Planning Your Health: An Assessment of Lifestyle Factors Influencing Creativity of Secondary School Teachers in Alimosho Local Government

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Abstract
In today's rapidly changing educational landscape, creativity is not merely a desirable trait but a necessity. The ability to think outside the box allows teachers to address diverse student needs, integrate technology effectively, and navigate the complexities of modern education systems. This study investigates the influence of nutritional health and physical fitness and exercise on the creativity of senior secondary school teachers in Alimosho Local Government, Lagos State, Nigeria. Using a descriptive survey research design, 321 respondents were sampled from a population of 4000 teachers. Data were collected through structured questionnaires and analyzed using linear regression. The results revealed that nutritional health significantly influences creativity ($R^2 = 0.181$, $\beta = 0.425$, $p < 0.05$), explaining 18.1% of the variance in creativity. Similarly, physical fitness and exercise significantly influence creativity ($R^2 = 0.143$, $\beta = 0.378$, $p < 0.05$), explaining 14.3% of the variance in creativity. Based on these findings, this study concluded that both nutritional health and physical fitness and exercise are critical factors for promoting the creativity of teachers. It, therefore, recommended that educational authorities implement systematic programmes promoting healthy eating and regular physical activity to improve teachers' creativity and overall well-being.

Keywords: Creativity, exercise, nutritional health, physical fitness, teachers.

Introduction

In today's rapidly changing educational landscape, creativity is not merely a desirable trait but a necessity. The ability to think outside the box allows teachers to address diverse student needs, integrate technology effectively, and navigate the complexities of modern education systems (Brandon et al., 2024). Further, creativity is a pivotal attribute in the teaching profession, essential for developing engaging and effective educational experiences. It enables teachers to design innovative lesson plans, adapt to various learning styles, and promote a stimulating classroom environment that encourages student participation and critical thinking. Creative teachers can transform the educational landscape by making learning more interactive and enjoyable, thus enhancing student outcomes and ensuring a love for learning (Khanna et al., 2024; Rawat & Yadav 2024). Creativity in teaching is critical for nurturing a dynamic and engaging learning environment. It allows teachers to develop innovative approaches to instruction, which can cater to the diverse learning needs of students. For instance, creative teaching methods can help students develop critical thinking and problem-solving skills, which are essential for success in the 21st-century workforce (Rawat & Yadav 2024). Consequently, understanding the factors that enhance or impede teacher creativity is of paramount importance for educational stakeholders.

Extant research has shown that lifestyle factors such as nutritional health and physical fitness can play a significant role in cognitive function and overall well-being, which in turn can

influence creativity (Bungay & Vella-Burrows, 2013; Friedman & Kern, 2014; Oyewole & Atinmo, 2015; Ejiohuo et al., 2024). Nutritional health refers to the adequacy of an individual's diet in providing essential nutrients necessary for optimal brain function and physical health (Oladiji et al., 2024; Dwivedi et al., 2023). A diet rich in fruits, vegetables, whole grains, lean proteins, and healthy fats supports cognitive processes, including memory, attention, and problem-solving skills, all of which are crucial for creative thinking. Nutritional health is fundamental for brain function and cognitive performance. Essential nutrients such as omega-3 fatty acids, vitamins, and minerals are crucial for maintaining brain health and enhancing cognitive abilities. For example, omega-3 fatty acids, found in fish and certain plant oils, are integral to the structure and function of brain cell membranes, promoting neural efficiency and cognitive performance (Boga & Basak, 2023). Vitamins and minerals such as vitamin B12, vitamin D, iron, and zinc play essential roles in neurotransmitter synthesis, myelin formation, and overall brain metabolism, contributing to enhanced cognitive abilities (Adhikary et al., 2024). Research indicates that dietary patterns emphasizing whole, unprocessed foods are associated with better mental health and cognitive outcomes. The Mediterranean diet, which is rich in fruits, vegetables, whole grains, and healthy fats, has been linked to lower risks of cognitive decline and improved mental health (Butler & Mörkl, 2023). These dietary habits support cognitive function by reducing inflammation and oxidative stress, which can negatively impact brain health and creativity (Gantenbein & Kanaka-Gantenbein 2021).

