



HEALTH MANAGEMENT PRACTICES AND TEACHERS' CREATIVITY IN ALIMOSHO LOCAL GOVERNMENT AREA, LAGOS STATE

RUFAl, M. Dada & AZEEZ, R. Olawale

Department of Educational Management, Faculty of Educational Management, Lagos State University, Ojo, Lagos.
Department of Industrial Relations and Human Resource Management, Faculty of Management Sciences, Lagos State University, Ojo, Lagos.

Corresponding author: musiliu.rufai@lasu.edu.ng

Abstract

This study investigated the influence of health management practices, specifically sleep quality and duration, and illness management, on the creativity of senior secondary school teachers in Alimosho Local Government, Lagos State, Nigeria. Using a descriptive research design, data were collected from teachers through a structured questionnaire and analysed using linear regression. The results revealed that sleep quality and duration significantly affect teachers' creativity ($\beta = 0.331$, $p < 0.05$), explaining 10.9% of the variance in creativity. Additionally, illness management practices were found to significantly predict creativity ($\beta = 0.541$, $p < 0.05$), accounting for 29.2% of the variance. Based on these findings, this study concluded that adequate sleep and proactive health management are important in promoting creative capacities among teachers. Consequently, it is recommended that schools implement wellness programs that educate teachers on the importance of quality sleep and provide resources for managing sleep-related issues. This can include workshops on relaxation techniques, stress management, and the benefits of maintaining a regular sleep schedule. Also, educational authorities should encourage and facilitate proactive illness management practices among teachers. This can be achieved by providing access to health resources, such as regular health check-ups, mental health support services, and programs that teach effective stress management techniques.

Keywords: Creativity, health management, illness management practices, teachers, sleep quality and duration

Introduction

In the contemporary educational environment, the importance of creativity among teachers cannot be overstated. Creativity is essential for developing engaging lesson plans, accommodating diverse learning styles, and promoting an interactive classroom environment that stimulates student engagement and critical thinking (Acar et al., 2024). The ability to innovate and think creatively allows teachers to navigate the complexities of modern education, integrate technology effectively, and meet the varied needs of their students. Accordingly, interrogating the factors (health management practices) that enhance teacher creativity is of paramount importance for educational stakeholders aiming to improve educational outcomes and support a culture of innovation within secondary schools (Sawyer, 2011). Health management practices which include sleep quality and duration, and illness management, are crucial factors that could affect cognitive function and overall well-being, which are critical for creativity (King et al., 2017). Sleep plays a vital role in various cognitive processes such as memory consolidation, problem-solving, and creative thinking (Krause et al., 2017). Adequate sleep quality and duration are essential for the optimal functioning of the brain, supporting the mental flexibility and cognitive resources necessary for creative tasks. In contrast, insufficient or poor-quality sleep can lead to cognitive impairments, mood disturbances, and reduced creative performance (Gilley, 2023). Despite the well-documented importance of sleep, there is limited research specifically examining its effect on the creativity of teachers, highlighting a gap in the literature that this study aims to address.

Illness management practices, encompassing how individuals manage chronic illnesses, stress, and general health maintenance could significantly affect the cognitive function and creativity of people. Effective illness management, which some other scholars like Azeez and Soetan (2022) termed self-care practices can mitigate the adverse effects of chronic conditions on cognitive abilities and overall health of people. Chronic stress and unmanaged health issues can impair cognitive functions, reduce mental clarity, and hinder creative thinking (Buzsáki & Tingley, 2023; Singha, 2024). Conversely, proactive health management, including regular medical check-ups, stress management techniques, and maintaining a healthy lifestyle, can enhance cognitive resilience and support creative processes (Sorensen, 2024). To this end, this study filled these gaps in the literature by assessing the influence of sleep quality and duration on the creativity of senior secondary school teachers in Alimosho Local Government. Additionally, it seeks to investigate the effect of illness management practices on their creativity.

Sleep is a fundamental biological necessity that significantly influences overall health and well-being. The quality and duration of sleep are crucial aspects that determine the restorative functions of sleep. Sleep quality refers to how well one sleeps, encompassing factors such as sleep latency, sleep maintenance, and sleep architecture, while sleep duration is the total amount of time spent sleeping (Hirshkowitz et al., 2015). Adequate sleep quality and duration are vital for maintaining physical health.

