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Sleep Quality, Resilience, and Time Management as Predictors of Mental Health of Student-Athletes in the Framework of Biopsychosocial Model: A Multiple Linear Regression Analysis

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Abstract
Mental health of student-athletes is troubling. This study aimed to determine the significance of sleep quality, resilience, and time management as predictors of mental health among student-athletes. Using multiple linear regression analysis, with 201 student-athletes as the selected sample through convenience sampling, it was found that the determinants are all significant predictors, accounting for a 58.7% degree of influence. The Biopsychosocial Model was affirmed. Collaborative activities may be initiated by educators, coaches, guidance counselors, mental health professionals, and policymakers to enhance sleep quality, resilience, and time management, ultimately benefiting the mental health of student-athletes.

Keywords: Sleep Quality, Resilience, Time Management, Mental Health, Student-Athletes, Biopsychosocial Model, Multiple Linear Regression Analysis

1. INTRODUCTION

In this chapter, the research problem and its scope, the significance of the study, the statement of the problem, hypotheses, as well as the theoretical and conceptual frameworks are contained.

The Problem and Its Settings

The mental health of student-athletes has become a growing global issue, with increasing concerns about how psychological struggles are affecting their overall well-being. Poor mental health impacts not only individual well-being but also one's ability to function effectively in work, relationships, and community life (Dattani et al., 2023) [1]. The rising prevalence of mental health issues is evident across all communities, countries, and continents, highlighting its widespread and growing nature (Schwartz, 2025) [2].

In the United States, the prevalence of mental health concerns among student-athletes reveals that they report lower rates of depression but higher rates of suicidality compared to non-athletes (Daniel, 2018)

[3]. Additionally, a study conducted in China shows that 24.9% of college students experience mild to severe anxiety, a pattern likely present among student-athletes as well (Grubic et al., 2021) [4]. A study utilizing the International Olympic Committee Sport Mental Health Assessment Tool 1 (SMHAT-1) reports mental health symptoms among athletes, with prevalence rates ranging from 24% to 40% for psychological distress, 15% to 30% for anxiety, and 19% to 26% for depression (Mountjoy et al., 2022) [5].

In the Philippines, mental health continues to be a pressing concern, with high rates of depression, anxiety, and suicide, often intensified by poverty, frequent natural disasters, and social inequality. Approximately 11.3% to 11.6% of the population—equivalent to around 12.5 million Filipinos—are affected by mental health disorders, most commonly depression and anxiety. Mental well-being is equally essential as physical health (Mina, 2024) [6]. Philippine Mental Health Association -Davao Chapter revealed that in 2022, the city recorded 55 cases of suicide, with men accounting for 90% of these incidents (Agustin, 2023) [7].

Mental health problems can affect many areas of students' lives, reducing their quality of life, academic achievement, physical health, and satisfaction with the college experience, and negatively impacting relationships with friends and family members (Suicide Prevention Resource Center, 2020) [8]. While research on mental health and mental illness in the general population has increased in quality and prevalence in recent years, this same caliber of progress has not reached the sport psychology field (Nixdorf, Nixdorf, & MacIntyre, 2023) [9]. Addressing this gap is essential, especially in athletic settings, where psychological well-being plays a crucial role in overall performance and personal development. Therefore, this study is undertaken.

Significance of the Study

The findings of this study have significant implications for the Commission on Higher Education, school administrators, guidance counselors, sports coordinators/coaches, students, and future researchers, directly impacting current practices and shaping future educational strategies.

Commission on Higher Education. By undertaking this study, CHED would gain a comprehensive understanding of the factors influencing student-athletes' overall well-being and academic achievement. CHED could use the findings to develop evidence-based policies, programs, and support services that are targeted at the specific needs of student-athletes and ultimately create a positive and supportive environment conducive to academic and athletic success.

School Administrators. The study offers school administrators opportunities to make informed decisions about policies, programs, and resource allocation to better support student-athletes. Moreover, administrators could promote a positive school culture that prioritizes mental health and overall well-being.

Guidance Counselors. Identifying students with low resilience levels or poor time management skills early on could allow counselors to provide targeted interventions and prevent potential academic or

personal challenges from escalating. Counselors could use research findings to tailor support services such as academic advising, time management workshops, and mental health counseling to meet the specific needs of student-athletes.

Sports Coordinator/Coaches. Scholarship coordinators could use research findings to offer targeted support to student-athletes, such as mentorship programs, academic resources, or mental health services, to ensure their success both on and off the field. Addressing sleep quality, time management, and resilience could contribute to higher retention and graduation rates among student-athletes, which benefits both scholarship providers and the students themselves.

Students. Research findings might lead to the development of new support services and resources tailored to the needs of student-athletes, providing them with valuable tools and assistance to succeed in their academic and athletic pursuits. By developing resilience and learning effective time management skills, students could better navigate the demands of academic and athletic commitments while maintaining their mental and physical well-being.

For Future Researchers. Future research holds significant promise in optimizing athletic performance, preventing injuries, promoting academic achievement, supporting mental health and overall well-being, and enabling personalized interventions. Additionally, it offers opportunities to cultivate essential life skills among student-athletes. By addressing these key areas, researchers can contribute meaningfully to the holistic development and long-term success of student-athletes, both in their academic pursuits and athletic endeavors.

Statement of the Problem

This study aimed to examine the significance of sleep quality, resilience and time management as predictors of mental health among school student-athletes.

Specifically, this study aimed to answer the following research objectives:

1. determine the levels of the sleep quality, resilience, time management on the mental health of student athletes;
2. investigate if a significant relationship exists among sleep quality, resilience, and time management on the mental health among student-athletes; and
3. examine if there is a combined significant influence of sleep quality, resilience, and time management on the mental health among student-athletes.

Hypotheses

The hypotheses will be tested at a 0.05 level of significance.

H_{o1}: Sleep quality, resilience, and time management do not significantly correlate with Mental Health.
H_{o2}: Sleep quality, resilience, and time management do not significantly influence Mental Health.

Theoretical Framework

This study is anchored in Engel's (1977) Biopsychosocial Model, and as cited by Megan (2021) [10], it examines how the three aspects: biological, psychological, and social, play roles in relative health or disease. Engel's model, grounded in Ludwig von Bertalanffy's systems theory (1928), serves as an interdisciplinary framework for understanding how individuals interact with and adapt to their environment within society (Ontañón, 2024) [11].

