by 18.7% of the respondents, with the lowest ratings of 1 and 2 accounting for 2.0% each.

Regarding institutional support, the vast majority of the respondents (92.1%) indicated that their school does not offer initiatives to support work-study-life balance, while 7.9% reported that such initiatives are available. When asked if they had utilized any school initiatives, 27.5% responded "No," 72.5% responded "Yes,". Finally, regarding the effectiveness of these initiatives, 93.1% of the total respondents reported that the initiatives were effective, 6.9% reported they were not effective.

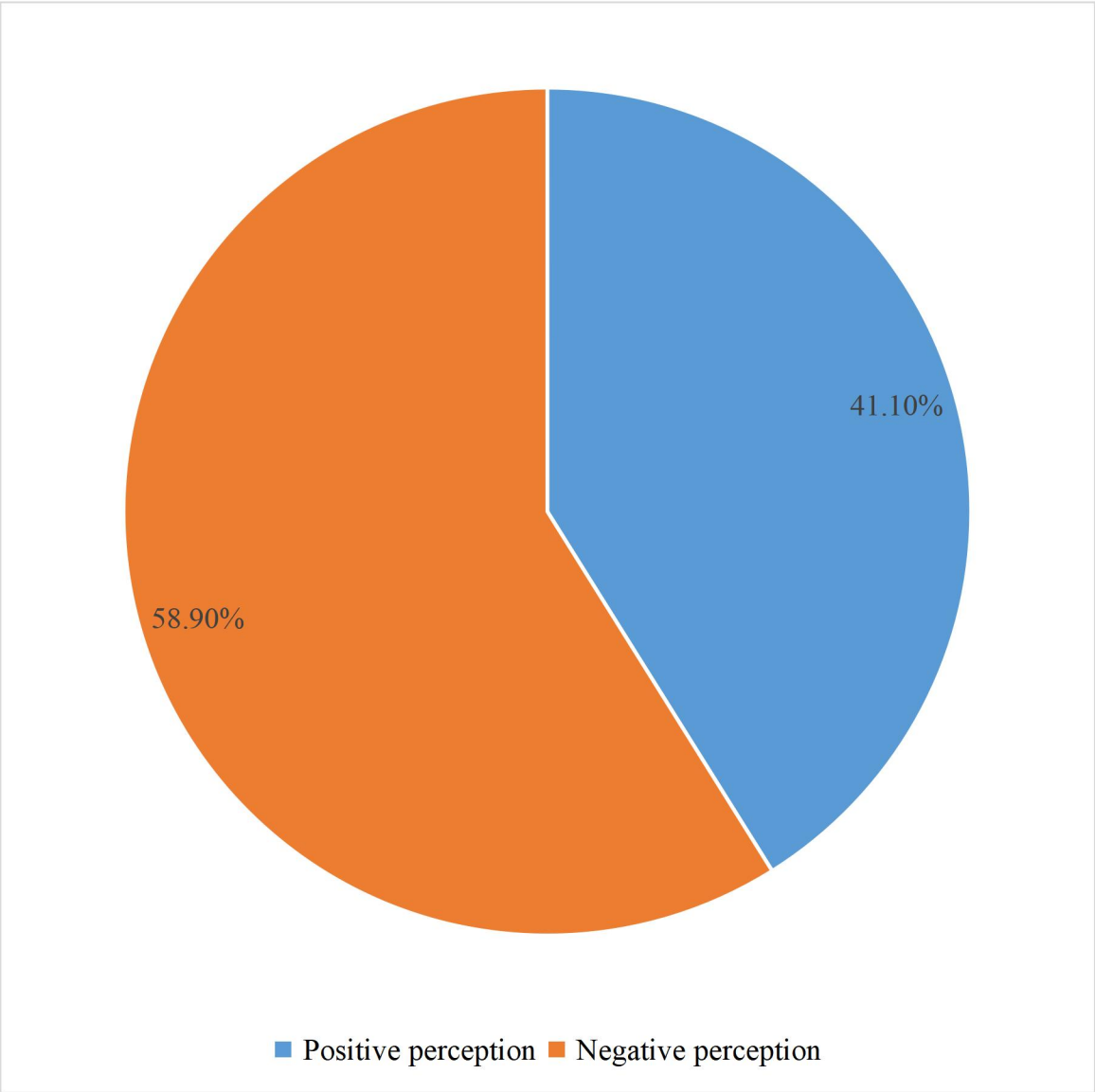

Figure 2: perception of respondents towards work-study-life balance

The pie chart above illustrates that of the 509 respondents, 209(41.10%) had a good perception of the concept, however, 300(58.90%) had a poor perception towards work-study-life balance.

Variable	Negative Perception (n=300) Freq(%)	Positive Perception (n=209) Freq(%)	Test Statistics	p-value
Age Group (years)			χ^2 =4.20	0.127
18–21	84 (56.8%)	64 (43.2%)		
22–23	194 (61.8%)	120 (38.2%)		
24–32	22 (46.8%)	25 (53.2%)		
Gender			χ^2 =0.43	0.534
Male	222 (58.1%)	160 (41.9%)		
Female	78 (61.4%)	49 (38.6%)		
Level of Study			χ^2 =3.01	0.559
200 Level	53 (64.6%)	29 (35.4%)		
300 Level	37 (53.6%)	32 (46.4%)		
400 Level	92 (59.7%)	62 (40.3%)		
500 Level	31 (52.5%)	28 (47.5%)		
600 Level	87 (60.0%)	58 (40.0%)		
Marital Status			χ^2 =0.89	0.408
Ever married	17 (68.0%)	8 (32.0%)		
Never married	283 (58.5%)	201 (41.5%)		
Religion			Fisher's Exact=2.44	0.262
Christianity	288 (59.6%)	195 (40.4%)		
Islam	10 (43.5%)	13 (56.5%)		
Others	2 (66.7%)	1 (33.3%)		
Ethnic Group			χ^2 =0.08	0.787
Edo-indigenes	144 (58.3%)	103 (41.7%)		
Non Edo-indigenes	156 (59.5%)	106 (40.5%)		
Residence			χ^2 =0.49	0.528
On Campus	147 (57.4%)	109 (42.6%)		
Off Campus	153 (60.5%)	100 (39.5%)		
Employment Status			χ^2 =6.49	0.038
Unemployed	214 (62.4%)	129 (37.6%)		
Self-employed	78 (53.4%)	68 (46.6%)		
Employed	8 (40.0%)	12 (60.0%)		
Monthly Income(₦)			χ^2 0.96	0.918
< 20000	6 (46.2%)	7 (53.8%)		
20000 – 50000	76 (58.9%)	53 (41.1%)		
50000 – 70000	112 (59.3%)	77 (40.7%)		
70000 – 100000	25 (58.1%)	18 (41.9%)		
> 100000	81 (60.0%)	54 (40.0%)		

Table 6: Socio-demographics and perception of work-study-life balance

Chi-square tests of independence were conducted to evaluate the relationship between respondents' sociodemographic characteristics and their overall perception of work-study-life balance (categorized as negative or positive).

The analysis revealed a statistically significant association between employment status and overall perception, $\chi^2 = 6.49$, $p = .038$. Specifically, fully employed respondents were the most likely to report a positive perception of their work-study-life balance (60.0%), followed by self-employed students (46.6%). Conversely, unemployed students reported the highest rate of negative perception (62.4%).

The data failed to demonstrate a statistically significant relationship between overall perception and the remaining sociodemographic variables. There were no significant differences in perception across age groups ($\chi^2 = 4.20$, $p = .127$), gender ($\chi^2 = 0.43$, $p = 0.534$), or level of study ($\chi^2 = 3.01$, $p = .559$). Similarly, marital status ($p = .408$), religious affiliation ($p = .262$), ethnic grouping ($p = .787$), campus residence ($p = 0.528$), and monthly income/allowance ($p = 0.918$) did not significantly influence whether a student held a positive or negative perception of work-study-life balance.

SECTION C

PRACTICE OF WORK-STUDY-LIFE BALANCE

Variables	Frequency (n = 509)	Percent (%)
Current Work-Life Balance Rating(1=Lowest, 5=Highest)		
1	38	7.5
2	84	16.5
3	263	51.7
4	75	14.7
5	49	9.6
Do you prioritize self-care?		
Yes	376	73.9
No	133	26.1
Biggest Challenges to Maintaining Work-Study-Life Balance*		
Lack of free time	365	71.7%
Demanding curriculum	338	66.4%
Clinical rotation hours	240	47.2%
Other specific challenges**	8	1.6%
Daily Study Intensity (n = 507)		
Low (0 – 2 hours)	128	25.2
Moderate (2.1 – 4 hours)	291	57.4
High (> 4 hours)	88	17.4
Preferred Study Methods*		
Reading of class notes and materials	365	71.7
Watching videos	358	70.3
Reading textbooks	338	66.4
Group study	337	66.2
Making use of past questions	332	65.2
Other methods (e.g. AI tools)	4	0.8
Preferred Study Locations*		
Home / Hostel	393	77.2
Library	256	50.3
Classrooms / School	164	32.2
Reading / Study rooms	9	1.8
Other locations (e.g. Night class)	3	0.6

Table 7: Practice of work study-life balance among respondents

*Multiple choice **

Indiscipline, finances, need to make money, lack of motivation, large academic workload, no vibe, time management", and long hours of posting and classes

Out of the 509 respondents, the majority (51.7%) assigned their current work-life balance a neutral rating of 3 on a 5-point scale. This was followed by a rating of 2 (16.5%) and a rating of 4 (14.7%). The extreme ratings of 5 and 1 were reported by 9.6% and 7.5% of the respondents, respectively. Regarding self-care practices, a large proportion of the respondents (73.9%) reported that they do prioritize self-care, whereas 26.1% stated that they did not.

The biggest challenges respondents face in maintaining a work-study-life balance was structured as a multiple-response set. The most frequently selected challenge was a "lack of free time," identified by 365 individuals (71.7%). "Demanding curriculum" was the second most common challenge, reported by 338 respondents (66.4%), followed by "Clinical rotation hours," which was selected by 240 respondents (47.2%). A minor subset of the respondents (1.6%) cited other specific individual challenges such as time management, finances, or motivation.

Regarding the amount of time dedicated to studying daily, the respondents were classified into three intensity categories based on 507 valid responses. The majority of the respondents (57.4%) fell into the "Moderate" study intensity category, indicating that they spend between 2.1 and 4 hours studying each day. A quarter of the respondents (25.2%) were classified in the "Low" intensity category, reporting 2 hours or less of daily study time. The "High" intensity category, which represents individuals who study for more than 4 hours daily, comprised 17.4% of the valid respondents.

The utilization of various study methods was highly distributed among the 509 respondents, with all five primary options selected by more than 65% of the respondents. The most frequently utilized method was the reading of class notes and materials, reported by 365

respondents (71.7%). This was closely followed by watching videos, which was selected by 358 individuals (70.3%). Traditional methods such as reading textbooks (66.4%), engaging in group study (66.2%), and making use of past questions (65.2%) were similarly prevalent. A very small fraction of the respondents (0.8%) specified alternative methods, such as utilizing AI platforms, flashcards, or meditation.