Physical fitness, encompassing regular physical activity and exercise, is another vital lifestyle factor that might influence creativity because exercise improves cardiovascular health, increases blood flow to the brain, and stimulates the release of endorphins and other neurotransmitters that enhance mood and cognitive function (Bhattacharya et al., 2023). Regular physical activity has been linked to improved mental flexibility, higher levels of creative output, and better problem-solving abilities (Venckunas et al., 2016). Moreover, regular physical activity reduces stress and anxiety, which are known inhibitors of creative thinking (Kandola & Stubbs, 2020). Despite the clear benefits of nutritional health and physical fitness for cognitive function and creativity, there is a gap in the literature regarding their specific influence on the creativity of senior secondary school teachers in Alimosho Local Government Area of Lagos State, Nigeria. Most existing studies have focused on general populations or different professional groups, leaving a gap in understanding how these lifestyle factors influence teachers' creativity. Addressing this gap is crucial, as teachers play a vital role in shaping the educational experiences and outcomes of students.

Literature Review

Nutritional health is a multifaceted concept that encompasses the intake and utilization of nutrients to maintain and promote overall well-being. It involves the balance of macronutrients (carbohydrates, proteins, and fats) and micronutrients (vitamins and minerals) necessary for various bodily functions (World Health Organization [WHO], 2020). A balanced diet is crucial for sustaining energy levels, supporting cellular processes, and preventing chronic diseases. According to the WHO (2020), nutritional health is not only about the absence of deficiency diseases but also about achieving optimal health through proper dietary habits. The concept of nutritional health extends beyond the physical aspects of diet and incorporates psychological and social dimensions. Psychological factors, such as stress and emotional well-being, can significantly influence eating behaviours and, consequently, nutritional health (Kinshella et al., 2023). Social determinants, including socioeconomic status, education, and cultural practices, also play critical roles in shaping dietary patterns and access to nutritious foods. For instance, higher socioeconomic status often correlates with better access to diverse and nutrient-rich foods, which can enhance overall health outcomes (Darmon & Drewnowski, 2008).

Physical fitness is a state of health and well-being that allows individuals to perform daily

activities with vigour, reduce the risk of chronic diseases, and improve the overall quality of life. It is typically characterized by attributes such as cardiovascular endurance, muscular strength, flexibility, and body composition (Singh et al., 2023). Physical fitness is not only crucial for physical health but also for mental health, as it has been shown to reduce symptoms of anxiety, and depression, and improve mood (Rebar et al., 2015). Exercise, on the other hand, refers to planned, structured, and repetitive physical activity aimed at improving or maintaining physical fitness (Garber et al., 2011). Exercise is a key component of physical fitness, serving as a primary means to enhance cardiovascular endurance, muscle strength, flexibility, and body composition. Different types of exercise, such as aerobic, resistance, flexibility, and balance exercises, target specific aspects of physical fitness and contribute to overall health. The relationship between physical fitness and exercise is symbiotic. Regular exercise is necessary to develop and maintain physical fitness, and a higher level of physical fitness enables individuals to engage in more intense and prolonged physical activity. This relationship highlights the importance of incorporating various forms of exercise into daily routines to achieve a balanced and comprehensive fitness profile. Moreover, the principle of specificity in exercise science noted that different exercises yield specific fitness outcomes, making it essential to tailor exercise programs to individual fitness goals and needs (Kraemer & Ratamess, 2004).

Creativity is a construct that has been examined across various disciplines, including psychology, education, and human resource management. Fundamentally, creativity involves the generation of novel and useful ideas (Azeez, 2021). This dual criterion of novelty and usefulness is crucial as it distinguishes creative ideas from those that are merely original but impractical. According to Runco and Jaeger (2012), creativity encompasses both divergent thinking, which refers to the ability to generate many different ideas, and convergent thinking, which involves synthesizing these ideas into the best possible solution. Divergent thinking is typically measured through tasks that require individuals to produce as many ideas as possible in response to a prompt, whereas convergent thinking is evaluated through tasks that require the selection of a single correct solution. The cognitive processes underlying creativity have been a major focus of research. One prominent model is the Geneplore model proposed by Finke et al. (1992), which describes creativity as a cyclic process involving the generation of mental representations (the generative phase) and the exploration of these representations to find creative ideas (the exploratory phase). This model highlights the importance of both spontaneous idea generation and deliberate, analytical processes in creative thinking.