Figure 1 The conceptual framework of the study

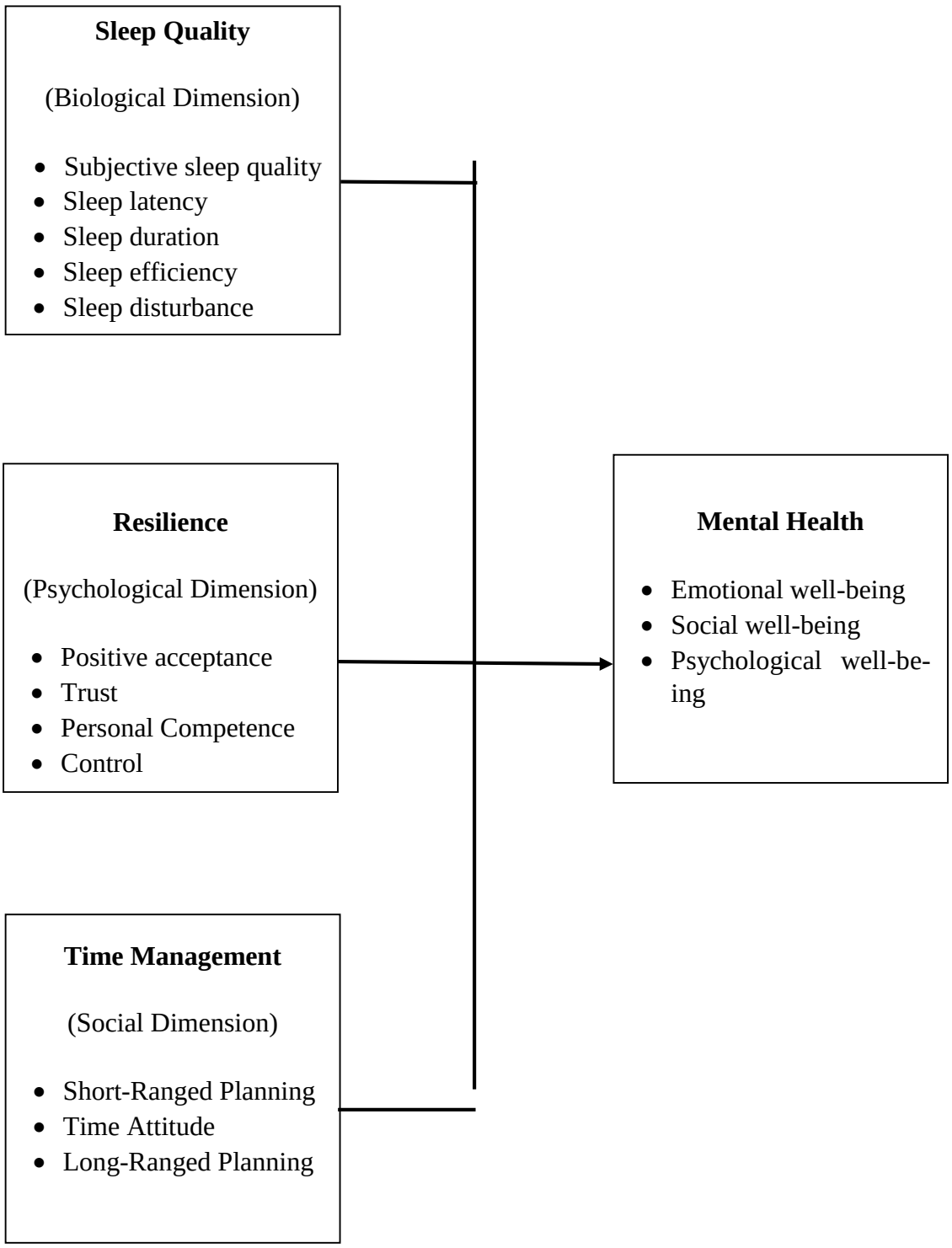

Figure 1 illustrates the conceptual model, highlighting the relationships between three predictive variables – sleep quality, resilience, and time management – and one criterion variable, mental health. In this study, the sleep quality variable is reflected by sleep quality, sleep latency, sleep duration, habitual sleep efficiency, sleep disturbance, use of sleep medications, and daytime dysfunction (Buysse et al., 1989) [12] and represents the biological factors outlined in the theory. The resilience variable is demonstrated by positive acceptance, trust, personal competence, control, and spiritual intelligence (Connor & Davidson, 2003) [13] and represents the psychological factors described in the theory. The time management variable is exemplified by short-range planning, time attitudes, and long-range planning (Britton & Tesser, 1991; Aeon & Aguinis, 2017) [14,15] and represents the social factors discussed in the theory. The criterion variable, mental health, is measured through psychological well-being, emotional well-being, and social well-being (Keyes, 2009) [16]. This study is narrowed down only to biological, psychological, and social factors; thus, other external factors are excluded.

2. METHOD

In this chapter, the methods and processes that were used in conducting the study are presented, such as the research design, research locale, research respondents, research instruments, data-gathering procedures, data analysis, and ethical considerations.

Research Design

This study utilized a quantitative research design, a structured method commonly employed in disciplines such as social sciences, psychology, economics, and market research. It aims to collect and analyze numerical data to answer research questions and test hypotheses (Pritha B., 2023) [17]. A predictive-correlational approach was applied to explore the influence of sleep quality, resilience, and time management on the mental health of student-athletes (Zila-Velasque, 2024) [18]. This design enables researchers to examine relationships between variables and predict outcomes using statistical tools such as correlation and regression analysis. Findings from such approaches are valuable for understanding how psychological and behavioral factors contribute to mental health, thus guiding targeted interventions and support programs in educational environments.

Research Locale

The study was conducted in three selected tertiary schools in Davao City. Specifically, it focused on member schools of the Davao Association of Catholic Schools, which are non-stock, non-profit private Catholic educational institutions. These schools were chosen to ensure a diverse population of student-athletes with a broad spectrum of experience and athletic backgrounds. The presence of active sports programs and consistent participation in athletic competitions made these institutions ideal for the study. This setting provides a comprehensive context for examining the influence of sleep quality, resilience, and time management on the mental health of student-athletes within tertiary Davao Association of Catholic Schools institutions.

Sample and Sampling

This study focused exclusively on college student-athletes from three Catholic tertiary institutions in Davao City, all members of the Davao Association of Catholic Schools (DACS). The population consisted of 201 student-athletes currently enrolled and actively participating in at least one official school sports team. Non-athlete students were deliberately excluded to maintain focus and relevance. Due to the diverse schedules and commitments of student-athletes, the researcher employed a convenience sampling technique to select respondents. Although this method may limit the generalizability of the findings, it was considered appropriate given the constraints of time, accessibility, and resources inherent in the study. Convenience sampling also enabled efficient access to this specific group, which is often difficult to reach due to their simultaneous academic and athletic responsibilities (Abbadia, 2024) [19]. To ensure sufficient statistical power and meaningful analysis, a sample size of 100–150 respondents is often deemed sufficient to balance statistical power and resource constraints (Draugalis & Plaza, 2009) [20].

Research Instrument

Sleep Quality. An adapted Likert-scale questionnaire measured the extent of sleep quality among participants. It included items related to seven dimensions of sleep: sleep quality, sleep latency, sleep duration, habitual sleep efficiency, sleep disturbance, use of sleep medications, and daytime dysfunction. The Cronbach's Alpha for this scale was 0.856, indicating a very good level of internal consistency.

Table 1 Sleep Quality Scale Interpretation

Level	Mean Interval	Descriptive Level	Descriptive Interpretation
5	4.21 - 5.00	Strongly Agree	Sleep Quality is excellent.
4	3.41 - 4.20	Agree	Sleep Quality is very good.
3	2.61 - 3.40	Neutral	Sleep Quality is good.
2	1.81 - 2.60	Disagree	Sleep Quality is poor.
1	1.00 - 1.80	Strongly Disagree	Sleep Quality is very poor.

Resilience. An adapted Likert-scale questionnaire measured the extent of resilience among student-athletes. This instrument encompassed short-ranged planning, time attitude and long-ranged planning. The Cronbach's Alpha for this scale was 0.811, demonstrating a very good level of internal consistency.

Table 2 Resilience Scale Interpretation

Level	Mean Interval	Descriptive Level	Descriptive Interpretation
5	4.21 - 5.00	Strongly Agree	Resilience is excellent.
4	3.41 - 4.20	Agree	Resilience is very good.
3	2.61 - 3.40	Neutral	Resilience is good.
2	1.81 - 2.60	Disagree	Resilience is poor.
1	1.00 - 1.80	Strongly Disagree	Resilience is very poor.

Time Management. An adapted Likert-scale questionnaire measured the extent of time management among student-athletes. This instrument encompassed three dimensions: Short-Range planning, Time Attitudes, and Long-Range planning. The reliability coefficient (Cronbach's Alpha) for this instrument was 0.918, implying an excellent level of internal consistency.

Table 3 Time Management Scale Interpretation

Level	Mean Interval	Descriptive Level	Descriptive Interpretation
5	4.21 - 5.00	Strongly Agree	Time Management is excellent.
4	3.41 - 4.20	Agree	Time Management is very good.
3	2.61 - 3.40	Neutral	Time Management is good.
2	1.81 - 2.60	Disagree	Time Management is poor.
1	1.00 - 1.80	Strongly Disagree	Time Management is very poor.