When identifying where they prefer to study, personal residences were the most prevalent environments. Out of the 509 respondents, 393 (77.2%) indicated that they study at their home or hostel. The library was the second most frequently reported location, utilized by exactly half of the respondents (50.3%). Additionally, approximately one-third of the respondents (32.2%) reported using classrooms or other general school facilities for their studies. Dedicated reading or study rooms (outside of the primary library) were used by a small fraction of the respondents (1.8%), while uniquely specified locations, such as night classes or the gym, were reported by 0.6% of the respondents.

Table 8: Coping strategies among respondents

Coping Strategy	Strongly Disagree n(%)	Disagree n(%)	Indifferent n(%)	Agree n(%)	Strongly Agree n(%)
Resolve issue myself	20 (3.9%)	44 (8.6%)	167 (32.8%)	180 (35.4%)	98 (19.3%)
Push to work harder	22 (4.3%)	78 (15.3%)	181 (35.6%)	170 (33.4%)	58 (11.4%)
Accept mistake	30 (5.9%)	73 (14.3%)	200 (39.3%)	152 (29.9%)	54 (10.6%)
Avoid overthinking	26 (5.1%)	100 (19.6%)	210 (41.3%)	133 (26.1%)	40 (7.9%)
Ask mentor/senior for advice	41 (8.1%)	83 (16.3%)	194 (38.1%)	130 (25.5%)	61 (12.0%)
Withdraw from others	39 (7.7%)	106 (20.8%)	190 (37.3%)	138 (27.1%)	36 (7.1%)
Wish situation away	29 (5.7%)	84 (16.5%)	200 (39.3%)	121 (23.8%)	75 (14.7%)
Defend boundaries	23 (4.5%)	105 (20.6%)	215 (42.2%)	115 (22.6%)	51 (10.0%)
Express emotions/venting	51 (10.0%)	152 (29.9%)	162 (31.8%)	88 (17.3%)	56 (11.0%)
Allow friends to support	41 (8.1%)	101 (19.8%)	215 (42.2%)	110 (21.6%)	42 (8.3%)
Forget about stress	44 (8.6%)	113 (22.2%)	220 (43.2%)	102 (20.0%)	30 (5.9%)
Downplay seriousness	54 (10.6%)	99 (19.4%)	228 (44.8%)	103 (20.2%)	25 (4.9%)
Emotional outburst	67 (13.2%)	127 (25.0%)	190 (37.3%)	96 (18.9%)	29 (5.7%)
Regret taking on commitments	56 (11.0%)	110 (21.6%)	240 (47.2%)	76 (14.9%)	27 (5.3%)

Table 8 presents the frequencies and percentages of respondents' level of agreement with various coping strategies used to manage work-study-life balance challenges, measured on a 5-point Likert scale.

Beginning with resolving the issue myself, the highest proportion of respondents agreed (35.4%), followed by those who were indifferent (32.8%), while 19.3% strongly agreed, 8.6% disagreed, and 3.9% strongly disagreed. For expressing emotions or venting, the most frequent response was indifferent (31.8%), with 29.9% disagreeing, 17.3% agreeing, 11.0% strongly agreeing, and 10.0% strongly disagreeing. Regarding regretting taking on commitments, nearly half of the respondents was indifferent (47.2%), while 21.6% disagreed, 14.9% agreed, 11.0% strongly disagreed, and 5.3% strongly agreed.

When assessing the strategy to avoid overthinking, 41.3% were indifferent, 26.1% agreed, 19.6% disagreed, 7.9% strongly agreed, and 5.1% strongly disagreed. For the strategy of wishing the situation away, 39.3% were indifferent, 23.8% agreed, 16.5% disagreed, 14.7% strongly agreed, and 5.7% strongly disagreed. Regarding forgetting about stress, the majority were indifferent (43.2%), followed by 22.2% who disagreed, 20.0% who agreed, 8.6% who strongly disagreed, and 5.9% who strongly agreed.

For the strategy of withdrawing from others, 37.3% reported indifference, 27.1% agreed, 20.8% disagreed, 7.7% strongly disagreed, and 7.1% strongly agreed. When asked about allowing friends to support them, 42.2% were indifferent, 21.6% agreed, 19.8% disagreed, 8.3% strongly agreed, and 8.1% strongly disagreed. For downplaying the seriousness of the issue, 44.8% were indifferent, 20.2% agreed, 19.4% disagreed, 10.6% strongly disagreed, and 4.9% strongly agreed.

Regarding pushing to work harder, 35.6% were indifferent, closely followed by 33.4% who agreed, 15.3% who disagreed, 11.4% who strongly agreed, and 4.3% who strongly disagreed. For defending boundaries, 42.2% were indifferent, 22.6% agreed, 20.6% disagreed, 10.0% strongly agreed, and 4.5% strongly disagreed. When dealing with challenges by accepting

mistakes, 39.3% were indifferent, 29.9% agreed, 14.3% disagreed, 10.6% strongly agreed, and 5.9% strongly disagreed.

For coping via an emotional outburst, 37.3% were indifferent, 25.0% disagreed, 18.9% agreed, 13.2% strongly disagreed, and 5.7% strongly agreed. Finally, for asking a mentor or senior for advice, 38.1% were indifferent, 25.5% agreed, 16.3% disagreed, 12.0% strongly agreed, and 8.1% strongly disagreed.

Table 9: Coping style profile among respondents

Coping Style Profile	Frequency (n = 509)	Percent (%)
Adaptive (Engagement Dominant)	228	44.8
Maladaptive (Disengagement Dominant)	194	38.1
Mixed / Equal Use	87	17.1

Table 9 presents the distribution of respondents according to their dominant coping style profiles. Among the 509 respondents, the highest frequency was observed in the Adaptive (Engagement Dominant) category, which accounted for 228 respondents (44.8%). The Maladaptive (Disengagement Dominant) profile was the second most common, comprising 194 individuals (38.1%). The remaining 87 respondents (17.1%) were categorized as having a Mixed or Equal Use of coping styles.

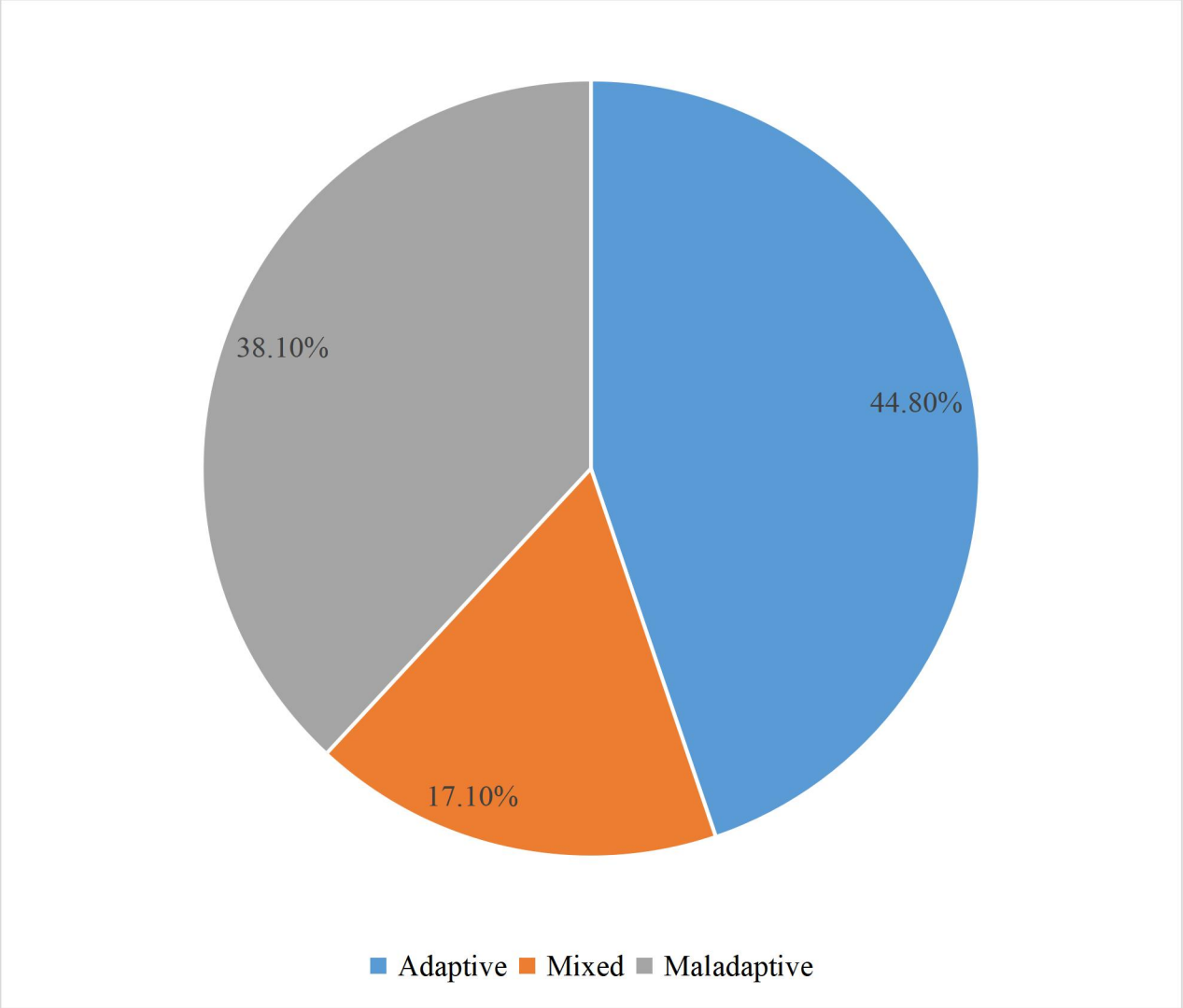

Figure 3 Coping style profile among respondents

The higher proportion of respondents 228(44.80%) demonstrated an adaptive coping profile, 194 (38.10%) were categorized as having a maladaptive coping profile and a smaller proportion 87(17.1%) demonstrated a mixed coping style profile.