Theoretical Review

The cognitive flexibility theory provides a comprehensive framework for understanding the interplay between nutritional health, physical fitness, and creativity, particularly in educational settings. Rende (2000) posited that cognitive flexibility, the ability to switch between different thoughts and adapt to new information, is essential for creative problem-solving and innovative thinking. This theory emphasizes the importance of mental agility in adapting to changing environments and novel challenges, making it particularly relevant for professions that require constant adaptation and creative thinking, such as teaching (Rende, 2000). The main thesis of cognitive flexibility theory is that individuals with higher cognitive flexibility are better equipped to handle complex and dynamic situations. Cognitive flexibility involves the ability to break down knowledge into smaller parts and reassemble them in new ways, facilitating innovative thinking and problem-solving (Griffin & Hesketh, 2003). This mental agility is crucial for teachers, who must continually adapt their teaching methods to meet diverse student needs and integrate new educational strategies. According to the theory, both nutritional health and physical fitness significantly contribute to cognitive flexibility by enhancing brain function and overall mental health (Parletta et al., 2013).

In the context of this study on the creativity of senior secondary school teachers, cognitive flexibility theory serves as a robust theoretical foundation. It helps explain how maintaining good nutritional health and engaging in physical fitness activities can enhance teachers' cognitive flexibility, thereby boosting their creativity (Tomporowski et al., 2008). Teachers with better cognitive flexibility can think more innovatively, adapt to new teaching methods, and develop creative solutions to educational challenges. One of the strengths of cognitive flexibility theory is its holistic approach to understanding cognitive processes, considering both physiological and psychological factors. It integrates findings from neuroscience, psychology, and education, providing a multi-faceted view of cognitive development (Pfeifer & Blakemore, 2012). The theory is supported by extensive research demonstrating that good nutrition and regular physical activity improve brain health, reduce stress, and enhance cognitive functions, including memory, attention, and flexibility (Gómez-Pinilla, 2008). However, a potential weakness is that it may not fully account for individual differences in cognitive flexibility due to genetic or environmental factors. Additionally, the theory primarily focuses on the cognitive aspects, potentially underemphasizing the role of emotional and social factors in creative processes (Blair, 2016).

Empirical Review and Hypotheses Development

Empirical research consistently demonstrates the significant impact of nutritional health on cognitive functions, which are critical for creativity. Essential nutrients such as omega-3 fatty acids, antioxidants, vitamins, and minerals are vital for maintaining brain health and function. Omega-3 fatty acids, in particular, are crucial for the structure and function of brain cell membranes, promoting efficient neural communication, which underpins creative thinking (Freeman et al., 2006). Also, Ojo (2016) observed that diets rich in fruits, vegetables, whole grains, and lean proteins enhance cognitive processes such as memory, attention, and problem-solving skills, which are integral to creativity. Several studies have highlighted the role of specific nutrients in cognitive enhancement. For instance, Gómez-Pinilla (2008) found that omega-3 fatty acids, commonly found in fish oil, support cognitive function and improve mood, both of which are crucial for creative thinking. Similarly, vitamins such as B12 and D are associated with better mental health and cognitive performance. A deficiency in these vitamins can lead to cognitive decline and mood disorders, which can inhibit creative processes (Lewis et al., 2021). Additionally, antioxidants found in fruits and vegetables reduce oxidative stress and inflammation, protecting brain cells and supporting cognitive function (Feng et al., 2023)

Research on dietary patterns further supports the link between nutrition and creativity. The Mediterranean diet, which emphasizes the consumption of fruits, vegetables, nuts, and healthy fats, has been associated with lower risks of cognitive decline and improved mental health outcomes (Barnes et al., 2023). This diet provides a comprehensive array of nutrients that support brain health, thereby fostering conditions conducive to creative thinking. Moreover, hydration is a critical but often overlooked aspect of nutritional health; even mild dehydration can impair cognitive functions, affecting creativity (Doohan, 2024). Experimental and longitudinal studies provide robust evidence of the impact of nutrition on cognitive functions related to creativity. For example, a study by Benton and Stevens (2008) demonstrated that children who received a diet supplemented with essential fatty acids showed significant improvements in cognitive performance and creative tasks. Longitudinal studies, such as those by Gale et al. (2009), have shown that consistent adherence to a healthy diet over time is associated with better cognitive health and higher creative outputs in later life. These findings highlight the importance of sustained nutritional health for maintaining creativity across the lifespan. The empirical evidence linking nutritional health to creativity has significant implications for educational and workplace settings. Encouraging healthy eating habits can enhance cognitive functions and creative capacities, leading to better educational outcomes and