Data Gathering Procedure

The data gathering was conducted from February 5 to March 26, 2025, and involved securing ethical clearance, obtaining authorization from relevant academic offices, distributing and administering survey questionnaires in both online and paper-based formats with clear instructions, monitoring the process to ensure confidentiality and accuracy, and compiling and preparing the collected data for analysis.

Asking for Permission to Conduct the Study. The researcher first secured ethical clearance from the Society for Moral Integrity and Legal Ethics (SMILE). After receiving this clearance, endorsement letters were obtained from the Graduate School, signed by both the adviser and the dean. A formal request was then submitted to the Office of the School President of the selected institutions to conduct the study.

Data Collection. The data collection commenced with the researcher drafting and submitting a permission letter to the president and directress' offices to request approval for conducting the research with tertiary-level student-athletes as respondents. Once permission was granted, the researcher administered the survey questionnaires following the necessary protocols.

Administration and Retrieval of Questionnaires. The researcher provided clear instructions on how to properly complete the questionnaire. All responses were collected while maintaining strict confidentiality and data privacy protocols. The researcher thoroughly explained to the research in-charge or the sports coordinator how the questionnaires were to be answered. The instrument was completed by the selected tertiary-level student-athletes. After the respondents had honestly and thoroughly filled out the questionnaires, the researcher retrieved all completed forms and compiled the essential data.

Tabulation and Organization of Data. After retrieving the completed questionnaires, the researcher began tabulating the data by systematically entering the responses into a structured format, typically using software like Microsoft Excel. This step ensured that all data were accurately recorded and organized for analysis. The researcher then categorized the data based on relevant variables to facilitate the identification of patterns and trends. Proper tabulation and organization were essential as they formed the foundation for

accurate interpretation and meaningful conclusions. The compiled data were then submitted to a statistician for further analysis.

Data Analysis

The researcher utilized various statistical tools to analyze the data collected from the respondents, including the mean, standard deviation, Pearson product-moment correlation coefficient, and multiple linear regression analysis. Each of these methods provided unique insights, enabling a thorough understanding of the relationships among the study's variables.

Mean. This was used to answer the first two objectives of the study. More specifically, it was used to describe the level of the motivational climate and eating habits of student-athletes.

Standard Deviation. This was used to describe the variability or spread of data within a dataset.

Pearson's product moment correlation coefficient. This tool was used to measure the linear relationship between two variables that have been measured on interval or ratio scales.

Multiple Linear Regression Analysis. This is a statistical model that uses a straight line to estimate the relationship between a dependent variable and multiple independent variables.

On measuring the strength of the correlation. In measuring the correlation, this study utilized the standard scheme in determining the strength and the significance measure of the correlation. For the R-value, the following scheme is used:

Table 4 Correlation Strength Interpretation Scale

Computed r	Descriptive Interpretation
+/- 1.00	Perfect correlation
Between +/- 0.75 - +/- 0.99	High correlation
Between +/- 0.51 - +/- 0.74	Moderately high correlation
Between +/- 0.31 - +/- 0.50	Moderately low correlation
Between +/- 0.01 - +/- 0.30	Low correlation
0.00	No correlation

Ethical Consideration

Ethical guidelines were strictly followed to protect respondents' rights and wellbeing throughout the study. Approval was obtained from the Society for Moral Integrity and Legal Ethics before data collection. All respondents were informed about the study's purpose, procedures, and their rights to confidentiality and voluntary participation. The survey was administered through Google Forms without collecting any personally identifiable information, ensuring anonymity.

To minimize potential distress, communications used respectful language that framed mental health as a normal part of athletic and human experience. Respondents could read the assessment content before starting the survey, allowing them to make informed decisions. The questionnaires were designed to be completed at their convenient time without interfering with academic or athletic commitments, all in comfortable and private settings. Respondents were free to withdraw at any time without consequence. These measures ensured the study adhered to ethical research standards, respecting the privacy, autonomy, and wellbeing of all respondents.

3. RESULTS

In this chapter, the results of the study are presented. Specifically, included in this chapter are descriptive analysis, correlation analysis, regression analysis, and the summary of the findings.

Descriptive Analysis

Table 1 is the descriptive table. It contains the variables involved in the study namely, sleep quality, resilience, and time management. It also contains the number of samples, standard deviation, the mean and their corresponding descriptive levels.

Table 1 Descriptive Presentation

Variable	N	Mean	SD	Descriptive Interpretation
Sleep Quality (IV1)	210	3.31	0.16	Moderate
Sleep Disturbance		3.19	0.90	Moderate
Sleep Duration		3.49	0.81	High
Daytime Dysfunction		3.53	0.94	High
Habitual Sleep Quality		3.59	0.86	High
Subjective Slee Quality		3.37	0.80	Moderate
Sleep Latency		3.36	0.73	Moderate
Use of Sleep Medication		2.36	1.23	Low
Resilience (IV2)	210	3.97	0.03	High
Positive Acceptance		3.83	0.68	High
Trust		3.83	0.71	High
Personal Competence		4.15	0.63	High
Control		3.91	0.70	High
Spiritual Influence		4.14	0.72	High
Time Management (IV3)	210	3.72	0.07	High
Short-Ranged Planning		3.63	0.81	High
Time Attitude		3.79	0.65	High
Long-Ranged Planning		4.75	0.72	Very High
Mental Health (DV)	210	3.97	0.02	High
Emotional well-being		3.87	0.75	High

Social well-being		4.13	0.71	High
Psychological well-being		3.93	0.69	High

Specifically, Table 1 shows that sleep quality achieved an overall mean of 3.31 described as a good level. It indicates that the student-athletes' sleep quality is good. Three indicators namely; sleep duration, daytime dysfunction, and habitual sleep quality obtained corresponding means described as very good. Three indicators namely; subjective sleep quality, sleep latency, and sleep disturbance obtained means described as good. One indicator, namely; use of sleep medication obtained a mean described as poor level.
Additionally, it also shows that resilience achieved an overall mean of 3.97 described as a very good level. It indicates that student-athletes' resilience is very good. All indicators namely; positive acceptance, trust, control, and spiritual influence obtained means described as very good.

Furthermore, the time management variable achieved an overall mean of 3.72 described as a very good level. It indicates that student-athletes' time management is very good. All indicators namely; short-ranged planning, time attitude, and long-ranged planning obtained means described as very good to excellent level.

Finally, the mental health variable achieved an overall mean of 3.72 described as very good. It indicates that student-athletes' mental health is very good. All indicators namely; emotional well-being, social well-being, and psychological well-being obtained means described as a very good level.

Correlation Analysis

Table 2 is a correlation table. It contains the predictive variables involved in the study namely, sleep quality, resilience and time management; and the criterion variable that is mental health. It also contains the R-value, p-value, the decision on hypothesis, and the corresponding descriptive levels.

Table 2 Correlation Table

	Mental Health of Student-Athletes			
	R-value	**p-value**	**Decision on Ho@ 0.05 level of significance**	**Interpretation**
Sleep Quality	.406***	.000	Reject H01	Significant
Resilience	.717***	.000	Reject H01	Significant
Time Management	.652***	.000	Reject H01	Significant

Table 2 specifically shows that the correlation between sleep quality and mental health of student athletes obtained a p-value of 0.000, which is less than the 0.05 level of significance. Hence, the null hypothesis is rejected. This indicates that the correlation between sleep quality and mental health is significant at a moderate positive level, with an r value of 0.406.

Moreover, the correlation between resilience and mental health of student athletes obtained a p-value of 0.000, which is less than the 0.05 threshold. Hence, the null hypothesis is rejected. This suggests that the correlation between resilience and mental health is significant at a high positive level, with an r value of 0.717.