Table 10: Socio-demographics characteristics and coping style among respondents

Variable	Adaptive (n=228) Freq(%)	Mixed (n=87) Freq (%)	Maladaptive (n=194) Freq (%)	Test statistics	p-value
Age Group (years)				χ^2=11.34	0.023
18–21	64 (43.2%)	24 (16.2%)	60 (40.5%)		
22–23	133 (42.4%)	55 (17.5%)	126 (40.1%)		
24–32	31 (66.0%)	8 (17.0%)	8 (17.0%)		
Gender				χ^2=0.96	0.627
Male	169 (44.2%)	63 (16.5%)	150 (39.3%)		
Female	59 (46.5%)	24 (18.9%)	44 (34.6%)		
Level of Study				Fisher's Exact= 4.38	0.811
200 Level	36 (43.9%)	16 (19.5%)	30 (36.6%)		
300 Level	28 (40.6%)	11 (15.9%)	30 (43.5%)		
400 Level	69 (44.8%)	21 (13.6%)	64 (41.6%)		
500 Level	26 (44.1%)	12 (20.3%)	21 (35.6%)		
600 Level	69 (47.6%)	27 (18.6%)	49 (33.8%)		
Marital Status				χ^2=1.93	0.410
Ever married	8 (32.0%)	6 (24.0%)	11 (44.0%)		
Never married	220 (45.5%)	81 (16.7%)	183 (37.8%)		
Religion				Fisher's Exact= 5.59	0.170
Christianity	213 (44.1%)	82 (17.0%)	188 (38.9%)		
Islam	14 (60.9%)	5 (21.7%)	4 (17.4%)		
Others	1 (33.3%)	0 (0.0%)	2 (66.7%)		
Ethnic Group				χ^2=1.24	0.553
Edo-indigenes	112 (45.3%)	46 (18.6%)	89 (36.0%)		
Non Edo-indigenes	116 (44.3%)	41 (15.6%)	105 (40.1%)		
Residence				χ^2=3.53	0.173
On Campus	125 (48.8%)	42 (16.4%)	89 (34.8%)		
Off Campus	103 (40.7%)	45 (17.8%)	105 (41.5%)		
Employment Status				χ^2=7.43	0.113
Unemployed	145 (42.3%)	57 (16.6%)	141 (41.1%)		
Self-employed	75 (51.4%)	28 (19.2%)	43 (29.5%)		
Employed	8 (40.0%)	2 (10.0%)	10 (50.0%)		
Monthly Income (₦)				Fisher's Exact= 4.10	0.885
< 20000	5 (38.5%)	7 (53.8%)	1 (7.7%)		
20000 – 50000	56 (43.4%)	48 (37.2%)	25 (19.4%)		
50000 – 70000	83 (43.9%)	70 (37.0%)	36 (19.0%)		
70000 – 100000	19 (44.2%)	18 (41.9%)	6 (14.0%)		
> 100000	65 (48.1%)	51 (37.8%)	19 (14.1%)		

Chi-square tests of independence were conducted to determine if respondents' dominant coping style profiles (Adaptive, Maladaptive, or Mixed) varied significantly across different sociodemographic groups.

The analysis revealed a statistically significant relationship only between age group and coping style, χ^2= 11.34, p = .023. Older students in the 24–32 age bracket demonstrated a noticeably higher reliance on adaptive coping mechanisms (66.0%) and a significantly lower reliance on maladaptive strategies (17.0%) compared to their younger counterparts (aged 18–21 and 22–23), who exhibited higher rates of maladaptive coping (40.5% and 40.1%, respectively).

None of the other sociodemographic variables exhibited a statistically significant association with the respondents' choice of coping strategies. Coping styles did not differ significantly by gender (χ^2 = 0.96, p = .627), academic level of study (p = .811), marital status (χ^2 = 1.93, p = .410), religious affiliation (p = .170), or ethnic group (χ^2 = 1.24, p = .553). Similarly, living arrangements (χ^2 = 3.53, p = .173), employment status (χ^2 = 7.43, p = .113), and monthly income/allowance (p = .885) had no significant influence on whether students adopted adaptive or maladaptive coping mechanisms.

SECTION D

IMPLICATIONS OF WORK-STUDY-LIFE BALANCE (STRESS LEVELS)

Table 11: Perceived stress among respondents

Stress Indicator	Never n (%)	Seldom n (%)	Sometimes n (%)	Often n (%)	Always n (%)
Upset by unexpected things	51 (10.0%)	160 (31.4%)	146 (28.7%)	122 (24.0%)	30 (5.9%)
Felt nervous	29 (5.7%)	118 (23.2%)	137 (26.9%)	176 (34.6%)	49 (9.6%)
Felt confident	13 (2.6%)	88 (17.3%)	188 (36.9%)	163 (32.0%)	57 (11.2%)
Things going your way	18 (3.5%)	103 (20.2%)	196 (38.5%)	147 (28.9%)	45 (8.8%)
Could not cope with tasks	43 (8.4%)	142 (27.9%)	158 (31.0%)	137 (26.9%)	29 (5.7%)
Felt on top of things	28 (5.5%)	123 (24.2%)	191 (37.5%)	139 (27.3%)	28 (5.5%)
Angered by lack of control	47 (9.2%)	128 (25.1%)	162 (31.8%)	136 (26.7%)	36 (7.1%)
Thinking about tasks	18 (3.5%)	64 (12.6%)	150 (29.5%)	158 (31.0%)	119 (23.4%)
Control over time	17 (3.3%)	120 (23.6%)	169 (33.2%)	161 (31.6%)	42 (8.3%)

Table 11 presents the distribution of responses across various indicators of perceived stress, measured on a 5-point frequency scale from "Never" to "Always."

When asked how often they were upset by unexpected things, the highest proportion answered seldom (31.4%), followed by sometimes (28.7%), often (24.0%), never (10.0%), and always (5.9%). Regarding feeling nervous or stressed, the most frequent response was often (34.6%), with 26.9% reporting sometimes, 23.2% seldom, 9.6% always, and 5.7% never. For the reverse-coded item measuring how often they felt confident, the majority selected sometimes (36.9%), followed closely by often (32.0%), seldom (17.3%), always (11.2%), and never (2.6%).

When evaluating how often things were going their way, 38.5% responded sometimes, 28.9% often, 20.2% seldom, 8.8% always, and 3.5% never. In terms of feeling they could not cope

with tasks, 31.0% reported sometimes, 27.9% seldom, 26.9% often, 8.4% never, and 5.7% always. For the item assessing if they felt on top of things, 37.5% reported sometimes, 27.3% often, 24.2% seldom, 5.5% never, and 5.5% always.

Regarding being angered by a lack of control, 31.8% responded sometimes, 26.7% often, 25.1% seldom, 9.2% never, and 7.1% always. When asked about thinking about tasks, the most frequent response was often (31.0%), followed by sometimes (29.5%), always (23.4%), seldom (12.6%), and never (3.5%). Lastly, for having control over time, 33.2% reported sometimes, 31.6% often, 23.6% seldom, 8.3% always, and 3.3% never.

Perceived Stress level	Frequency (n = 509)	Percent (%)
Low Stress	309	60.7
High Stress	200	39.3

Table 12: Perceived stress level among respondents

Table 12 displays the overall perceived stress categorization for the respondents. Out of the total respondents of 509 respondents, the majority (60.7%) were classified as experiencing "Low Stress," while the remaining 39.3% were categorized as experiencing "High Stress."

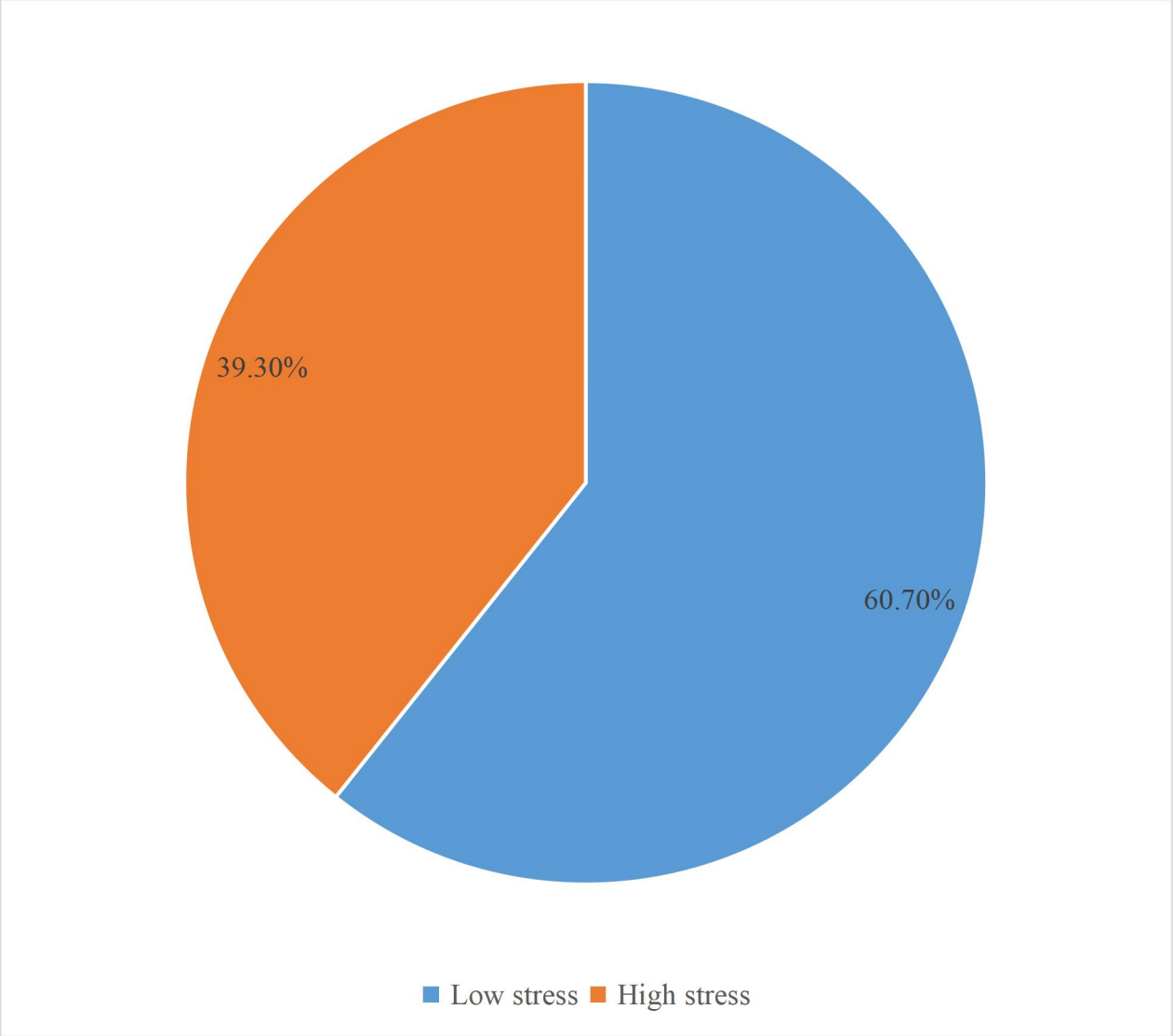

Figure 4: Overall perceived stress by respondents

The pie chart above shows that 309(60.70%) respondents experienced low stress while 200(39.30%) experienced high stress levels

TABLE 13: Socio-demographic characteristics and level of perceived stress

Variable	Low Stress (n= 309) Freq(%)	High Stress (n= 200) Freq (%)	Test statistics	p-value
Age Group (years)			χ^2= 7.22	0.027
18–21	81 (54.7%)	67 (45.3%)		
22–23	192 (61.1%)	122 (38.9%)		
24–32	36 (76.6%)	11 (23.4%)		
Gender			χ^2= 1.64	0.210
Male	238 (62.3%)	144 (37.7%)		
Female	71 (55.9%)	56 (44.1%)		
Level of Study			χ^2= 6.27	0.181
200 Level	47 (57.3%)	35 (42.7%)		
300 Level	49 (71.0%)	20 (29.0%)		
400 Level	86 (55.8%)	68 (44.2%)		
500 Level	40 (67.8%)	19 (32.2%)		
600 Level	87 (60.0%)	58 (40.0%)		
Marital Status			χ^2= 0.59	0.532
Ever married	17 (68.0%)	8 (32.0%)		
Never married	292 (60.3%)	192 (39.7%)		
Religion			Fisher's Exact=0.95	0.684
Christianity	294 (60.9%)	189 (39.1%)		
Islam	14 (60.9%)	9 (39.1%)		
Others	1 (33.3%)	2 (66.7%)		
Ethnic Group			χ^2= 0.14	0.717
Edo indigenes	152 (61.5%)	95 (38.5%)		
Non-Edo indigenes	157 (59.9%)	105 (40.1%)		
Residence			χ^2= 0.96	0.364
On Campus	150 (58.6%)	106 (41.4%)		
Off Campus	159 (62.8%)	94 (37.2%)		
Employment Status			Fisher's Exact=0.01	1.000
Unemployed	208 (60.6%)	135 (39.4%)		
Self-employed	89 (61.0%)	57 (39.0%)		
Employed	12 (60.0%)	8 (40.0%)		
Monthly Income (₦)			4.42	0.354
< 20000	9 (69.2%)	4 (30.8%)		
20000 – 50000	87 (67.4%)	42 (32.6%)		
50000 – 70000	109 (57.7%)	80 (42.3%)		
70000 – 100000	27 (62.8%)	16 (37.2%)		
> 100000	77 (57.0%)	58 (43.0%)		

Chi-square tests of independence were utilized to explore the relationship between sociodemographic characteristics and respondents' perceived stress categories.