Poor sleep quality and short sleep duration have been linked to an increased risk of various chronic health conditions, including cardiovascular diseases, diabetes, and obesity (Cappuccio et al., 2010). For instance, individuals with chronic sleep deprivation exhibit higher levels of inflammatory markers and reduced insulin sensitivity, which can contribute to the development of type 2 diabetes (Buxton & Marcelli, 2010). Furthermore, sufficient sleep is essential for immune function, with evidence suggesting that sleep deprivation impairs immune responses, making individuals more susceptible to infections (Besedovsky, Lange, & Born, 2012). Poor sleep quality and insufficient sleep duration can have detrimental effects on physical health, mental well-being, and cognitive performance. Therefore, ensuring adequate and good-quality sleep should be a priority for teachers to promote overall health and prevent various adverse health outcomes.

Illness management practices encompass a wide range of strategies and interventions designed to help individuals cope with and manage chronic diseases and health conditions. These practices are crucial for improving patients' quality of life, reducing the burden on healthcare systems, and promoting better health outcomes. Key components of illness management include self-management education, lifestyle modifications, medication adherence, and psychosocial support (Schipper et al., 2015). Self-management education empowers patients with knowledge and skills to take an active role in managing their health. This approach emphasizes the importance of understanding the illness, recognizing symptoms, and implementing daily management techniques such as monitoring health indicators and adjusting treatments as needed (Hermanns et al., 2020). Lifestyle modifications are integral to illness management, as they address the underlying risk factors and contribute to the overall well-being of individuals. These modifications often include dietary changes, regular physical activity, and smoking cessation. For instance, dietary interventions can help manage conditions like diabetes and cardiovascular diseases by controlling blood sugar levels and reducing cholesterol (Evert et al., 2019). Regular physical activity is associated with improved cardiovascular health, enhanced mood, and better weight management, which are essential for managing chronic illnesses (Stonerock & Blumenthal, 2017). Furthermore, smoking cessation is a critical aspect of managing respiratory and cardiovascular diseases, significantly improving health outcomes and reducing the risk of complications (Okorare et al., 2023). Psychosocial support plays a vital role in illness management by addressing the emotional and psychological aspects of living with a chronic condition. Support groups, counselling, and stress management techniques can help patients cope with the emotional burden of chronic illness, reduce anxiety and depression, and improve adherence to treatment plans (Maguire et al., 2021).

Creativity is a complex and multifaceted cognitive process involving the generation of new, useful, and original ideas or solutions. It is critical in various professional fields, including education, where it enables teachers to develop engaging instructional strategies, solve problems innovatively, and adapt to the diverse needs of their students (Runco, 2014). Creativity involves several cognitive processes such as divergent thinking, which allows for the exploration of multiple solutions, and convergent thinking, which narrows down these solutions to the most effective one (Guilford, 1967, as cited in Pinkow, 2023). Several factors influence creativity, including cognitive abilities, personality traits, and environmental conditions. Cognitive abilities such as working memory, attention, and executive functions play a crucial role in creative thinking by allowing individuals to retrieve and manipulate information in novel ways (Dietrich, 2004). Personality traits like openness to experience, intrinsic motivation, and resilience also significantly contribute to creative performance. Openness to experience, for example, fosters a willingness to explore new ideas and perspectives, which is fundamental for creative endeavours (Sawyer & Henriksen, 2024). Creativity is not a static trait but a dynamic process that can be cultivated through various practices and interventions. Techniques such as brainstorming, mind mapping, and creative problem-solving exercises can enhance creative thinking (Paulus et al., 2023). Additionally, activities that promote relaxation and reduce stress, such as physical exercise and mindfulness meditation, have been shown to improve cognitive function and creativity (Horan, 2009).

The self-determination theory (SDT), developed by Deci and Ryan (1985), provides a comprehensive framework for understanding human motivation, particularly how intrinsic and extrinsic factors influence behaviour and cognitive function. SDT posits that human motivation is driven by the need to satisfy three fundamental psychological needs: autonomy, competence, and relatedness. When these needs are met, individuals are more likely to experience enhanced motivation, well-being, and cognitive functioning, including creativity. The strength of SDT lies in its holistic approach to understanding motivation and behaviour. The theory emphasizes the role of intrinsic motivation—engaging in activities for their inherent satisfaction and enjoyment—over extrinsic motivation, which involves external rewards or pressures. Intrinsic motivation has been consistently linked to higher levels of creativity, as it fosters a deeper engagement with tasks and allows for more flexible and original thinking (Ryan & Deci, 2000). In the context of this study, SDT can explain how health management practices, such as ensuring adequate sleep and effectively managing illnesses, support the basic psychological needs that underpin intrinsic motivation and, consequently, enhance creativity. For example, teachers who maintain good health are more likely to feel competent and autonomous, which can boost their intrinsic motivation and creative performance. However, SDT has faced criticism from various scholars. One major critique is that SDT may not fully account for the complexity of motivation in real-world settings, where intrinsic and extrinsic motivations often interact in nuanced ways (Hagger et al., 2014). Critics argue that the theory's dichotomy between intrinsic and extrinsic motivation can be overly simplistic, failing to capture the dynamic interplay between different motivational forces. Additionally, some researchers have pointed out that SDT's emphasis on

autonomy may not be universally applicable across all cultures, as collectivist societies may value relatedness and community over individual autonomy (Chirkov et al., 2003). Despite these critiques, SDT remains a robust theoretical framework for understanding how fulfilling basic psychological needs can enhance intrinsic motivation and creativity.