In addition, the correlation between time management and mental health of student athletes also obtained a p-value of 0.000, which is less than the 0.05 significance level. Therefore, the null hypothesis is rejected. This implies that the correlation between time management and mental health is significant at a high positive level, with an r value of 0.652.

The table shows that all three predictive variables significantly correlate with the criterion variable—mental health of student athletes. This implies that for every unit change in these predictive variables, there is a corresponding unit change in the mental health of student athletes.

Regression Analysis

Table 3 presents the regression analysis. It includes the predictive variables involved in the study—sleep quality, resilience, and time management—as well as the criterion variable, mental health. The table also provides the coefficient beta, standard estimate, t-value, p-value, decisions on hypotheses, and the corresponding interpretations.

Table 2 Regression Table

	Mental Health of Student-Athletes						
	Unstandardized Coefficients		**Standardized Coefficients**				
	B	**Std. Error**	**Beta**	**t**	**Sig.**	**Decision on H02**	**Interpretation**
Constant	.202	.233		.865	.388		
Sleep Quality (IV1)	.085	.054	.082	1.558	.121	Accept	Not Significant
Resilience (IV2)	.585	.069	.501	8.498	.000	Reject	Significant
Time Management (IV3)	.313	.067	.298	4.711	.000	Reject	Significant

R=.766 R^2 = .587 Adjusted R^2 = .580 SEE = .424 P-value = .000

Table 3 specifically shows that the Sleep Quality variable obtained a coefficient Beta of 0.082 which indicates that it has 8.2% degree of influence on the health of student-athletes. With the p-value of 0.121 which is greater than 0.05 degree of significance, hence the null hypothesis is accepted. It indicates that the 8.2% degree of influence is not significant.

Moreover, the Resilience variable obtained a coefficient Beta of 0.501 which indicates it has 50.1% degree of influence on the health of student-athletes. Such degree of influence is significant as denoted by the p-value of 0.000 which is less than 0.05 alpha. Hence, the null hypothesis is rejected. It indicates that the 50.1% degree of influence is significant.

Furthermore, the Time Management variable obtained a coefficient Beta of 0.298 which indicates it has 29.8% degree of influence on the health of student-athletes. Such degree of influence is significant as denoted by the p-value of 0.000 which is less than 0.05 alpha. Hence, the null hypothesis is rejected. It indicates that the 29.8% degree of influence is significant.

Finally, Table 3 shows that the three predictive variables obtained an R-squared of 0.587 which denotes that together they have 58.7% combined degree of influence on the criterion variable. With the obtained p-value of 0.000 which is less than 0.05 alpha, the said predictive power is significant.

Summary of Findings

1. Resilience, time management, and mental health are very good, while sleep quality among student-athletes is good.
2. Student-athletes' sleep quality, resilience, and time management of student-athletes are significantly related to their mental health.
3. Student-athletes' sleep quality, resilience, and time management of student-athletes are significantly related to their mental health.

4. DISCUSSIONS

In this chapter, I discussed the results of the study. The discussions are placed in the context of the findings of research relevant to the result of the study. Included here are the descriptive analysis, discussion on the correlation results, discussion on the degree of influence, conclusions and recommendations.

Good Sleep Quality Among Student Athletes

The finding that student-athletes exhibit good sleep quality is consistent with prior research indicating that adequate sleep is crucial for performance. This data aligns with the assertion of Rygielski et al. (2024) [21]. Rygielski and colleague research indicates that sleep quality significantly influences athletic performance, recovery, and injury risk. Athletes obtaining less than 7 hours of sleep are 1.7 times more likely to sustain injuries. In addition, this finding supports the study of Hamlin, 2021 found that university athletes who maintained good sleep habits (≥8 hours) reported better mood, energy levels, and training quality, correlating with lower injury rates (Hamlin et al., 2021) [22].

Very Good Resilience Among Student Athletes

The result that student-athletes demonstrate very high, indeed exceptional, levels of resilience is well aligned with recent empirical research. This research output supports the study of Chrétien et al., 2024)

[23]. They found that elite athletes exhibit high resilience, which correlates with better health-related behaviors and psychological well-being. The revelation validates the study of Rogaleva et al., 2022) [24] which revealed that adolescents engaged in sports exhibit higher resilience levels compared to their non-athlete peers.

Very Good Time Management Among Student Athletes

The insight that student athletes possess strong time management skills is well aligned with existing research. This outcome is consistent with the study of Ator & Ortizo, (2024) [25]. Both researchers revealed a high level of time management skills demonstrated by student-athletes in managing both training sessions and academic schedules. Also, this conclusion is in line with the study of Quimbo who found strong positive correlations between athletic participation, time management, and academic performance, suggesting that effective time management enhances academic success among student-athletes (Quimbo, 2023) [26].

Very Good Mental Health Among Student Athletes

The data point of this study that student-athletes exhibited very good mental health aligns with a growing body of literature suggesting that athletic participation contributes to enhanced psychological well-being. The present result affirms with the findings of Nazarudin (2023). In his study at Universiti Kebangsaan Malaysia, Nazarudin found that student-athletes reported very high mental health scores (M=4.92) and sports performance satisfaction (M=9.22), indicating a positive correlation between mental health and performance satisfaction (Nazarudin et al., 2023) [27]. Likewise, this empirical result conforms to the study of Cronk et al, (2023) [28]. Cronk and peers found in their study of a cross-sectional analysis of Division III student-athletes who showed low rates of severe anxiety and depression, with only 5.1% and 1.6% scoring moderate on PHQ-9 and GAD-7, respectively.

Sleep Quality, Resilience and Time Management as Predictors of Mental Health

The observation from this study indicates a significant positive relationship between sleep quality, resilience, time management, and mental health among student-athletes. The finding that sleep quality has a positive relationship with mental health aligns with prior research emphasizing the critical role of sleep in psychological well-being. The same learning confirms with the study of Cousins et al. (2023) [29] who found that poor sleep quality among college athletes was linked to elevated levels of depression and anxiety, while those with better sleep reported fewer mental health concerns, reinforcing the connection between quality sleep and emotional stability. This outcome is further supported by Bacaro and associates (2024) [30], whose research demonstrated that good sleep quality correlates with lower internalizing and externalizing symptoms and greater psychological well-being.

For guidance and counseling professionals, the results that sleep quality has a positive relationship with mental health highlight the importance of implementing comprehensive sleep assessments, offering targeted sleep education workshops tailored to the athletic context, creating individualized sleep hygiene strategies, and advocating for academic accommodations during high-demand training and competition

periods. The finding that sleep quality has a positive relationship with mental health reflects the outcome of Walsh et al. (2024) [31], who suggest that programs like Sleep Coaching and Individualized Mental health Assistance (SCIMA) aim to improve sleep regularity and mental health through structured interventions, including psychoeducation and behavioral coaching.

Meanwhile, resilience exhibited the strongest correlation with mental health, a result that matches with the study of Simon et al. (2024) [32]. Simon and colleagues' research shows that student-athletes with greater resilience report lower levels of anxiety and depression, contributing to improved subjective well-being.

In addition, this data point coincides with Mejía, et al. (2024) [33] who found a positive correlation between resilience and positive mental health, emphasizing the importance of resilience in high-stress environments.

The observation that resilience exhibited the strongest correlation with mental health has important implications for guidance counselors; incorporating coping strategies into their training can help mitigate stress and improve performance outcomes (Codonhato, et al. 2018) [34]. The implication for the mental health practitioners such as workshops can teach athletes to reframe negative experiences, fostering a growth mindset and strengthening resilience; and engaging upperclassmen as mentors can provide incoming athletes with relatable experiences and effective coping mechanisms (Chrétien et al., 2024) [23].