The analysis revealed a statistically significant association between age group and perceived stress levels, χ^2= 7.22, p = .027. The data demonstrates a trend where perceived high stress decreases as age increases. The youngest cohort (18–21 years) reported the highest proportion of high stress (45.3%). This decreased in the 22–23 age group (38.9%), and dropped substantially in the oldest cohort (24–32 years), where only 23.4% reported high stress.

None of the other evaluated sociodemographic variables showed a statistically significant relationship with perceived stress. Perceived stress levels did not differ significantly by gender (χ^2 = 1.64, p = .210), level of study (χ^2 = 6.27, p = .181), marital status (χ^2 = 0.59, p = .532), religion (p = .684), or ethnic group (χ^2 = 0.14, p = .717). Similarly, living arrangements (χ^2 = 0.96, p = .364), employment status (p = 1.000), and monthly income/allowance (χ^2 = 4.42, p = .354) had no statistically significant impact on whether students experienced low or high stress.

Table 14: Predictors of perceived stress among respondents

Predictor	β	Odds ratio	Lower 95% CI for OR	Upper 95% CI for OR	p-value
Age (years)	-0.243	0.784	0.669	0.919	0.003
Class					
Clinical	-	1	-	-	-
Preclinical	-0.295	0.744	0.490	1.130	0.165
Employment Status					0.785
Employed	--	1	-	-	-
Unemployed	-0.056	0.946	0.364	2.460	0.909
Self-employed	0.091	1.096	0.404	2.969	0.857
Overall WSLB Knowledge					
Good Knowledge	-	1	-	-	-
Poor Knowledge	0.103	1.108	0.733	1.676	0.626
Overall WSLB Perception					
Positive	-	1	-	-	-
Negative Perception	0.621	1.861	1.273	2.721	0.001
Coping Style Profile					0.880
Mixed	-	1	-	-	-
Adaptive	-0.025	0.975	0.579	1.641	0.924
Maladaptive	-0.114	0.892	0.523	1.522	0.676
Global Sleep Quality					
Poor	-	1	-	-	-
Good Sleep	-0.404	0.668	0.334	1.335	0.253

A binary logistics regression analysis was performed to ascertain the effects of age, academic class, employment status, overall work-study-lB perception, dominant coping style profile,

and global sleep quality on the likelihood that respondents experience high perceived stress. The overall logistic regression model was statistically significant, $\chi^2(9) = 25.357$, $p = 0.003$.

Of the seven predictor variables evaluated, age and overall WSLB perception emerged as the only statistically significant predictors of high perceived stress. Age was a significant negative predictor ($\beta = -0.243$, $p = .003$), with an odds ratio of 0.784 (95% CI [0.669, 0.919]). Overall WSLB perception was a significant positive predictor, wherein respondents with a negative perception had 1.861 times higher odds of experiencing high stress compared to those with a positive perception ($\beta = 0.621$, $p = .001$, 95% CI [1.273, 2.721]). The remaining predictor variables did not reach statistical significance in the model. Specifically, academic class ($\beta = -0.295$, $p = 0.165$), employment status ($p = .785$), overall WSLB knowledge ($\beta = 0.103$, $p = .626$), dominant coping style profile ($p = 0.880$), and global sleep quality ($\beta = -0.404$, $p = 0.253$) were not significant predictors of high perceived stress

SECTION E

IMPLICATIONS OF WORK-STUDY-LIFE BALANCE (SLEEP QUALITY)

Variables	Frequency (n = 509)	Percent (%)
Typical Bedtime		
12:00 AM	153	30.1
11:00 PM	114	22.4
10:00 PM	93	18.3
2:00 AM	42	8.3
1:00 AM	36	7.1
9:00 PM	29	5.7
8:00 PM	11	2.2
3:00 AM	6	1.2
4:00 AM	6	1.2
10:30 PM	5	1.0
10:00 AM	4	0.8
12:30 AM	2	0.4
9:00 AM	2	0.4
1:30 AM	1	0.2
11:00 AM	1	0.2
2:00 PM	1	0.2
4:00 PM	1	0.2
6:00 PM	1	0.2
11:30 PM	1	0.2

Table 15A: Sleep quality of respondents

Table 15 details the self-reported sleep habits and durations of the 509 respondents, with bedtime, waketime, sleep latency, and average sleep duration ordered from the highest occurring frequency to the lowest.

When observing typical bedtimes, the most frequently reported time was 12:00 AM, selected by 153 respondents (30.1%). This is followed closely by 11:00 PM (114 respondents, 22.4%) and 10:00 PM (93 respondents, 18.3%). Later bedtimes in the early morning were the next most common, with 2:00 AM (8.3%) and 1:00 AM (7.1%) rounding out the top five

Table 15B: Sleep quality of respondents (cont'd)

Variables	Frequency (n = 509)	Percent (%)
Typical Waketime		
6:00 AM	155	30.5
5:00 AM	134	26.3
7:00 AM	95	18.7
4:00 AM	32	6.3
8:00 AM	20	3.9
3:00 AM	17	3.3
6:30 AM	15	2.9
5:30 AM	14	2.8
9:00 AM	7	1.4
10:00 AM	4	0.8
2:00 AM	3	0.6
4:30 AM	2	0.4
5:45 AM	2	0.4
5:30 PM	2	0.4
1:00 AM	1	0.2
5:50 AM	1	0.2
6:20 AM	1	0.2
11:00 AM	1	0.2
12:00 PM	1	0.2
8:30 PM	1	0.2
11:00 PM	1	0.2
Sleep Latency (n = 504)		
≤ 15 minutes	318	63.1
16 - 30 minutes	141	28.0
31 - 60 minutes	36	7.1
> 60 minutes	9	1.8
Average Sleep Duration		
6 hours	159	31.2
5 hours	135	26.5
7 hours	77	15.1
4 hours	74	14.5
8 hours	33	6.5
≤ 3 hours	24	4.7
≥ 9 hours	7	1.4
Sleep Quality Rating (n=506)		
Very Poor	12	2.4%
Poor	44	8.7%
Fair	197	38.9%
Good	163	32.2%
Very Good	90	17.8%

For typical waketimes, the data shows that the highest frequency was 6:00 AM, reported by

Variables	Not during past month n (%)	Less than once a week n (%)	Once or twice a week n (%)	Three or more times a week n (%)
Cannot sleep within 30 min (n=509)	212 (41.7%)	207 (40.7%)	64 (12.6%)	26 (5.1%)
Wake up in middle of night (n=509)	135 (26.5%)	224 (44.0%)	100 (19.6%)	50 (9.8%)
Cannot breathe comfortably (n=509)	327 (64.2%)	114 (22.4%)	53 (10.4%)	15 (2.9%)

155 respondents (30.5%). This is followed by 5:00 AM (26.3%) and 7:00 AM (18.7%). Waketimes of 4:00 AM (6.3%), 8:00 AM (3.9%), and 3:00 AM (3.3%) represent the next most frequent responses.

Regarding sleep latency, out of 504 valid responses, a majority (63.1%) reported falling asleep within 15 minutes, while 28.0% took between 16 and 30 minutes.

In terms of total average sleep duration, the highest proportion of the respondents reported sleeping for 6 hours (31.2%) per night. The second most frequent duration was 5 hours (26.5%), followed by 7 hours (15.1%), and 4 hours (14.5%). A smaller segment of the respondents reported sleeping for 8 hours (6.5%), 3 hours or less (4.7%), and 9 hours or more (1.4%).

Among the 506 valid responses, the largest segment rated their sleep quality as "Fair" (38.9%). This was followed by 32.2% who rated their sleep as "Good" and 17.8% as "Very Good." A smaller minority rated their overall sleep quality as "Poor" (8.7%) or "Very Poor" (2.4%).

Cough or snore loudly (n=509)	340 (66.8%)	100 (19.6%)	57 (11.2%)	12 (2.4%)
Feel too cold (n=509)	271 (53.2%)	158 (31.0%)	69 (13.6%)	11 (2.2%)
Feel too hot (n=509)	216 (42.4%)	200 (39.3%)	71 (13.9%)	22 (4.3%)
Bad dreams (n=509)	263 (51.7%)	166 (32.6%)	70 (13.8%)	10 (2.0%)
Have pain (n=509)	292 (57.4%)	137 (26.9%)	66 (13.0%)	14 (2.8%)
Taken sleep medicine (n=508)	357 (70.3%)	98 (19.3%)	40 (7.9%)	13 (2.6%)
Trouble staying awake (n=506)	291 (57.5%)	126 (24.9%)	68 (13.4%)	21 (4.2%)
Problem keeping up enthusiasm (n=506)	168 (33.2%)	214 (42.3%)	97 (19.2%)	27 (5.3%)

Table 15C: Sleep quality of respondents (cont'd)

Table 15C presents the frequency of various sleep disturbances and related daytime dysfunctions experienced over the past month. Waking up in the middle of the night was a common disturbance, with 44.0% experiencing it less than once a week and 19.6% experiencing it once or twice a week. Difficulty initiating sleep within 30 minutes was also frequent, reported by 40.7% less than once a week and 12.6% once or twice a week. Conversely, disturbances such as coughing or snoring loudly, cannot breathe comfortably, and taking sleep medicine were less common, with the majority of respondents (66.8%, 64.2%, and 70.3% respectively) reporting that these did not occur during the past month. Regarding daytime dysfunction, 42.3% reported a problem keeping up enthusiasm less than once a week, while 57.5% reported no trouble staying awake during the past month.