Extant studies have shown the influence of sleep quality and duration on cognitive functions that are crucial for creativity. High-quality sleep, characterized by adequate duration and continuity, is essential for optimal brain function. Studies have demonstrated that sleep facilitates memory consolidation, emotional regulation, and various cognitive processes such as divergent thinking and problem-solving, which are integral to creative thinking (Walker, 2017). For instance, sleep allows for the reorganization and integration of information, enabling the formation of novel connections and ideas essential for creativity (Van den Berg et al., 2023). Furthermore, the study of Cai et al. (2009) found that individuals who napped showed improved performance on tasks requiring creative problem-solving compared to those who did not. This suggests that even short periods of sleep can significantly enhance creative processes by allowing the brain to refresh and reorganize. Furthermore, rapid eye movement (REM) sleep has been particularly linked to enhanced creativity due to its role in associative thinking and the integration of disparate information (Wagner et al., 2004). These findings highlight the necessity of adequate sleep for maintaining high levels of creativity.

Despite the clear link between sleep and cognitive performance, many professionals, including teachers, often suffer from inadequate or poor-quality sleep due to various stressors and demanding schedules. This sleep deprivation can lead to significant cognitive impairments, mood disturbances, and a reduction in creative capacities. A study by Killgore (2010) revealed that sleep deprivation negatively impacts innovative thinking and the ability to generate novel solutions, further emphasizing the importance of sleep for maintaining creativity. Addressing these sleep issues is crucial for optimizing cognitive functions and enhancing creative performance in demanding professions like teaching. Moreover, chronic sleep deprivation can have long-term adverse effects on health and cognitive functions, further diminishing creative capabilities. Chronic lack of sleep has been associated with reduced neuroplasticity, impaired memory, and decreased problem-solving abilities (Stickgold & Walker, 2013). These cognitive deficits can significantly hinder a teacher's ability to engage in creative thinking and develop innovative teaching strategies. Consequently, ensuring adequate sleep is essential for fostering a creative and effective teaching environment.

Illness management practices, which encompass strategies and behaviours adopted to manage chronic illnesses, stress, and overall health, are also critical for sustaining cognitive function and creativity. Research indicates that proactive illness management can support cognitive resilience and enhance creative output. For instance, individuals who effectively manage their health conditions tend to exhibit better cognitive performance and higher levels of creative thinking compared to those who do not. A study by Loziak (2022) found that effective stress management practices, such as mindfulness and relaxation techniques, can reduce the effect of chronic stress on cognitive functions, thereby preserving mental clarity and supporting creative processes. These findings underscore the importance of illness management for maintaining creativity, particularly in high-stress professions like teaching. Chronic stress and unmanaged health issues can have severe negative impacts on cognitive functions and creativity. Persistent stress can lead to cognitive fatigue, reduced mental flexibility, and impaired problem-solving abilities, all of which hinder creative thinking. McEwen (2006) noted that chronic stress can damage brain structures involved in memory and executive function, further diminishing creative capacities. Therefore, effective stress and illness management are essential for maintaining the cognitive functions required for creativity.

Research Hypotheses

H₁: sleep quality and duration have a significant effect on the creativity of senior secondary school teachers in Alimosho Local Government

H₂: Illness management practices have a significant effect on the creativity of senior secondary school teachers in Alimosho Local Government

Methodology

This study used the descriptive research design to examine the interplay between health management practices (sleep quality and duration and illness management practices) and the creativity of senior secondary school teachers in the Alimosho Local Government. This design is suitable as it allows for an in-depth description of the variables and their interactions without altering the study environment (Creswell, 2021). The study targeted all senior secondary school teachers in government-registered private schools within Alimosho Local Government. The estimated population is approximately 4,000 teachers, based on the number of private schools and the typical number of teachers employed per school. From this population, 351 respondents were selected using the Krejcie and Morgan (1970) sample size determination table, and participants were chosen through the convenience sampling technique. The justification for using the convenience sampling technique is based on the fact that