Similarly, time management showed a strong positive relationship with mental health, highlighting how effective scheduling and prioritization skills substantially contribute to psychological well-being in this population. This fact is parallel to the study of Liu and associates who found that effective time management practices were linked to improved mental health outcomes, suggesting that students who manage their time well experience lower levels of stress (Liu et. al, 2024) [35]. This inference resonates with the research of Santos and collaborators who found that effective academic time management positively predicts subjective well-being, suggesting that structured time management can alleviate stress (Santos et. al, 2022) [36].

The conclusion that time management shows a strong positive relationship has implications for the guidance and counseling profession. Liu and colleagues suggested that various time management strategies, such as the 'flexible focus' approach, are beneficial for student-athletes, allowing them to efficiently switch between academic and athletic tasks (Liu & Taresh, 2024) [35].

Sleep Quality, Resilience, and Time Management Influence on Mental Health

The assessment revealed that resilience and time management emerged as significant predictors of student-athlete mental health, while sleep quality did not reach statistical significance when controlling for the other variables. This suggests that sleep quality alone may not directly predict mental health outcomes, supporting the null hypothesis.

Although sleep quality did not directly predict mental health outcomes in the current study, the understanding reflects the notion of (Poon et al., 2024) [37] which indicates that it can indirectly affect mental health through resilience. Poon and associates found that better sleep quality was associated with higher resilience, which in turn correlated with fewer mental health symptoms The reckoning, however, contradicts with the study of Montero at al. (2022) [38] which suggests a direct, cyclical relationship between sleep quality and mental health and found that poor sleep exacerbates mental health problems.

The outcome of the study that sleep quality does not significantly influence mental health has implications for counseling practitioners. These appraisals suggest that sleep education should be integrated within comprehensive wellness frameworks rather than delivered as isolated interventions. Counselors should focus on perceived sleep quality and sleep hygiene education beyond sleep duration alone, and assess how sleep interacts with other wellness factors like stress management and recovery, thereby developing holistic approaches that address these interconnected elements. Sleep hygiene, which encompasses behaviors that promote good sleep, has been identified as a modifiable factor that can influence both positive and negative dimensions of mental health, including depression and subjective well-being (Peach et al., 2016) [39]. Interventions focusing on sleep regularity and circadian alignment have shown promise in improving mental health outcomes (Walsh et al., 2024) [31].

Conversely, resilience demonstrated remarkable significance as a predictor of student-athlete mental health, exhibiting the largest coefficient and strongest statistical relationship, indicating substantial mental health improvements with increased resilience capacity. This deduction corresponds with Simon et al. (2024) [32]. They found that resilience acts as a buffer against negative mental health outcomes, highlighting its importance in psychological well-being. The results are consistent with the study of Christopher B., et al. (2023) [40], which identified resilience as a key factor in maintaining positive mental health among student-athletes by helping them cope with stress and adversity.

For support service professionals, the resilience findings suggest implementing structured resilience programs that teach psychological flexibility and adaptive coping, developing peer support initiatives, regularly assessing athletes to identify those needing additional support, and providing preventative training prior to competitions.

Additionally, time management emerged as another significant predictor with a moderate positive influence on mental health outcomes. This conclusion corroborates with the study of Amajida and associates who found that effective time management is essential for student-athletes balancing academic and athletic commitments, reducing stress and enhancing mental health. They also noted that poor time management can lead to increased anxiety and decreased performance, highlighting the need for structured support systems (Amajida et al., 2024) [41]. This result bolstered the research of Alhasani (2022) [42] during the pandemic. He came across that student who preferred organized time management reported lower stress and anxiety levels, highlighting the importance of time management in crisis situations.

For practitioners in guidance and counseling, the time management findings that influence mental health suggest: developing personalized scheduling systems and priority-setting workshops for student-athletes' unique challenges; implementing regular check-ins throughout academic terms, especially during

competitive seasons; incorporating specialized planning apps or digital calendars into counseling interventions; and coordinating with academic advisors and coaches to create integrated support systems that recognize student-athletes' multiple time pressures.

Recommendations

Based on the conclusion, future research may consider multiple regression analysis types utilizing other variables not covered in this study in order to account for the remaining 41.3 % variance in mental health.

Moreover, the Commission on Higher Education may formulate evidence-based policies that promote student-athlete mental health by ensuring adequate professional staffing ratios, conducting regular mental health screenings, and allocating dedicated funding; and athletic departments may introduce resilience-building initiatives that incorporate cognitive-behavioral strategies and mindfulness practices tailored to the demands of competitive sports.

Furthermore, educational institutions may establish comprehensive time management programs supported by specialized academic advising; and student health services may offer targeted sleep education that addresses the distinct needs of athletes.

In addition, school administrators may develop wellness centers staffed by professionals trained to integrate physical, psychological, and academic support; and guidance counselors may employ structured assessment tools to identify at-risk student-athletes throughout the academic year.

Moreover, sports coordinators may integrate sleep hygiene education into regular training routines; and student-athletes may actively participate in peer support networks to foster a culture of mutual care. Finally, future research may broaden its scope and explore additional factors influencing student-athlete mental health through longitudinal and mixed-method approaches.

5. APPENDIX A

Letter to Validators

HOLY CROSS OF DAVAO COLLEGE
GRADUATE SCHOOL OFFICE
Tel. No. (082) 221 – 9071 to 79 loc. 150
Email: graduatesschool@hcdc.edu.ph
Main Campus: Sta. Ana Avenue corner C. De Guzman St. Brgy. 14-B, Davao City, Philippines
Other Campuses: Camudmud (IGaCOS) and Bajada (SOS Drive)

June 25, 2024

DR. DE MAR M. BANGELES, RPSY, RPM
Head, Guidance and Counseling Office
Holy Cross of Davao College
Davao City

Dear Dr. Bangeles:

Warmest greetings!

I am Jean O. Lugas, a candidate for the degree of Master of Education major in Guidance and Counseling at Holy Cross of Davao College. I am currently working on my thesis "THE INFLUENCE OF BIOLOGICAL, PSYCHOLOGICAL, AND SOCIAL FACTORS ON THE MENTAL HEALTH OF STUDENT-ATHLETES".

In this connection, I am respectfully requesting your impeccable competence to validate the questionnaires to be used in examining the influence of biopsychosocial factors on the mental health of student-athletes.

I am hoping for your favorable response on this matter.

Thank you and God Bless!

Yours truly,

JEAN O. LUGAS
Researcher

Noted by:

JEAN A. LEGASPI, EdD
Adviser

Accredited: Institutional Member of: Certified: ISO 21001:2018

HOLY CROSS OF DAVAO COLLEGE
GRADUATE SCHOOL OFFICE
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Email: graduatescchool@hcdc.edu.ph
Main Campus: Sta. Ana Avenue corner C. De Guzman St. Brgy. 14-B, Davao City, Philippines
Other Campuses: Camudmud (IGaCOS) and Bajada (SOS Drive)

July 30, 2024

DR. TERESA P. FABIANIA
Vice President for Academic Affairs
Holy Cross of Davao College
Davao City

Dear Dr. Fabiania:

Warmest greetings!

I am Jean O. Lugas, a candidate for the degree of Master of Education major in Guidance and Counseling at Holy Cross of Davao College. I am currently working on my thesis "THE INFLUENCE OF BIOLOGICAL, PSYCHOLOGICAL, AND SOCIAL FACTORS ON THE MENTAL HEALTH OF STUDENT-ATHLETES".

In this connection, I am respectfully requesting your impeccable competence to validate the questionnaires to be used in examining the influence of biopsychosocial factors on the mental health of student-athletes.

I am hoping for your favorable response on this matter.

Thank you and God Bless!

Yours truly,

JEAN O. LUGAS
Researcher

Noted by:

JEAN A. LEGASPI, EdD
Adviser

HOLY CROSS OF DAVAO COLLEGE
GRADUATE SCHOOL OFFICE
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Main Campus: Sta. Ana Avenue corner C. De Guzman St. Brgy. 14-B, Davao City, Philippines
Other Campuses: Camudmud (IGaCOS) and Bajada (SOS Drive)

June 25, 2024

DR. GIOVANNI A. MONTEJO
Vice President for Academic Affairs, Research,
and Community Engagement
Assumption College of Davao
J.P, Cabaguio Ave, Agdao, Davao City

Dear Dr. Montejo:

Warmest greetings!