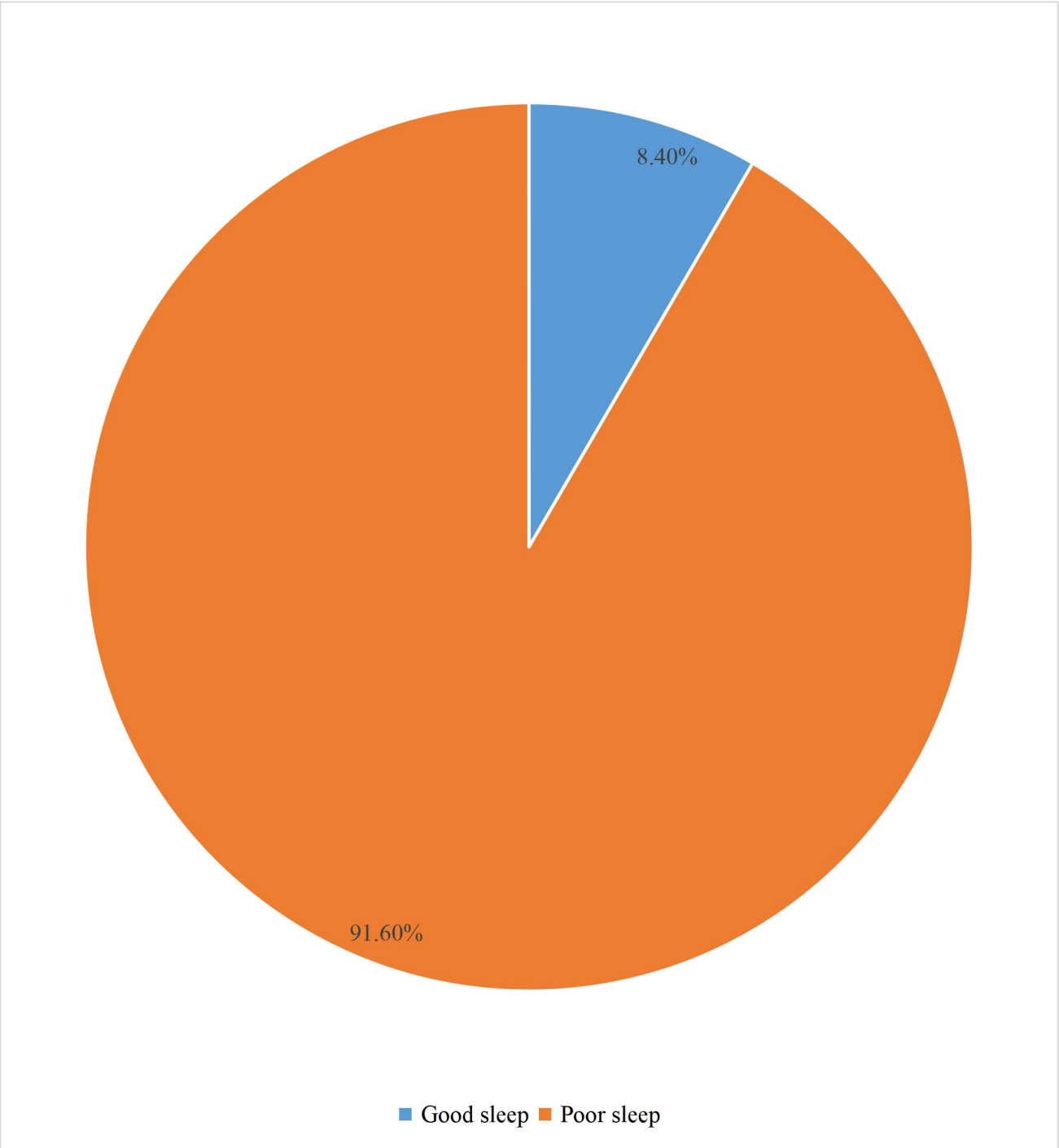

Figure 5: Overall sleep quality among respondents

The pie chart above reveals that a small proportion 43(8.40%) respondents reported good sleep quality and a vast majority 466(91.6%) reported poor sleep quality.

Variable	Good Sleep Quality (n=43) Freq(%)	Poor Sleep Quality (n=466) Freq (%)	Test statistics	p-value
Age Group (years)			χ^2=0.71	0.734
18–21	11 (7.4%)	137 (92.6%)		
22–23	29 (9.2%)	285 (90.8%)		
24–32	3 (6.4%)	44 (93.6%)		
Gender			χ^2=0.70	0.461
Male	30 (7.9%)	352 (92.1%)		
Female	13 (10.2%)	114 (89.8%)		
Level of Study			Fisher's Exact= 5.43	0.190
200 Level	9 (11.0%)	73 (89.0%)		
300 Level	7 (10.1%)	62 (89.9%)		
400 Level	11 (7.1%)	143 (92.9%)		
500 Level	1 (1.7%)	58 (98.3%)		
600 Level	15 (10.3%)	130 (89.7%)		
Marital Status			Fisher's Exact= 0.43	0.459
Ever married	3 (12.0%)	22 (88.0%)		
Never married	40 (8.3%)	444 (91.7%)		
Religion			Fisher's Exact= 2.90	0.200
Christianity	41 (8.5%)	442 (91.5%)		
Islam	1 (4.3%)	22 (95.7%)		
Others	1 (33.3%)	2 (66.7%)		
Ethnic Group			χ^2=0.00	1.000
Edo indigenes	21 (8.5%)	226 (91.5%)		
Non-Edo indigenes	22 (8.4%)	240 (91.6%)		
Residence			χ^2=1.16	0.339
On Campus	25 (9.8%)	231 (90.2%)		
Off Campus	18 (7.1%)	235 (92.9%)		
Employment Status			Fisher's Exact= 1.03	0.597
Unemployed	26 (7.6%)	317 (92.4%)		
Self-employed	15 (10.3%)	131 (89.7%)		
Employed	2 (10.0%)	18 (90.0%)		
Monthly Income (₦)			Fisher's Exact= 2.42	0.745
< 20000	0 (0.0%)	13 (100.0%)		
20000 – 50000	9 (7.0%)	120 (93.0%)		
50000 – 70000	18 (9.5%)	171 (90.5%)		
70000 – 100000	5 (11.6%)	38 (88.4%)		
> 100000	11 (8.1%)	124 (91.9%)		

Table 16: Socio-demographics and sleep quality among respondents

Chi-square tests of independence (and Fisher's exact tests where assumptions of expected cell counts were violated) were performed to examine the relationship between respondents' sociodemographic characteristics and their global sleep quality. Overall, the descriptive data reveals a highly prevalent issue within the cohort, as the vast majority of the sample (91.6%) reported experiencing poor sleep quality, regardless of their background.

The statistical analysis indicated that there were no significant associations between global sleep quality and any of the evaluated sociodemographic variables. The data failed to demonstrate a significant difference in sleep quality based on age group ($\chi^2 = 0.71$, $p = .734$), gender ($\chi^2 = 0.70$, $p = .461$), or academic level of study ($p = .190$). Furthermore, marital status ($p = .459$), religious affiliation ($p = .200$), ethnic grouping ($\chi^2 = 0.00$, $p = 1.000$), and campus residence ($\chi^2 = 1.16$, $p = .339$) did not significantly influence whether a student experienced good or poor sleep. Economic factors also showed no statistically significant bearing on sleep outcomes, as neither employment status ($p = .597$) nor monthly income/allowance ($p = .745$) were significantly associated with global sleep quality.

Table 17: Predictors of poor sleep quality among respondents

Predictor	β	Odds ratio	Lower 95% CI for OR	Upper 95% CI for OR	p-value
Age (years)	0.004	1.004	0.797	1.266	0.972
Class					
Clinical	-	1	-	-	-
Preclinical	-0.296	0.744	0.375	1.477	0.398
Employment Status					0.659
Employed	-	1	-	-	-
Unemployed	0.360	1.433	0.306	6.718	0.648
Self-employed	0.062	1.064	0.215	5.276	0.939
Overall WSLB Knowledge					
Good Knowledge	-	1	-	-	-
Poor Knowledge	0.501	1.651	0.854	3.190	0.136
Overall WSLB Perception		F			
Positive	-	1	-	-	-
Negative	-0.061	0.941	0.489	1.809	0.855
Coping Style Profile					0.614
Mixed	-	1	-	-	-
Adaptive (Engagement)	-0.497	0.609	0.221	1.678	0.337
Maladaptive (Disengagement)	-0.478	0.620	0.218	1.765	0.371
Perceived Stress Level					
Low Stress	-	1	-	-	-
High Stress	0.401	1.494	0.746	2.992	0.258

A binary logistic regression was performed to evaluate the effects of age, academic class, employment status, overall work-study-life balance (WSLB) knowledge, overall WSLB perception, dominant coping style profile, and perceived stress category on the likelihood of respondents having poor sleep quality.

None of the predictor variables included in the model were statistically significant. Specifically, age ($\beta = 0.004$, $p = .972$), academic class ($\beta = -0.296$, $p = .398$), employment status ($p = .659$), overall WSLB knowledge ($\beta = 0.501$, $p = .136$), overall WSLB perception ($\beta = -0.061$, $p = .855$), dominant coping style profile ($p = .614$), and perceived stress category ($\beta = 0.401$, $p = .258$) did not significantly predict the likelihood of poor sleep quality among the respondents.

CHAPTER FIVE

DISCUSSION

5.1 KNOWLEDGE OF WORK-STUDY-LIFE BALANCE

The findings of this study revealed that 74.1% of respondents had good knowledge of work-study-life balance, while a smaller proportion demonstrated poor knowledge. There was also a statistically significant association between age group and knowledge level, indicating that knowledge varied significantly across age categories.

The relatively high level of knowledge observed in this study may be attributed to increased awareness of mental health discussions within medical training, exposure to structured academic curricula that emphasize professionalism and self-care, and peer discussions regarding burnout and stress. Senior students may have gained more insight through prolonged exposure to academic stressors and clinical rotations, which may explain the association with age.

This finding aligns with a mixed-methods study conducted at the University of Birmingham, in which medical students demonstrated a clear conceptual understanding of work-study-life balance, defining it as enjoyment, meeting academic requirements, and effective time management. That study highlighted that medical students are generally aware of the concept, even if implementation remains challenging.[2]

From a public health perspective, good knowledge of work-study-life balance is essential because awareness is the first step toward behavior modification and stress prevention. However, knowledge alone does not guarantee healthy practice. If students understand the balance conceptually but cannot implement it, the risk of chronic stress, burnout, and long-term psychological morbidity remains high.

It is recommended that UNIBEN institutionalize structured orientation programs and workshops focused on translating knowledge into practical skills, particularly targeting younger students who have demonstrated comparatively lower knowledge levels.

5.2 PERCEPTION OF WORK-STUDY-LIFE BALANCE

In this study, the majority of respondents (51.7 %) rated their current work-study-life balance as neutral (3 on a 5-point scale). Additionally, a statistically significant association was observed between employment status and overall perception. Although 73.9% reported prioritizing self-care, the neutral rating suggests ambivalence about their actual balance.

The predominance of neutral perception may indicate normalization of stress within medical training. Students may perceive imbalance as an expected part of medical school culture and therefore neither rate their balance as poor nor satisfactory. The demanding curriculum (66.4%), lack of free time (71.7%), and clinical rotation hours (47.2%) further explain why many students do not perceive their balance as optimal.