Data were gathered using a structured questionnaire and pre-established scales with reliable psychometric properties and Cronbach Alpha values ranging from $\alpha=.82$ to $.89$ in various contexts. Sleep quality and duration were assessed with an 8-item scale by Yi et al. (2006), illness management practices were measured with a 13-item patient activation measure (PAM-13) scale developed by Hibbard et al. (2005), and creativity was measured using a 13-item scale developed by George and Zhou (2001). Responses were measured on a five-point Likert scale from strongly disagree (1) to strongly agree (5). The data collection spanned four weeks, during which copies of the questionnaires were distributed and collected, with follow-up reminders sent to ensure a high response rate. This culminated in a response rate of 93% (327 responses). Participants were assured of the confidentiality and anonymity of their responses to encourage honesty in line with the LASU Research Ethics Policy (2020). Out of the 327 responses, 6 were improperly filled and discarded, leaving 321 valid responses for final analysis. The collected data were analyzed using both descriptive and inferential statistics, with descriptive statistics summarizing demographic characteristics and linear regression testing the stated hypotheses. These analyses were conducted using the Statistical Package for the Social Sciences (SPSS) version 26.

Findings and Discussion

This section is concerned with the analysis and discussion of the collected and collated data to understand the interaction between the variables.

Table 1: Breakdown of Demographic Variables

Variable	Classification	Frequency (%)
Age Bracket	20-30	100 (31.2%)
	31-40	122 (38.0%)
	41-50	99 (30.8%)
Department	Science	80 (24.9%)
	Arts	100 (31.2%)
	Commercial	60 (18.7%)
	Vocational/Technical	81 (25.2%)
Marital Status	Single	149 (46.4%)
	Married	162 (50.5%)
	Separated	10 (3.1%)
Educational Qualification	NCE	83 (25.9%)
	BSc/B.Ed	181 (56.4%)
	M.Ed./MSc.	57 (17.8%)
Years of Teaching Experience	0-5	100 (31.2%)
	6-10	164 (51%)
	11-15	57 (17.8%)

Source: Field Survey (2024)

The survey results from Table 1 provide a detailed demographic profile of teachers in government-registered private senior secondary schools within Alimosho Local Government. The age distribution indicates that a significant proportion of the respondents fall within the 31-40 age range, making up 38.0% of the sample. This is followed by the 20-30 and 41-50 age groups, which constitute 31.2% and 30.8%, respectively. This suggests that the teaching workforce is predominantly young, with many educators in the early to mid stages of their careers. This youthful demographic may imply a workforce that is adaptable and open to educational reforms and new teaching methodologies. In terms of departmental representation, the respondents are well-distributed across various teaching areas. The Arts and Science departments are the most prevalent, with 31.2% and 24.9% of the teachers, respectively. Additionally, the Vocational/Technical and Commercial departments have substantial representations of 25.2% and 18.7%. This diversity in departmental membership highlights the broad and varied curriculum offered in these private senior secondary schools, reflecting Lagos State's commitment to providing a comprehensive and well-rounded education that caters to a wide array of academic and vocational interests.

The marital status of the respondents reveals that a large portion of the teachers are married (50.5%), with a significant number being single (46.4%) and only a small percentage of the teachers are separated (3.1%). These personal demographics could influence the work-life balance and overall stability of the teaching staff, which are crucial factors in fostering a supportive and dynamic work environment. These factors can affect teachers' job satisfaction, performance, and creative capacity, which are essential for effective teaching and learning. Educational qualifications among the respondents show that the teaching workforce is highly educated. A majority hold a BSc/B. Ed degree (56.4%), while a notable proportion have attained a Master's degree (M.Ed./MSc.), accounting for 17.8%. Additionally, 25.9% of the teachers hold the Nigeria Certificate in Education (NCE). This high level of academic qualification underscores the capability of the teachers to deliver quality education and

effectively employ advanced teaching techniques, which are vital for enhancing student outcomes and educational standards. Regarding teaching experience, the data reveals a range of experience levels among the teachers. The majority have between 6-10 years of experience, representing 51% of the respondents. This is followed by those with 0-5 years (31.2%) and 11-15 years (17.8%). This could bring fresh ideas and innovative practices to the educational environment.

Test of Hypotheses

Before conducting the linear regression analysis, pre-estimation tests were used to assess the variables. Linearity was assessed by plotting scatterplots of sleep quality duration and illness management practices against creativity, confirming linear relationships. The normality of the residuals was evaluated using Q-Q plots and the Shapiro-Wilk test, which indicated that the residuals were normally distributed (Shapiro-Wilk p-value > 0.05 for both predictors). For sleep quality duration, skewness was 0.15 and kurtosis was 2.20, indicating acceptable levels of symmetry and peakedness. For illness management practices, skewness was -0.22 and kurtosis was 2.35, also within acceptable ranges. These pre-estimation tests validated the assumptions of linear regression, ensuring robust and reliable results for the effects of sleep quality duration and illness management practices on creativity.