I am Jean O. Lugas, a candidate for the degree of Master of Education major in Guidance and Counseling at Holy Cross of Davao College. I am currently working on my thesis "THE INFLUENCE OF BIOLOGICAL, PSYCHOLOGICAL, AND SOCIAL FACTORS ON THE MENTAL HEALTH OF STUDENT-ATHLETES".

In this connection, I am respectfully requesting your impeccable competence to validate the questionnaires to be used in examining the influence of biopsychosocial factors on the mental health of student-athletes.

I am hoping for your favorable response on this matter.

Thank you and God Bless!

Yours truly,

JEAN O. LUGAS
Researcher

Noted by:

JEAN A. LEGASPI, EdD
Adviser

Accredited: Institutional Member of: Certified: ISO 21001:2018

APPENDIX B

Validation Results

HOLY CROSS OF DAVAO COLLEGE
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Validation Sheet for Quantitative Research Instrument

Name of Evaluator : DR. TERESA P. FABIANIA
Degree :
Position :
Institution :

Name of the Researcher : Jean O. Lugas
Title of the Research : The Influence of Sleep Quality, Resilience, Time Management on the Mental Health of Student-Athletes

To the Evaluator: Please check the appropriate box for your ratings.

Points: 5-Excellent, 4-Very Good, 3-Good, 2-Fair, 1-Poor

Criteria/ Indicators	5	4	3	2	1
1. Clarity of directions and Items *The vocabulary, language structure and concepts suit the level of the respondents and the items are written in clear and understandable manner.*		/			
2. Presentation and Organization of items *The items are presented and organized in a logical manner.*		/			
3. Suitability of the items *The items are appropriate and they represent the substance of the research. The statements are designed to determine the conditions, knowledge, perceptions and/or the attitudes that are supposed to be measured.*	/				
4. Adequateness *The items represent the coverage of the research adequately. The number of statements per area is representative enough for the questions needed in the research.*	/				
5. Attainment of Purpose *The research tool as a whole fulfills the objectives for which it is constructed.*	/				
6. Objectivity *No aspect of the questionnaire suggests bias on the part of the researchers.*		/			

Comments/Suggestions/Recommendations:

Please check the suggestions for the improvement of the instrument.
Good luck.

Evaluator's Signature: _

Date: September 24, 2024

Accredited: Institutional Member of: Certified: ISO 21001:2018

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Other Campuses: Camudmud (IGaCOS) and Bajada (SOS Drive)

Validation Sheet for Quantitative Research Instrument

Name of Evaluator : DR. GIOVANNI A. MONTEJO
Degree :
Position :
Institution :

Name of the Researcher : Jean O. Lugas
Title of the Research : The Influence of Sleep Quality, Resilience and Time Management on the Mental Health of Student-Athletes

To the Evaluator: Please check the appropriate box for your ratings.

Points: 5-Excellent, 4-Very Good, 3-Good, 2-Fair, 1-Poor

Criteria/ Indicators	5	4	3	2	1
1. Clarity of directions and Items *The vocabulary, language structure and concepts suit the level of the respondents and the items are written in clearand understandable manner.*	/				
2. Presentation and Organization of items *The items are presented and organized in a logical manner.*		/			
3. Suitability of the items *The items are appropriate and they represent the substanceof the research. The statements are designed to determine the conditions, knowledge, perceptions and/or the attitudesthat are supposed to be measured.*			/		
4. Adequateness *The items represent the coverage of the research adequately. The number of statements per area is representative enough for the questions needed in theresearch.*			/		
5. Attainment of Purpose *The research tool as a whole fulfills the objectives for whichit is constructed.*			/		
6. Objectivity *No aspect of the questionnaire suggests bias on the part ofthe researchers.*		/			

Comments/Suggestions/Recommendations:
Please see suggestions found in the questionnaire

Evaluator's Signature:

Date: August 20, 2024

HOLY CROSS OF DAVAO COLLEGE
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Tel. No. (082) 221 – 9071 to 79 loc. 150
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Other Campuses: Camudmud (IGaCOS) and Bajada (SOS Drive)

Validation Sheet for Quantitative Research Instrument

Name of Evaluator : DE MAR M. BANGELES
Degree : CIAL-ORG)
Position : SIGNMENT
Institution :

Name of the Researcher : Jean O. Lugas
Title of the Research : The Influence of Biological, Psychological and Social Factors on the Mental Health of Student-Athletes

To the Evaluator: Please check the appropriate box for your ratings.

Points: 5-Excellent, 4-Very Good, 3-Good, 2-Fair, 1-Poor

Criteria/ Indicators	5	4	3	2	1
1. Clarity of directions and Items *The vocabulary, language structure and concepts suit the level of the respondents and the items are written in clearand understandable manner.*	/				
2. Presentation and Organization of items *The items are presented and organized in a logical manner.*	/				
3. Suitability of the items *The items are appropriate and they represent the substanceof the research. The statements are designed to determine the conditions, knowledge, perceptions and/or the attitudesthat are supposed to be measured.*	/				
4. Adequateness *The items represent the coverage of the research adequately. The number of statements per area is representative enough for the questions needed in theresearch.*	/				
5. Attainment of Purpose *The research tool as a whole fulfills the objectives for whichit is constructed.*	/				
6. Objectivity *No aspect of the questionnaire suggests bias on the part ofthe researchers.*	/				

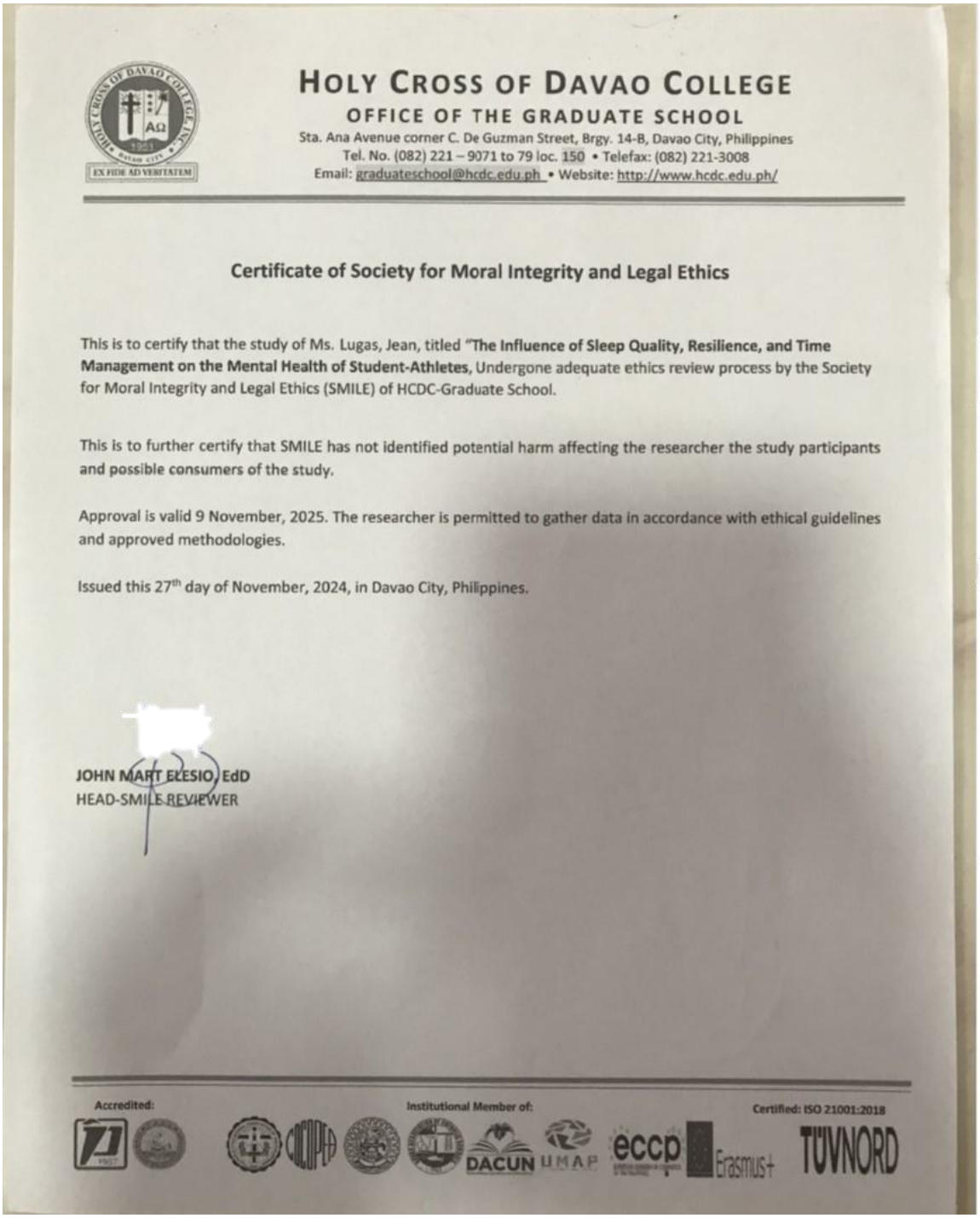
Comments/Suggestions/Recommendations:
There are no questions regarding the psychometric properties of the instrument, as they are already standardized. My only concern is the administration of the questionnaire to the respondents, as it might be lengthy. Please ensure that the respondents are monitored while answering the instrument to prevent test-taking biases and to ensure the truthfulness of their responses. Also accommodate if there are questions from the respondents.