This finding is comparable to the 2024 cross-sectional study conducted in India, where a significant proportion of medical students reported limited personal time and perceived study-life imbalance.[11]

The public health implications are substantial. A neutral or indifferent perception of balance may mask underlying distress. When imbalance becomes normalized, students are less likely to seek support, increasing vulnerability to burnout, depression, and reduced empathy in future clinical practice.

It is recommended that the medical school integrate periodic well-being assessments and mentorship programs that encourage reflective practice. Creating a culture where balance is actively promoted rather than passively acknowledged is essential.

5.3 PRACTICE OF WORK-STUDY-LIFE BALANCE

The study revealed that 44.8% of respondents utilized adaptive (engagement-dominant) coping mechanisms, 38.1% utilized maladaptive (disengagement-dominant) coping mechanisms, and 17.1% demonstrated mixed coping styles.

The relatively high proportion of maladaptive coping may be due to academic overload, limited structured stress-management training, and normalization of emotional suppression in medical culture. While nearly half engaged in adaptive coping, the substantial proportion using maladaptive strategies suggests vulnerability to long-term psychological strain.

Similarly, the Arsi University study in Ethiopia found that adaptive coping mechanisms had higher mean scores compared to disengagement strategies.[27]

From a public health standpoint, coping style significantly influences mental health outcomes. Maladaptive coping strategies such as denial, behavioral disengagement, and avoidance are associated with higher stress levels, depression, and burnout. Given that medical students represent future healthcare providers, ineffective coping mechanisms may compromise both their well-being and patient care quality.

It is recommended that structured resilience training, stress-management workshops, and peer-support systems be incorporated into the medical curriculum to reduce maladaptive coping patterns and reinforce adaptive strategies.

5.4 IMPLICATIONS OF WORK-STUDY-LIFE BALANCE (STRESS LEVELS AND SLEEP QUALITY)

Regarding stress levels, 60.7% of respondents were classified as experiencing low stress, while 39.3% experienced high stress. Although the majority reported low stress, the proportion experiencing high stress remains clinically significant.

This comparatively lower prevalence of high stress may reflect adaptive coping among some students, social support systems, or possible underreporting due to social desirability bias. However, nearly two out of five students experiencing high stress remains concerning.

Similarly, the Gombe State University study found alarmingly high levels of moderate to severe stress among medical students.[21]

Concerning sleep quality, 38.9% rated their sleep as fair, 32.2% as good, and 17.8% as very good, while a minority reported poor (8.7%) and very poor (2.4%) sleep quality. While extreme sleep disturbance was uncommon, a large proportion reported only fair sleep quality, suggesting suboptimal rest.

The relatively better sleep outcomes in this study may reflect adaptation, reporting bias, or differences in measurement categorization

This contrasts with the study conducted in South-Western Nigeria, where approximately 29.7% reported poor sleep quality.[24]

The public health significance is critical. Chronic stress and poor sleep are associated with impaired cognition, reduced academic performance, increased risk of anxiety and depression, and long-term cardiovascular consequences. For medical students, sleep deprivation may impair clinical judgment and patient safety.

It is recommended that the institution implement policies promoting protected rest periods during clinical postings, incorporate stress-screening programs, and provide accessible mental health services within the university.

CONCLUSION

This study demonstrated that while a majority of undergraduate medical students at UNIBEN possess good knowledge of work–study–life balance, their perception of balance remains largely neutral, suggesting ambivalence and possible normalization of academic strain. Although a significant proportion of students employ adaptive coping mechanisms, a considerable number continue to rely on maladaptive strategies, which may predispose them to psychological distress.

Furthermore, while most students reported low stress levels and relatively acceptable sleep quality, a clinically meaningful proportion experienced high stress and suboptimal sleep, highlighting areas of concern.

Overall, the findings indicate that knowledge alone is insufficient to ensure healthy work–study–life balance. Practical institutional support systems, structured resilience training, mental health monitoring, and cultural shifts within medical education are essential to translate awareness into sustainable well-being practices.

Addressing these factors will not only improve students' academic performance and psychological health but will also contribute to the development of competent, balanced, and emotionally resilient future physicians.

RECOMMENDATIONS

TO THE STUDENTS

1. Medical students should intentionally adopt adaptive coping strategies such as problem-solving, seeking social support, and cognitive restructuring, while minimizing maladaptive coping patterns such as avoidance, denial, and emotional suppression.
2. Students should also practice effective time management and boundary setting to enhance work–study–life balance.
3. Students should prioritize sleep hygiene by maintaining consistent sleep schedules, limiting stimulant use before bedtime, and organizing structured study–rest routines.
4. Participation in peer-support groups and mentorship opportunities should be encouraged to foster resilience and reduce the normalization of unhealthy stress culture within medical training.

TO THE COLLEGE OF MEDICINE

1. The College of Medicine enhance institutionalize structured orientation programs and periodic workshops focused on translating knowledge of work–study–life balance into practical skills.
2. Resilience training, stress-management programs, and reflective practice sessions should be embedded within the curriculum to aid students grasp on gaining such balance.
3. Regular mental health screening using validated tools should be incorporated into the academic calendar, with clear referral pathways to counseling and psychological support services for students in necessary need.

4. Academic calendar scheduling should be reviewed periodically to reduce clustering of examinations and excessive workload during clinical postings.
5. Strengthening faculty–student mentorship systems will further promote early identification and support for students experiencing distress.

6.3 TO THE MEDICAL AND DENTAL COUNCIL OF NIGERIA (MDCN)

1. The Medical and Dental Council of Nigeria should incorporate student well-being standards into accreditation requirements for medical schools.
2. Wellness programs, access to mental health services, and reasonable academic workload distribution should be developed and enforced.
3. The Council should also encourage the inclusion of resilience training and professional self-care competencies as part of the core medical education framework to ensure that future physicians are adequately equipped to manage occupational stress.

6.4 TO THE FEDERAL GOVERNMENT

THROUGH THE MINISTRY OF EDUCATION

1. The Ministry of Education, in partnership with the Ministry of Health, should increase funding for mental health services within tertiary institutions to ensure accessible and affordable psychological support for medical students.
2. Policies that promote student welfare, including improved learning environments, adequate hostel facilities, and supportive academic infrastructures, should be strengthened.

3. National educational policies should recognize student mental health and work–study–life balance as public health priorities, given their long-term implications for healthcare workforce sustainability and patient care quality.
4. The Ministry of Education in partnership with Ministry of Health, should increase funding for mental health services within tertiary institutions to ensure accessible and affordable psychological support for medical students.
5. Policies that promote student welfare, including improved learning environments, adequate hostel facilities, and supportive academic infrastructures, should be strengthened.
6. National educational policies should recognize student mental health and work–study–life balance as public health priorities, given their long-term implications for healthcare workforce sustainability and patient care quality.
7. Regular mental health screening using validated tools should be incorporated into the academic calendar, with clear referral pathways to counseling and psychological support services for students in necessary need.
8. Strengthening faculty–student mentorship systems will further promote early identification and support for students experiencing distress.

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APPENDIX I

INFORMED CONSENT FORM

KNOWLEDGE, PERCEPTION, PRACTICE OF WORK-STUDY-LIFE BALANCE AND ITS IMPLICATION AMONGST MEDICAL STUDENTS IN THE UNIVERSITY OF BENIN

INVESTIGATORS

ISICHEI JOAN ISIOMA

IYAMU JOY OSARUGUE

SUPERVISOR

PROF. A.N. OFILI

FINANCIAL SPONSORSHIP

This research project is self-sponsored.

PURPOSE OF THE RESEARCH

The purpose of this study is to assess the knowledge, perception and practice of work-study-life balance among medical students in the University of Benin and its implication.

PROCEDURES AND PROTOCOL INVOLVED IN THE STUDY

You are kindly requested to complete a questionnaire designed to assess the knowledge, perception, practice and the implication of a work-study-life balance among medical students of University of Benin. This questionnaire is for research purposes only.

COMPENSATION

There will be no financial compensation for participating in this study.

VOLUNTARY PARTICIPATION

Your participation in this research is completely voluntary. There will be no discrimination against you if you choose not to participate. You are free to change your mind and withdraw from the study at any time, even if you initially agreed to take part.

SIDE EFFECTS

There is no anticipated adverse effect associated with participating in this study.

BENEFIT

The benefit of this study includes the provision of useful local data for understanding the trends in Nigeria among medical students and providing recommendations for evidence-based interventions regarding the problem**.**

CONFIDENTIALITY

All information and data obtained during this study will be kept confidential. Participant names will not be recorded on the questionnaires, and all collected information will be securely stored in a password-protected file on my personal computer. Any physical copies will be stored in a locked personal document cabinet.

CONTACT INFORMATION

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IYAMU JOY OSARUGUE
Medical Student
Email: joedanny320@gmail.com
Tel: +2347031877301

Ethics and Research Committee
University of Benin Teaching Hospital
Benin City.
Email: ubthresearchethics@gmail.com
Phone Number: 07063331337

IF THERE IS ANY PORTION OF THIS CONSENT AGREEMENT THAT YOU DO NOT UNDERSTAND, ASK THE FIELD WORKER OR INVESTIGATOR BEFORE SIGNING.

Please, sign below if you have agreed to participate in the study.

CERTIFICATION OF CONSENT

I, ……. having full capacity to consent for myself do thereby to my participation in the research study. The methods and means by which the study will be conducted have been explained to me by Ethical Committee. I have been given the opportunity to ask questions concerning this investigational study, and any such questions have been answered to my full and complete satisfaction. I understand that I may at any time during this study revoke this consent and withdraw myself from the study without prejudice.

Name of Participant: ----------

Signature of participant: ----------

Date: ----------

APPENDIX II

QUESTIONNAIRE DESIGN

KNOWLEDGE, PERCEPTION AND PRACTICE OF WORK-STUDY-LIFE BALANCE AND ITS IMPLICATION AMONGST MEDICAL STUDENTS IN THE UNIVERSITY OF BENIN, BENIN CITY, EDO STATE, NIGERIA.