H₁: Sleep quality and duration have a significant effect on the creativity of senior secondary school teachers in Alimosho Local Government

Table 2: Model Summary of Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.331 ^a	.109	.107	.51917	1.654

a. Predictors: (Constant), Sleep_Quality_Duration

b. Dependent Variable: Creativity

Table 3: ANOVA of Regression Analysis

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.556	1	10.556	39.161	.000 ^b
	Residual	85.983	319	.270		
	Total	96.539	320			

a. Dependent Variable: Creativity

b. Predictors: (Constant), Sleep_Quality_Duration

Table 4: Coefficients of Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	2.670	.206		12.994	.000
	Sleep_Quality_Duration	.336	.054	.331	6.258	.000

a. Dependent Variable: Creativity

Source: Field Survey (2024)

As evident in Table 2, the model summary table indicates that the R^2 is 0.109, meaning that approximately 10.9% of the variance in creativity can be explained by sleep quality and duration. The standard error of the estimate is 0.51917, which measures the average distance that the observed values fall from the regression line. The Durbin-Watson statistic is 1.654, which is within the acceptable range (1.5 to 2.5), suggesting that there is no significant autocorrelation in the residuals. Furthermore, Table 3 which is the ANOVA table assesses the overall significance of the regression model. The F-statistic is 39.161 with a p-value (Sig.) of 0.000, which is highly significant ($p < 0.05$). This indicates that the regression model is statistically significant and that sleep quality duration is a meaningful predictor of the creativity of teachers in Alimosho Local Government. The model provides a significantly better fit to the data than a model with no predictors, confirming the importance of sleep quality and duration in explaining variations in teachers' creativity. Table 4 shows the constant (intercept) value is 2.670, representing the expected value of creativity when sleep quality and duration are zero. The unstandardized coefficient for sleep quality and duration is 0.336, indicating that for each one-unit increase in sleep quality and duration,

creativity is expected to increase by 0.336 units, holding all else constant. The standardized coefficient (β) of 0.331 shows the strength and direction of the relationship. The t-value for sleep quality and duration is 6.258, with a p-value of 0.000, indicating that sleep quality and duration are a statistically significant predictor of teachers' creativity at the 0.05 significance level. Therefore, the stated alternate hypothesis is accepted.

The results bring to the fore the importance of adequate sleep for cognitive functions that underpin creative thinking. These findings are consistent with existing literature that emphasizes the critical role of sleep in cognitive processes such as memory consolidation, emotional regulation, and problem-solving (Walker, 2017). The study's results reinforce the notion that high-quality sleep facilitates the reorganization and integration of information, enabling the formation of novel connections and ideas essential for creativity (Van den Berg et al., 2023). Furthermore, the significant F-statistic and low p-value from the ANOVA table indicates that sleep quality and duration are meaningful predictors of teachers' creativity. This aligns with the findings of Cai et al. (2009), who demonstrated that even short periods of sleep, such as napping, can significantly enhance creative problem-solving abilities. The regression coefficients further reveal that for each one-unit increase in sleep quality and duration, teachers' creativity is expected to increase by 0.336 units, holding all other factors constant. This strong positive relationship suggests that improvements in sleep quality and duration can lead to significant enhancements in teachers' creative capacities, making it crucial to address sleep-related issues among educators.

The self-determination theory (SDT) provides a robust theoretical framework for understanding the link between sleep and creativity. According to SDT, fulfilling basic psychological needs such as autonomy, competence, and relatedness enhances intrinsic motivation, which is crucial for creative thinking (Ryan & Deci, 2000). Adequate sleep contributes to these psychological needs by improving overall well-being and cognitive function. Teachers who maintain good sleep hygiene are likely to feel more competent and autonomous, boosting their intrinsic motivation and, consequently, their creativity. This aligns with the study's findings that show a significant positive influence of sleep quality and duration on creativity, suggesting that well-rested teachers are more motivated and capable of innovative thinking. Despite the clear benefits of sleep for cognitive performance and creativity, many teachers suffer from inadequate or poor-quality sleep due to various stressors and demanding schedules. This sleep deprivation can lead to significant cognitive impairments, mood disturbances, and reduced creative capacities, as highlighted by Killgore (2010). Chronic sleep deprivation is particularly detrimental, leading to reduced neuroplasticity, impaired memory, and decreased problem-solving abilities (Stickgold & Walker, 2013). These cognitive deficits can significantly hinder a teacher's ability to engage in creative thinking and develop innovative teaching strategies.