Evaluator's Signature:
Date: 28 June 2024

Accredited: Institutional Member of: Certified: ISO 21001:2018

APPENDIX C

Society of Moral Integrity and Legal Ethics Certificate



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Tel. No. (082) 221 – 9071 to 79 loc. 150 • Telefax: (082) 221-3008
Email: graduateschool@hcdc.edu.ph • Website: http://www.hcdc.edu.ph/

Certificate of Society for Moral Integrity and Legal Ethics

This is to certify that the study of Ms. Lugas, Jean, titled "**The Influence of Sleep Quality, Resilience, and Time Management on the Mental Health of Student-Athletes,** Undergone adequate ethics review process by the Society for Moral Integrity and Legal Ethics (SMILE) of HCDC-Graduate School.

This is to further certify that SMILE has not identified potential harm affecting the researcher the study participants and possible consumers of the study.

Approval is valid 9 November, 2025. The researcher is permitted to gather data in accordance with ethical guidelines and approved methodologies.

Issued this 27th day of November, 2024, in Davao City, Philippines.

JOHN MART ELESIO, EdD
HEAD-SMILE REVIEWER

Accredited: Institutional Member of: Certified: ISO 21001:2018

APPENDIX D

Reliability Test

Reliability Analysis

Title of the Study: The Influence of Sleep Quality, Resilience, and Time Management on the Mental Health of Student-Athletes

Researcher: Lugas, Jean

Model: Cronbach's Alpha for Inter-Item Consistency

# of Items	# of Respondents	%	Cronbach's Alpha	Description
Sleep Quality			.856	Very Reliable
Level of Resilience	30	100	.811	Very Reliable
Level of Time Management			.918	Very Reliable
Level of Mental Health			.937	Very Reliable
Overall			.953	Very Reliable

Prepared

DE MAR M. BANGELES, PhD
Full-time Faculty, HCDC

APPENDIX E

Approval Letter

HOLY CROSS OF DAVAO COLLEGE
GRADUATE SCHOOL OFFICE
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Main Campus: Sta. Ana Avenue corner C. De Guzman St. Brgy. 14-B, Davao City, Philippines
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January 30, 2025

REYNALDO O. CUIZON, PhD
Dean of Graduate School
Holy Cross of Davao College, Inc.
Sta. Ana Avenue St., Davao City

Dear Dr. Cuizon,

Greetings!

The undersigned is a Master of Arts in Education student, major in Guidance and Counseling, at Holy Cross of Davao College, Inc. I am currently working on my thesis titled **'The Influence of Sleep Quality, Resilience, and Time Management on the Mental Health of Student-Athletes'** in partial fulfillment of the requirements for the program. This research aims to explore the relationships between these factors and their impact on the mental health of student-athletes. As part of the research process, I will be collecting data from student athletes.

In this regard, I kindly request permission from your office to allow me to conduct my study within this institution, as well as in other tertiary schools. Please be assured that the security and confidentiality of all participants will be strictly upheld, and all research procedures will adhere to ethical standards.

I look forward to your positive response regarding this request. Thank you very much, and God bless.

Respectfully yours,

JEAN O. LUGAS
Researcher

Noted :

JEAN A. LEGASPI, EdD
Adviser

Accredited: Institutional Member of: Certified: ISO 21001:2018

6.

APPENDIX F
Survey Questionnaire

HOLY CROSS OF DAVAO COLLEGE
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Tel. No. (082) 221 – 9071 to 79 loc. 150
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Main Campus: Sta. Ana Avenue corner C. De Guzman St. Brgy. 14-B, Davao City, Philippines
Other Campuses: Camudmud (IGaCOS) and Bajada (SOS Drive)

The Influence of Sleep Quality, Resilience, and Time Management on the Mental Health of Student-Athletes

Survey Questionnaire

Dear Respondents,

I am currently conducting a research study entitled "The Influence of Sleep Quality, Resilience, and Time Management on the Mental Health of Student-Athletes." The purpose of this study is to explore how these factors influence the mental well-being of individuals who balance both academic responsibilities and athletic commitments. With this in mind, I invite you to participate in this study, as your experiences and insights are crucial in helping us understand the relationship between sleep quality, resilience, time management, and mental health. The questionnaire is divided into four parts: Sleep Quality will be measured using the Pittsburgh Sleep Quality Index (PSQI), focusing on sleep disturbance, duration, and subjective quality; Resilience will be evaluated through the Connor-Davidson Resilience Scale (CD-RISC-25), considering factors such as personal competence and positive acceptance; Time Management will be assessed via a dedicated questionnaire, examining your planning skills and attitudes toward time management; and Mental Health will be measured using the Mental Health Continuum Short Form (MHC-SF), which covers emotional, social, and psychological well-being. Your participation is completely voluntary, and you are free to withdraw at any point without any consequences. There are no right or wrong answers—what matters most is your honest perspective. For each statement, please select the response that best reflects your experience, using a scale from 1 to 5, where 1 represents strong disagreement and 5 represents strong agreement.

By participating, you will play a crucial role in advancing research that seeks to uncover valuable insights into the unique challenges student-athletes face. Your time and input are invaluable to this study, and I sincerely appreciate your willingness to contribute. Thank you for your participation.