Dear respondent,

We are 600- level medical students of the University of Benin, Benin City. We are currently conducting a study to assess the knowledge, perception, and practice of work-study-life balance and its implication among medical students in the University of Benin. All information given in this questionnaire will be treated strictly confidential. Please tick and fill in the data appropriately and accurately. Thank you for your time and cooperation**.**

SECTION A: SOCIODEMOGRAPHIC INFORMATION

1. Age (as at last birthday) _____
2. Gender Male ( ) Female ( )
3. Level 200 ( ) 300 ( ) 400 ( ) 500 ( ) 600 ( )

3. Marital status: Married ( ) Single ( ) Widowed ( ) Divorced ( ) Separated ( )

4. Religion: Christianity ( ) Islam ( ) Traditionalist ( )Others (please specify)_____

5. Ethnic group: Bini( ) Esan ( ) Etsako ( ) Yoruba ( ) Ibo ( ) Others ( )

6. Residence: On campus ( ) Off campus ( )

7. Are you working while in medical school? (If No, skip to no. 11) Yes( ) No( )

8. Occupation(please tick all that apply): Graphics designer ( ) Content Creator ( ) Others ( ) (please specify) _____

9. How many years have you been working while being a medical student ___

10. How many hours do you spend working on an average _____

11. Monthly income/allowance: <N20,000 ( ) N20,000- N50,000 ( ) >N50,000-N70,000( ) >N70,000- N100,000 ( ) >N100,000 ( )

SECTION B: KNOWLEDGE AND PERCEPTION OF WORK-STUDY-LIFE BALANCE

KNOWLEDGE OF WORK-STUDY-LIFE BALANCE

1. Are you aware of the term work-study-life balance? Yes ( ) No ( )
2. What is work-study-life balance? (Select the correct option) (A)Being able to have self-care days off from school/work (B) Putting equal (50-50) time between personal time and academic/professional activities (C) The ability to fix an equilibrium in the face of an intersection between work/school life and personal life. (D) The ability of an individual to work/study while he/she has time for personal life.
3. Where did you hear it from? (Select all that apply): Teachers ( ) Books ( ) Social media ( ) Health institutions ( ) Family, friends, neighbors ( ) Magazine ( ) Television/Radio ( )
4. What is the importance of work-study-life balance? It helps you to glow-up( ) It helps reduce stress and improve overall well-being( ) It helps to keep work/school life entirely separate from personal life ( ) It makes you enjoy your life better( ) It helps you to make more money and better grades( )

PERCEPTION WORK-STUDY-LIFE BALANCE

INSTRUCTIONS: Please indicate your level of agreement with the following statements on a scale of 1 to 5 (1 = Strongly Disagree, 2 = Disagree, 3 = Indifferent, 4 =Agree, 5 = Strongly Agree).

S/N	STATEMENTS	(SA)	(A)	(I)	(D)	(SD)
1.	My job/school does not make my personal life difficult					
2.	I do not neglect my personal needs because of work/academics					
3.	I have felt nervous and stressed by both my work/academics and personal life					
5.	I do not struggle to juggle work/academic and personal life					
5.	I am happy with the amount of time I have for personal life activities.					

SN	STATEMENTS	(SA)	(A)	(I)	(D)	(SD)
6.	I have a better mood overall because my studies/job and personal life are going well.					
7.	Do you think neglecting work-study-life balance would affect your future career as a physician					
8.	School needs to do more to support work-study-life balance					
9.	My personal life does not drain me of energy for work/studies					

10. How important is work-study-life balance to you? (rating from 1-5), (1 = Poor, 5 = Excellent) _____

11. Are there any work-study-life balance initiatives offered by your school? Yes ( ) No ( ) (If NO, skip to Section D]

12. Have you used any work-study-life balance initiatives offered by your school? Yes ( ) No ( )

13. Has the initiative been effective? Yes ( ) No ( )

SECTION C: PRACTICE OF WORK-STUDY-LIFE BALANCE

2. On a scale of 1 to 5, how would you rate your current work-study-life balance?(1 = Poor, 5 = Excellent) ____
3. Do you prioritize self-care? Yes ( ) No ( )
4. What are the biggest challenges you face while achieving work-study-life balance as a medical student(select all that apply) (a) clinical rotation hours (b) lack of free time (c) demanding curriculum (d) others(please specify)_____
5. Where do you study (please tick all that apply): Class ( ) Home ( ) Library ( ) others _____
6. What method of studying do you prefer (please tick all that apply): Reading of class notes and materials ( ) Reading textbooks ( ) Watching videos ( ) Group study( ) Making use of past questions ( ) Others(please specify)_____
7. On average, how many hours per day do you spend studying _____

SN	Statements	Never	Rarely	Sometimes	Often	Always
1	When I face challenges balancing work/academic and personal life, I try to resolve the issue myself.					
2	When I feel overwhelmed, I express my emotions (e.g., crying, venting) to reduce stress.					
3	When my side commitments/work interfere with my studies, I regret					

	taking them on.					
4.	I didn't let it get to me; I avoided overthinking and spent some time alone.					
5.	I wished the situation would just go away.					
6.	I attempted to forget about the work/academic or life stress entirely.					
7.	I withdrew from others to deal with the stress on my own.					
8.	I allowed my friends to support me when I was feeling overwhelmed.					
9.	I downplayed the seriousness of the situation to reduce my stress.					
10.	I pushed myself to work harder and fix the imbalance between work/study and personal life.					
11.	I stood firm in defending my personal needs or boundaries, even with academic/work pressure.					
12.	I accepted that I made a mistake in managing my responsibilities and faced the consequences.					
13.	My emotions from work/academic or personal pressures became overwhelming and I had an outburst.					
14.	I asked someone I respect (e.g., senior, mentor, professor) for advice.					

SECTION D: IMPLICATIONS OF WORK-STUDY-LIFE BALANCE (Stress levels)

INSTRUCTION: Select how frequently you felt this way

S/N	STATEMENTS	Never	seldom	often	Some times	Always
1.	In the last month, how often have you been upset because of something that happened unexpectedly					
2.	In the last month, how often have you felt nervous and stressed?					
3.	In the last month, how often have you felt confident about your ability to handle your personal problems?					
4.	In the last month, how often have you felt that things were going your way?					
5.	In the last month, how often have you found that you could not cope with all the things that you had to do?					
6.	In the last month, how often have you felt that you were on top of things?					
7.	In the last month, how often have you been angered because of things that were outside of your control?					
8.	In the last month, how often have you found yourself thinking about things that you have to accomplish?					
9.	How often have you been able to control the way you spend your time?					

SECTION E: IMPLICATIONS OF WORK-STUDY-LIFE BALANCE (SLEEP QUALITY)

Instructions: The following questions relate to your usual sleep habits during the past month only. Your answers should indicate the most accurate reply for the majority of days and nights in the past month. Please answer all questions.

During the past month:

1. When have you usually gone to bed? _____

2. How long (in minutes) has it taken you to fall asleep each night? _____

3. When have you usually gotten up in the morning? _____

4. How many hours of actual sleep do you get at night? (This may be different than the number of hours you spend in bed) _____

STATEMENTS	**Always**	**Sometimes**	**Often**	**Never**
5. During the past month, how often have you had trouble sleeping because you …				
a. Cannot get to sleep within 30 minutes				
b. Wake up in the middle of the night or early morning				
c. Cannot breathe comfortably				
d. Cough or snore loudly				
e. Feel too cold				
f. Feel too hot				
g. Have bad dream.				
h. Have pain				
i. Other reason(s), please describe, including how often you have had trouble sleeping because of this reason(s)				

6. During the past month, how often have you taken medicine (prescribed or over the counter) to help you sleep				
7. During the past month, how often have you had trouble staying awake while driving, eating meals, or engaging in social activity?				
8. During the past month, how much of a problem has it been for you to keep up enthusiasm to get things done?				

9. During the past month, how would you rate your sleep quality overall (rating from 1-5), (1 = Poor, 5 = Excellent) _____

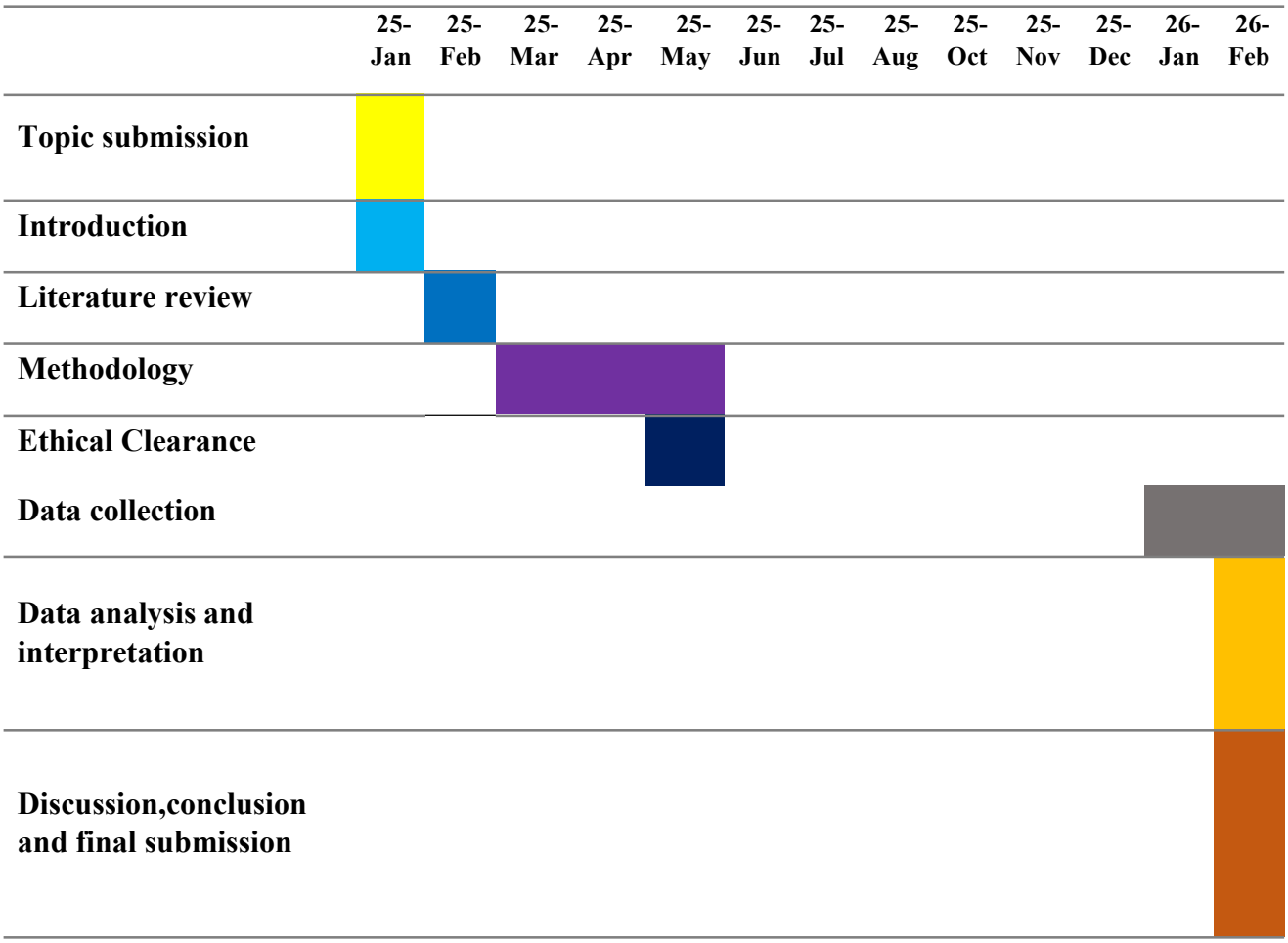
APPENDIX III

THE MAP OF THE AREA

FIGURE 6: A map showing the Main (Ugbowo) Campus of the University of Benin.