H₂: Illness management practices have a significant effect on the creativity of senior secondary school teachers in Alimosho Local Government

Table 5: Model Summary of Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.541 ^a	.292	.290	.46275	1.804

a. Predictors: (Constant), Illness_Management_Practices

b. Dependent Variable: Creativity

Table 6: ANOVA of Regression Analysis

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28.229	1	28.229	131.824	.000 ^b
	Residual	68.310	319	.214		
	Total	96.539	320			

a. Dependent Variable: Creativity

b. Predictors: (Constant), Illness_Management_Practices

Table 7: Coefficients of Regression Analysis

		Unstandardized Coefficients		Standardized Coefficients	
Model		B	Std. Error	Beta	t
1	(Constant)	1.531	.212		7.232
	Illness_Management_Practices	.616	.054	.541	11.481

a. Dependent Variable: Creativity

Source: Field Survey (2024)

Table 5 which shows the model summary contains an R^2 value of 0.292 means that approximately 29.2% of the variance in teachers' creativity can be explained by their illness management practices. The standard error of the estimate is 0.46275, reflecting the average distance that the observed values fall from the regression line. The Durbin-Watson statistic is 1.804, which is within the acceptable range (1.5 to 2.5), suggesting that there is no significant autocorrelation in the residuals. The ANOVA as evident in Table 6 evaluates the overall significance of the regression model. The F-statistic is 131.824 with a p-value (Sig.) of 0.000, which is highly significant ($p < 0.05$). This indicates that the regression model is statistically significant and that illness management practices by teachers significantly predict their creativity. The model provides a substantially better fit to the data than a model with no predictors, confirming the importance of illness management practices in explaining variations in creativity.

From Table 7, the constant (intercept) value is 1.531, representing the expected value of creativity when illness management practices are zero. The unstandardized coefficient for illness management practices is 0.616, indicating that for each one-unit increase in illness management practices, creativity is expected to increase by 0.616 units, holding all else constant. The standardized coefficient (β) of 0.541 shows the strength and direction of the relationship. The t-value for illness management practices is 11.481, with a p-value of 0.000, indicating that illness management practices are a statistically significant predictor of teachers' creativity at the 0.05 significance level. This strong positive interplay suggests that better illness management practices are associated with higher levels of teachers' creativity. Thus, the stated hypothesis is accepted.

Extant studies reinforce the findings of this hypothesis by illustrating the significant cognitive benefits of effective illness management. Loziak (2022) highlights that stress management techniques such as mindfulness and relaxation can mitigate the cognitive impairments associated with chronic stress, thereby enhancing creative capacities. This aligns with the study's results, which demonstrate that teachers who effectively manage their health exhibit higher levels of creativity. Effective illness management reduces cognitive fatigue and enhances mental clarity, allowing teachers to engage more deeply with creative problem-solving and innovative teaching methods. Further supporting these findings, McEwen (2006) noted that chronic stress could damage brain structures involved in memory and executive function, which are critical for creativity. Persistent stress leads to reduced mental flexibility and impaired problem-solving abilities, both of which hinder creative thinking. The detrimental effects of chronic stress on cognitive functions underscore the importance of proactive health management practices. Teachers who adopt effective stress and illness management strategies can maintain better cognitive health, which is essential for sustaining high levels of creativity in their professional roles.

Conclusion and Recommendations

The findings of this study highlight the significant influence of health management practices (sleep quality and duration, as well as illness management practices), on the creativity of senior secondary school teachers in Alimosho Local Government. The regression analysis revealed that sleep quality and duration explain approximately 10.9% of the variance in creativity, emphasizing the critical role that adequate sleep plays in cognitive functions necessary for creative thinking. This aligns with existing literature that accentuates the importance of sleep for memory consolidation, emotional regulation, and problem-solving abilities. Furthermore, the analysis demonstrated that illness management practices account for 29.2% of the variance in creativity, indicating a substantial influence. This study concludes that teachers who effectively manage their health conditions and have good sleep in its right quality and quantity are more likely to maintain cognitive resilience and exhibit higher levels of creativity, supporting the notion that proactive health management practices are essential for optimal cognitive performance.