Name(optional): _____ **Sex:** ( ) Male ( ) Female
Course: _____ **Year:** _____
Sports program affiliation: _____

Age:
( ) 18 – 25 ( ) 30 – 35
( ) 25 – 30 ( ) 35 and above

Part. 1 – The Level of the Sleep Quality on the Mental Health of Student Athletes Based on Pittsburgh Sleep Quality Index (PSQI)

Instructions: The following questions only relate to your usual sleep habits during the past month. Your answers should indicate the most accurate reply for most days and nights in the past month. **Please check the box that corresponds to your answer**

Scale	Descriptions	Interpretations
5	Strongly Agree (SA)	This means that you completely agree with the statement.
4	Agree (A)	This means that the statement's item is often manifested/agreed upon.
3	Neutral (N)	This means you neither agree nor disagree with the statement.
2	Disagree (DA)	This means that you do not generally agree with the statement.
1	Strongly Disagree (SD)	This means that you completely disagree with the statement

Accredited: Institutional Member of: Certified: ISO 21001:2018

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1. Sleep Disturbances	SA	A	N	D	SD
As a student-athlete, I…..	5	4	3	2	1
1. have had trouble sleeping because I wake up in the middle of the night or early morning.					
2. have had trouble sleeping because I have to get up to use the bathroom.					
3. have had trouble sleeping because I cannot breathe comfortably.					
4. have had trouble sleeping because I cough or snore loudly					
5. have had trouble sleeping because I feel too cold					
6. have had trouble sleeping because I feel too hot					
7. have had trouble sleeping because I have bad dreams					
8. have had trouble sleeping because of pain					
9. have had trouble sleeping because of other reasons					
2. Sleep Duration					
As a student-athlete, I….					
1. get about 8 hours of sleep each night					
2. feel well-rested upon waking up in the morning in general					
3. wake up during the night and find it hard to fall back asleep					
4. tend to sleep for longer periods on weekends compared to weekdays					
5. noticed a significant change in my sleep duration recently					
3. Daytime Dysfunction					
As a student-athlete, I….					
1. have had trouble staying awake while driving, eating meals, or engaging in social activity					
2. have been struggling to find the motivation to get things done					
3. experience excessive daytime sleepiness					
4. feel tired or fatigued throughout the day					
5. find it challenging to remember things or learn new information					
4. Habitual Sleep Quality					
As a student-athlete, I…					
1. go to bed at night around 8:00 to 9:00 PM					
2. get up at around 6:00 to 7:00 AM in the morning.					
3. get about 8 hours of sleep each night.					
4. sleep through the night without interruptions					
5. have noticed changes in my sleep quality over time					
5. Subjective Sleep Quality					
As a student-athlete, I…					
1. would rate my overall sleep quality as very good.					
2. have no difficulty returning to sleep if awakened					
3. experience minimal or no daytime sleepiness					
4. am satisfied with the amount and quality of my sleep					
5. have a high level of energy throughout the day					
6. Sleep Latency					
As a student-athlete, I…					
1. take 10-15 minutes to fall asleep each night					
2. have had trouble sleeping because I cannot get to sleep within 30 minutes					
3. find it difficult to relax and drift off to sleep					
4. don't experience racing thoughts that interfere with sleep					
5. can fall asleep even in noisy environments.					
7. Use of Sleep Medication					
As a student-athlete, I….					
1. rely on sleep medication to fall asleep, usually					
2. experience withdrawal symptoms when I stop taking sleep medication					
3. believe sleep medication is the only way I can fall asleep					

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4. have tried to reduce or stop using sleep medication without success					
5. feel frustrated with my continued need for sleep medication					

Source:

Buysse, D. J., Reynolds III, C. F., Monk, T. H., Berman, S. R., & Kupfer, D. J. (1989). The Pittsburgh Sleep Quality Index: a new instrument for psychiatric practice and research. *Psychiatry Research*, *28*(2), 193–213.

Part 2 – The Level of Resilience on the Mental Health of Student-Athletes based on the Connor-Davidson Resilience Scale (CD-RISC-25).

Instruction: Please answer the following questions by checking the box that corresponds your answer.

Scale	Descriptions	Interpretations
5	Strongly Agree (SA)	This means that you completely agree with the statement.
4	Agree (A)	This means that the statement's item is often manifested/agreed upon.
3	Neutral (N)	This means you neither agree nor disagree with the statement.
2	Disagree (DA)	This means that you do not generally agree with the statement.
1	Strongly Disagree (SD)	This means that you completely disagree with the statement

1. Positive Acceptance	**SA**	**A**	**N**	**D**	**SD**
As a student-athlete, I….	5	4	3	2	1
1. am able to adapt when changes occur.					
2. have one close and secure relationship.					
3. can deal with whatever comes my way.					
4. feel confident because of my past successes					
5. tend to bounce back after illness, injury or other hardships.					
2. Trust					
As a student-athlete, I….					
1. try to see the humorous side of things when I am faced with problems.					
2. I believe that overcoming stress helps me build resilience.					
3. stay focused and think clearly under pressure.					
4. prefer to take the lead in problem-solving.					
5. make unpopular or difficult decisions.					
6. am able to handle unpleasant or painful feelings like sadness, fear, and anger.					
7. have to act on a hunch					
3. Personal Competence	**SA**	**A**	**N**	**D**	**SD**
As a student-athlete, I….	5	4	3	2	1
1. make my best effort, no matter what.					
2. believe I can achieve my goals, even if there are obstacles.					
3. do not give up, even when things seem hopeless.					
4. am not easily discouraged by failure.					
5. think of myself as a strong person when dealing with life's challenges and difficulties.					
6. like challenges.					
7. work to attain goals.					
8. take pride in my achievements.					

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4. Control					
As a student-athlete, I….					
1. know where to find help in times of stress.					
2. have a strong sense of purpose in life.					
3. feel like I am in control.					
4. am confident in my ability to bounce back from setbacks					
5. have a strong support network to rely on					
5. Spiritual Influences					
As a student-athlete, I….					
5. sometimes feel a sense of luck or divine intervention in my life.					
6. believe that fate or God sometimes plays a role in my life.					
7. feel connected to something larger than myself					
8. believe there is a higher power or spiritual force guiding me					
9. find prayer or meditation helpful in managing challenges					

Source:

Connor, K. M., & Davidson, J. R. (2003). Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). Depression and anxiety, 18(2), 76-82.

Domínguez-Cancino, Karen & Calderon-Maldonado, Francisca & Choque-Medrano, Edith & Bravo-Tare, Carola & Palmieri, Patrick. (2022). Psychometric Properties of the Connor-Davidson Resilience Scale for South America (CD-RISC-25SA) in Peruvian Adolescents. Children. 9. 1689. 10.3390/children9111689

Part 3 – The Level of Time Management on the Mental Health of Student-Athletes.

Instructions: Please check the box that corresponds to your answer. All the questions were valued based on the Likert scale of five value scores:

Scale	Descriptions	Interpretations
5	Strongly Agree (SA)	This means that you completely agree with the statement.
4	Agree (A)	This means that the statement's item is often manifested/agreed upon.
3	Neutral (N)	This means you neither agree nor disagree with the statement.
2	Disagree (DA)	This means that you do not generally agree with the statement.
1	Strongly Disagree (SD)	This means that you completely disagree with the statement

1. Short-Ranged Planning	**SA**	**A**	**N**	**D**	**SD**
As a student-athlete, I….	5	4	3	2	1
1. make a list of things I need to do each day.					
2. plan my day before I start it					
3. make a schedule of the activities I have to do on work days					
4. write a set of goals for myself for each day					
5. spend each day planning					
6. have a clear idea of what I want to accomplish during the next week					
7. set and honor priorities					
2. Time Attitude					
As a student-athlete, I….					
1. often find myself doing things which interfere with my schoolwork simply because I hate to say "No" to people					
2. feel I am in charge of my own time, by and large					

References

1. Saloni D., Lucas R.G., Hannah R., Max R., "Mental Health", Our World in Data, 2023. https://ourworldindata.org/mental-health
2. Emma S., "The Global Mental Health Crisis: 10 Numbers to Note", May 20, 2024. https://www.projecthope.org/news-stories/story/the-global-mental-health-crisis-10-numbers-to-note/
3. Amber L.D., "Student athletes and mental health: An exploration of potential hurdles to student success", Honors Thesis, Appalachian State University, Boone, NC, 2018. https://libres.uncg.edu/ir/asu/listing.aspx?id=23029
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-JOL