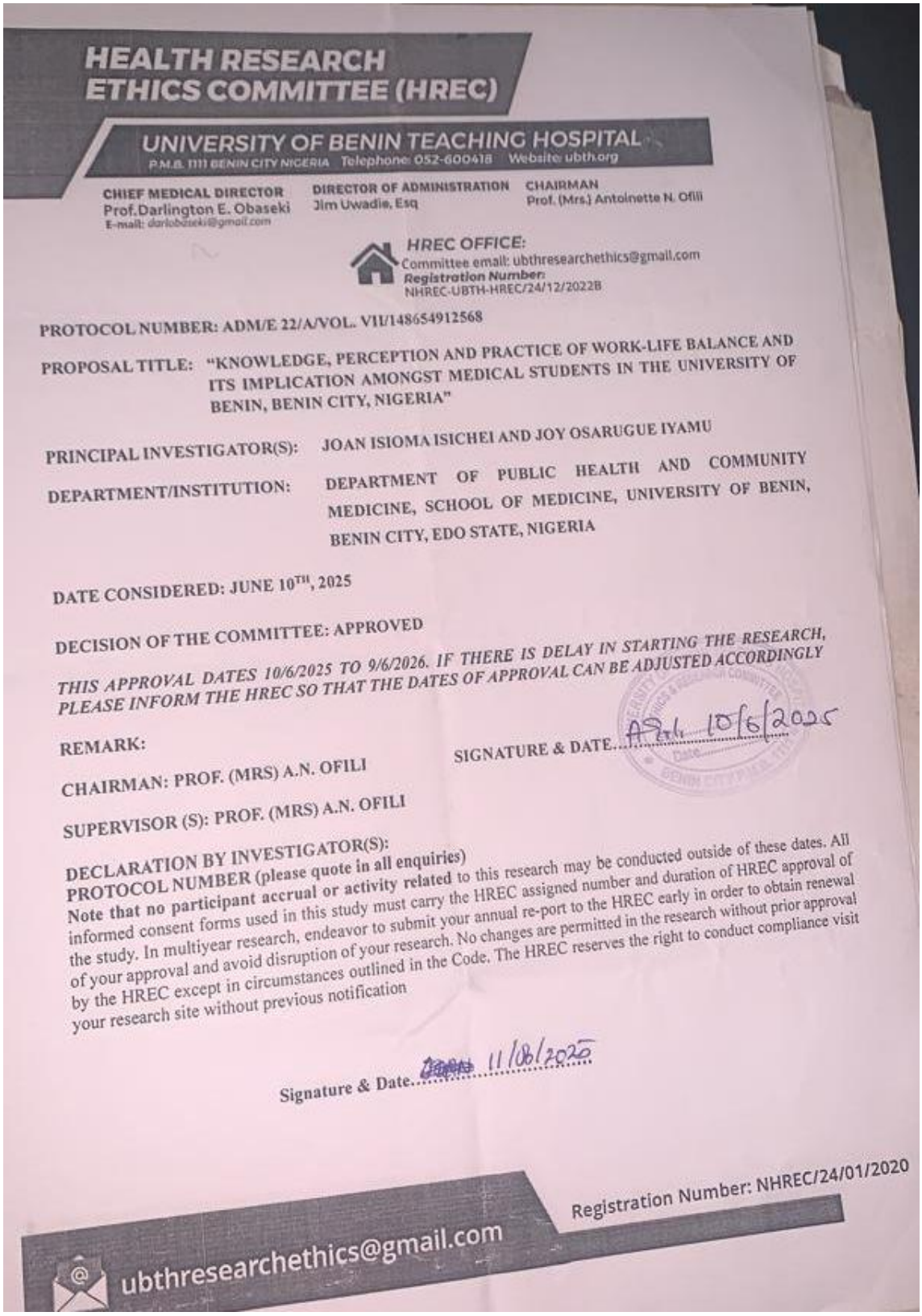
APPENDIX IV

GANTT CHART



APPENDIV V

ETHICAL APPROVAL FORM



HEALTH RESEARCH ETHICS COMMITTEE (HREC)

UNIVERSITY OF BENIN TEACHING HOSPITAL

P.M.B. 1111 BENIN CITY NIGERIA Telephone: 052-600418 Website: ubth.org

CHIEF MEDICAL DIRECTOR
Prof. Darlington E. Obaseki
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DIRECTOR OF ADMINISTRATION
Jim Uwadie, Esq

CHAIRMAN
Prof. (Mrs.) Antoinette N. Ofili

HREC OFFICE:
Committee email: ubthresearchethics@gmail.com
Registration Number:
NHREC-UBTH-HREC/24/12/2022B

PROTOCOL NUMBER: ADM/E 22/A/VOL. VII/148654912568

PROPOSAL TITLE: "KNOWLEDGE, PERCEPTION AND PRACTICE OF WORK-LIFE BALANCE AND ITS IMPLICATION AMONGST MEDICAL STUDENTS IN THE UNIVERSITY OF BENIN, BENIN CITY, NIGERIA"

PRINCIPAL INVESTIGATOR(S): JOAN ISIOMA ISICHEI AND JOY OSARUGUE IYAMU

DEPARTMENT/INSTITUTION: DEPARTMENT OF PUBLIC HEALTH AND COMMUNITY MEDICINE, SCHOOL OF MEDICINE, UNIVERSITY OF BENIN, BENIN CITY, EDO STATE, NIGERIA

DATE CONSIDERED: JUNE 10TH, 2025

DECISION OF THE COMMITTEE: APPROVED

THIS APPROVAL DATES 10/6/2025 TO 9/6/2026. IF THERE IS DELAY IN STARTING THE RESEARCH, PLEASE INFORM THE HREC SO THAT THE DATES OF APPROVAL CAN BE ADJUSTED ACCORDINGLY

REMARK:

SIGNATURE & DATE..... 10/6/2025

CHAIRMAN: PROF. (MRS) A.N. OFILI

SUPERVISOR (S): PROF. (MRS) A.N. OFILI

DECLARATION BY INVESTIGATOR(S):

PROTOCOL NUMBER (please quote in all enquiries)

Note that no participant accrual or activity related to this research may be conducted outside of these dates. All informed consent forms used in this study must carry the HREC assigned number and duration of HREC approval of the study. In multiyear research, endeavor to submit your annual re-port to the HREC early in order to obtain renewal of your approval and avoid disruption of your research. No changes are permitted in the research without prior approval by the HREC except in circumstances outlined in the Code. The HREC reserves the right to conduct compliance visit your research site without previous notification

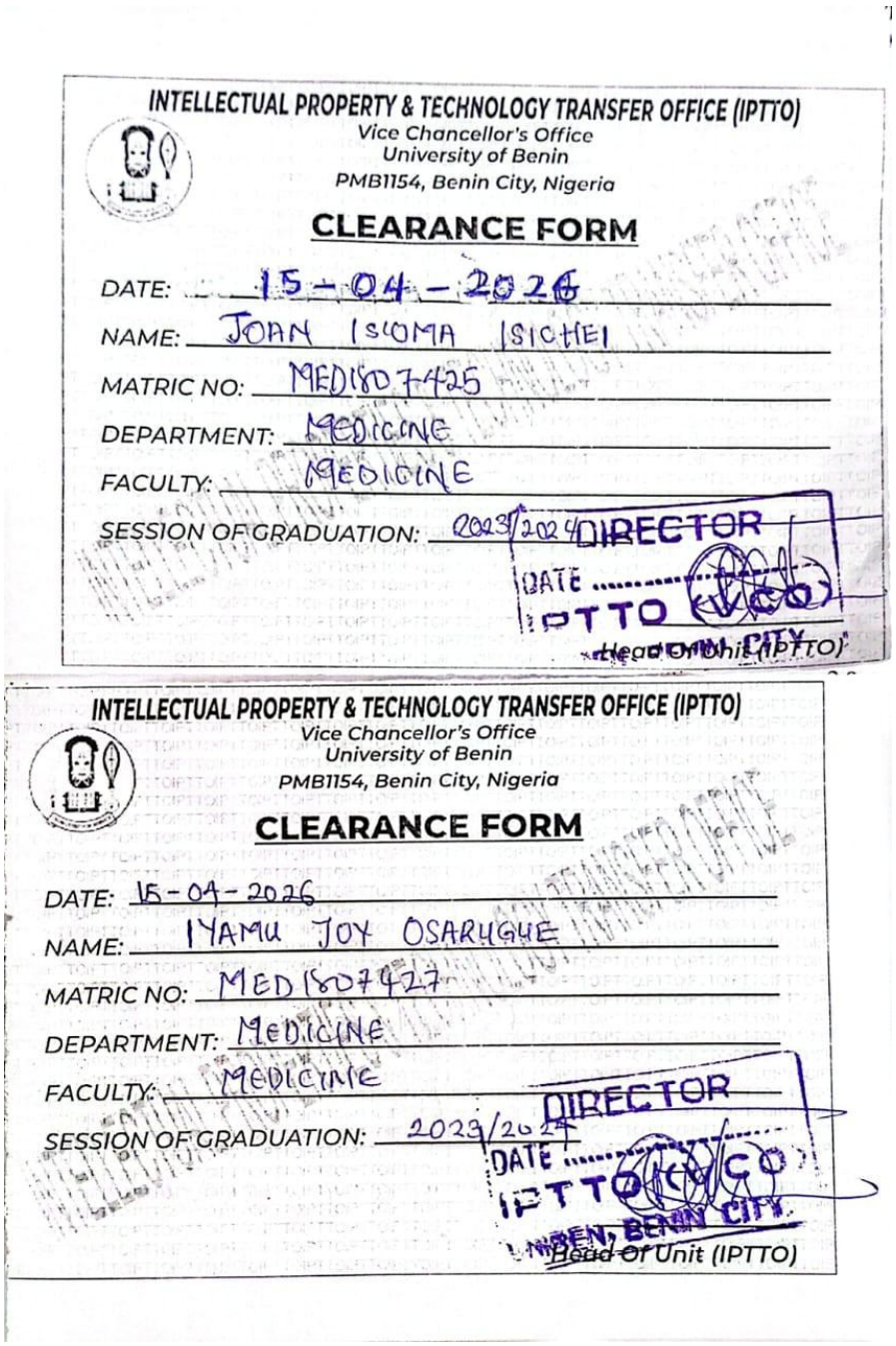
Signature & Date..... 11/06/2025

ubthresearchethics@gmail.com

Registration Number: NHREC/24/01/2020

APPENDIX VI

PLAGIARISM CLEARANCE FORM



INTELLECTUAL PROPERTY & TECHNOLOGY TRANSFER OFFICE (IPTTO)
Vice Chancellor's Office
University of Benin
PMB1154, Benin City, Nigeria

CLEARANCE FORM

DATE: 15-04-2026
NAME: JOAN ISOMA ISICHEI
MATRIC NO: MED1807425
DEPARTMENT: MEDICINE
FACULTY: MEDICINE
SESSION OF GRADUATION: 2023/2024

DIRECTOR
DATE .....
IPTTO
UNIBEN, BENIN CITY.
Head Of Unit (IPTTO)

INTELLECTUAL PROPERTY & TECHNOLOGY TRANSFER OFFICE (IPTTO)
Vice Chancellor's Office
University of Benin
PMB1154, Benin City, Nigeria

CLEARANCE FORM

DATE: 15-04-2026
NAME: IYAMU JOY OSARUGUE
MATRIC NO: MED1807427
DEPARTMENT: MEDICINE
FACULTY: MEDICINE
SESSION OF GRADUATION: 2023/2024

DIRECTOR
DATE .....
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