Based on the foregoing, this study recommends that educational institutions prioritize initiatives that promote high-quality sleep and effective illness management among teachers. Schools should implement wellness programs that educate teachers on the importance of quality sleep and provide resources for managing sleep-related issues. This can include workshops on relaxation techniques, stress management, and the benefits of maintaining a regular sleep schedule. The school needs to promote a culture that values and supports adequate sleep, schools can help teachers maintain the cognitive functions necessary for creative thinking and innovative teaching practices. Additionally, educational authorities should encourage and facilitate proactive illness management practices among teachers. This can be achieved by providing access to health resources, such as regular health check-ups, mental health support services, and programs that teach effective stress management techniques. Schools should also consider implementing policies that allow for flexible scheduling and time off for health reasons, ensuring that teachers can manage their health without compromising their professional responsibilities. By supporting teachers in maintaining their health, educational institutions can enhance their creative capacities and overall effectiveness in the classroom. As suggestions for further studies, future research should explore the long-term effects of sustained sleep quality and illness management practices on creativity across different educational contexts. Longitudinal studies that track teachers' health habits, sleep patterns, and creative outputs over extended periods can provide deeper insights into the causal relationships between these variables.

Acknowledgement

The authors thank the Tertiary Education Trust Fund (TETFUND) for providing the grant that was used to conduct this study.

References

- Acar, S., Cevik, E., Fesli, E., Bozkurt, R. N., & Kaufman, J. C. (2024). Testing the Domain Specificity of Creativity with Kaufman Domains of Creativity Scale: A Meta-Analytic Confirmatory Factor Analysis. *The Journal of Creative Behavior*, 58(1), 171-189.
- Azeez, R. O., & Soetan, O. (2022). Employee self-care, occupational stress, and burnout of security personnel. *LASU Journal of Employment Relations & Human Resource Management*, 3(1), 268-277.
- Besedovsky, L., Lange, T., & Born, J. (2012). Sleep and immune function. *Pflügers Archiv-European Journal of Physiology*, 463(1), 121-137.
- Buxton, O. M., & Marcelli, E. (2010). Short and long sleep are positively associated with obesity, diabetes, hypertension, and cardiovascular disease among adults in the United States. *Social science & medicine*, 71(5), 1027-1036.
- Buzsáki, G., & Tingley, D. (2023). Cognition from the body-brain partnership: exaptation of memory. *Annual review of neuroscience*, 46(1), 191-210.
- Cai, D. J., Mednick, S. A., Harrison, E. M., Kanady, J. C., & Mednick, S. C. (2009). REM, not incubation, improves creativity by priming associative networks. *Proceedings of the National Academy of Sciences*, 106(25), 10130-10134.
- Cappuccio, F. P., D'Elia, L., Strazzullo, P., & Miller, M. A. (2010). Quantity and quality of sleep and incidence of type 2 diabetes: a systematic review and meta-analysis. *Diabetes care*, 33(2), 414-420.
- Chirkov, V., Ryan, R. M., Kim, Y., & Kaplan, U. (2003). Differentiating autonomy from individualism and independence: a self-determination theory perspective on internalization of cultural orientations and well-being. *Journal of personality and social psychology*, 84(1), 97-110.
- Creswell, J. W. (2021). *A concise introduction to mixed methods research*. SAGE publications.
- Deci, E. L., Ryan, R. M., Deci, E. L., & Ryan, R. M. (1985). Conceptualizations of intrinsic motivation and self-determination. *Intrinsic motivation and self-determination in human behavior*, 11-40.
- Dietrich, A. (2004). The cognitive neuroscience of creativity. *Psychonomic bulletin & review*, 11, 1011-1026.
- Evert, A. B., Dennison, M., Gardner, C. D., Garvey, W. T., Lau, K. H. K., MacLeod, J., ... & Yancy Jr, W. S. (2019). Nutrition therapy for adults with diabetes or prediabetes: a consensus report. *Diabetes care*, 42(5), 731-754.
- George, J. M., & Zhou, J. (2001). When openness to experience and conscientiousness are related to creative behavior: an interactional approach. *Journal of Applied Psychology*, 86(3), 513-524.
- Gilley, R. R. (2023). The role of sleep in cognitive function: the value of a good night's rest. *Clinical EEG and Neuroscience*, 54(1), 12-20.
- Hagger, M. S., Hardcastle, S. J., Chater, A., Mallett, C., Pal, S., & Chatzisarantis, N. L. D. (2014). Autonomous and controlled motivational regulations for multiple health-related behaviours: between-and within-participants analyses. *Health Psychology and Behavioral Medicine: An Open Access Journal*, 2(1), 565-601.
- Hermanns, N., Ehrmann, D., Finke-Groene, K., & Kulzer, B. (2020). Trends in diabetes self-management education: where are we coming from and where are we going? A narrative review. *Diabetic Medicine*, 37(3), 436-447.
- Hibbard, J. H., Mahoney, E. R., Stockard, J., & Tusler, M. (2005). Development and testing of a short form of the patient activation measure. *Health services research*, 40(6p1), 1918-1930.
- Hirshkowitz, M., Whiton, K., Albert, S. M., Alessi, C., Bruni, O., DonCarlos, L., ... & Ware, J. C. (2015). National Sleep Foundation's updated sleep duration recommendations. *Sleep health*, 1(4), 233-243.
- Horan, R. (2009). The neuropsychological connection between creativity and meditation. *Creativity Research Journal*, 21(2-3), 199-222.
- Killgore, W. D. (2010). Effects of sleep deprivation on cognition. *Progress in brain research*, 185, 105-129.

- King, E., Daunis, M., Tami, C., & Scullin, M. K. (2017). Sleep in studio based courses: outcomes for creativity task performance. *Journal of Interior Design*, 42(4), 5-28.
- Krause, A. J., Simon, E. B., Mander, B. A., Greer, S. M., Saletin, J. M., Goldstein-Piekarski, A. N., & Walker, M. P. (2017). The sleep-deprived human brain. *Nature Reviews Neuroscience*, 18(7), 404-418.
- Krejcie, R. V., & Morgan, D. W. (1970). Sample size determination table. *Educational and Psychological Measurement*, 30, 607-610.
- LASU (2020). *Research Ethics Policy*. LASU Press.
- Loziak, A. (2022). Mindfulness or relaxation: What is more effective for work stress? Literature review. *Psychology & Its Contexts/Psychologie a Její Kontexty*, 13(1), 33-45.
- Maguire, R., Hanly, P., & Maguire, P. (2021). Living well with chronic illness: How social support, loneliness and psychological appraisals relate to well-being in a population-based European sample. *Journal of Health Psychology*, 26(10), 1494-1507.
- McEwen, B. S. (2006). Protective and damaging effects of stress mediators: central role of the brain. *Dialogues in clinical neuroscience*, 8(4), 367-381.
- Okorare, O., Evbayekha, E. O., Adabale, O. K., Daniel, E., Ubokudum, D., Olusiji, S. A., & Antia, A. U. (2023). Smoking cessation and benefits to cardiovascular health: a review of literature. *Cureus*, 15(3), e35966.
- Paulus, P. B., Baruah, J., & Kenworthy, J. (2023). Brainstorming: How to get the best ideas out of the “group brain” for organizational creativity. In *Handbook of Organizational Creativity* (pp. 373-389). Academic Press.
- Pinkow, F. (2023). Creative cognition: A multidisciplinary and integrative framework of creative thinking. *Creativity and Innovation Management*, 32(3), 472-492.
- Runco, M. A. (2014). “Big C, little c” creativity as a false dichotomy: Reality is not categorical. *Creativity Research Journal*, 26(1), 131-132.
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary educational psychology*, 25(1), 54-67.
- Sawyer, K. (2011). The cognitive neuroscience of creativity: A critical review. *Creativity Research Journal*, 23(2), 137-154.
- Sawyer, R. K., & Henriksen, D. (2024). *Explaining creativity: The science of human innovation*. Oxford University Press.
- Schipper, K., Bakker, M., De Wit, M., Ket, J. C. F., & Abma, T. A. (2015). Strategies for disseminating recommendations or guidelines to patients: a systematic review. *Implementation Science*, 11, 1-17.
- Singha, R. (2024). Stress, Resilience, and brain performance. In *Building Organizational Resilience With Neuroleadership* (pp. 14-29). IGI Global.
- Sorensen, J. (2024). *The Art and Science of Lifestyle Medicine: A Practical Guide to Transforming Your Health*. eBookIt.
- Stickgold, R., & Walker, M. P. (2013). Sleep-dependent memory triage: evolving generalization through selective processing. *Nature Neuroscience*, 16(2), 139-145.
- Stonerock, G. L., & Blumenthal, J. A. (2017). Role of counselling to promote adherence in healthy lifestyle medicine: strategies to improve exercise adherence and enhance physical activity. *Progress in cardiovascular diseases*, 59(5), 455-462.
- van den Berg, N. H., Smith, D., Fang, Z., Pozzobon, A., Toor, B., Al-Kuwatli, J., ... & Fogel, S. M. (2023). Sleep strengthens resting-state functional communication between brain areas involved in the consolidation of problem-solving skills. *Learning & Memory*, 30(1), 25-35.
- Wagner, U., Gais, S., Haider, H., Verleger, R., & Born, J. (2004). Sleep inspires insight. *Nature*, 427(6972), 352-355.
- Yi, H., Shin, K., & Shin, C. (2006). Development of the sleep quality scale. *Journal of Sleep Research*, 15(3), 309-316.