innovative work environments. Based on these arguments, we hypothesize that:
H_1: There is a significant influence of nutritional health on the creativity of teachers in Alimosho Local Government.
Empirical studies consistently show that physical fitness and regular exercise enhance cognitive functions that are critical for creativity. Exercise promotes neuroplasticity, the brain's ability to adapt and reorganize itself, which is fundamental for learning and creative thinking (Kim & Sung, 2017). Regular physical activity, especially endurance exercises like running, swimming, and cycling, increases the production of brain-derived neurotrophic factor (BDNF), a protein that supports the growth and survival of neurons and enhances cognitive function and creativity (Mrówczyński, 2019). Physical exercise also plays a crucial role in mood regulation, which directly impacts creativity. Exercise stimulates the release of endorphins and other neurotransmitters that enhance mood and reduce stress, creating a mental state conducive to creative thinking (Ratey & Loehr, 2011). Studies have shown that individuals who engage in regular physical activity report higher levels of mental well-being and exhibit greater creative output compared to sedentary individuals (Rodriguez-Ayllon et al., 2019). These mood-enhancing effects of exercise are particularly important for creative processes, as stress and anxiety are known inhibitors of creativity. Experimental studies provide robust evidence of the immediate and long-term effects of exercise on creativity. For instance, Oppezzo and Schwartz (2014) found that participants who walked on a treadmill showed higher levels of creative thinking compared to those who sat. This effect was observed both during and shortly after the exercise session, suggesting that physical activity has immediate benefits for creative thinking. Longitudinal studies, such as those by Voss et al. (2013), have shown that regular physical activity over several months leads to sustained improvements in cognitive functions and creative abilities. Therefore, based on the foregoing, we hypothesize that:
H_2: There is a significant influence of physical fitness and exercise on the creativity of teachers in Alimosho Local Government.

Research Methodology
This study adopts the descriptive research design to provide a comprehensive analysis of the influence of nutritional health and physical fitness on the creativity of senior secondary school teachers in Alimosho Local Government. A descriptive research design is appropriate for this study as it allows for a detailed description of the variables and their relationships without manipulating the study environment (Creswell, 2021). The target population for this study comprises all senior secondary school teachers in government-registered private schools in Alimosho Local Government. The population of senior secondary school teachers in government-registered private schools in Alimosho Local Government Area is estimated to be around 4000 teachers. This estimate is based on the number of private schools and the average number of teachers typically employed in secondary schools within the Local Government. From the population, using the Krejcie and Morgan (1970) sample size determination table, 351 respondents were drawn as research subjects for this study, and the convenience sampling technique was used to select the participants across various schools within the local government area. Data were obtained using a structured questionnaire and existing developed scales with sound psychometric properties and Cronbach Alpha of between α=.79 and 93 in different contexts. Nutritional health was measured with an 8-item scale developed by Graham (2005), physical fitness and exercise were measured using a 7-item scale developed by Stewart et al. (2001) and creativity was measured using a 13-item scale developed by George and Zhou (2001). These scales were measured using the five-point Likert scale from strongly disagree (1) to strongly agree (5). The data collection process spanned four weeks, during which the questionnaires were distributed and collected. Follow-up reminders were sent to ensure a high response rate of 93% which is 327. Participants were assured of the confidentiality and

anonymity of their responses to encourage honest and accurate reporting. Out of the 327 returned copies, 6 were not properly filled and discarded. Thus, only 321 copies of the questionnaire were found fit and used for final analysis. Collected and collated data were analyzed using descriptive and inferential statistics. Descriptive statistics were used to summarize the demographic characteristics of the participants and linear regression was used to test the stated hypotheses. The analyses with these statistical techniques were achieved using the Statistical Package for the Social Sciences (SPSS) version 26. This study was guided by the LASU Research Ethics Policy (2020) by ensuring ethical standards were met in protecting participants' rights, maintaining confidentiality, and upholding research integrity.

Findings and Discussion

Table 1: Results of Demographic Data

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)***

From Table 1, the results bring to the fore the demographic characteristics of sampled teachers working in government-registered private senior secondary schools in Alimosho Local Government. The age distribution revealed that the majority of the respondents are within the 31-40 age bracket, accounting for 38.0% of the sample, followed by the 20-30 and 41-50 age groups, comprising 31.2% and 30.8%, respectively. This distribution suggests a relatively young workforce, with a significant proportion in their early to mid-career stages, potentially indicating a vibrant and dynamic teaching community that can adapt to educational reforms and innovations. In terms of departmental representation, the respondents are fairly evenly distributed across different teaching areas. Arts and Science departments are the most prominent, with 31.2% and 24.9% of the teachers, respectively. Vocational/Technical and Commercial departments also have notable representations, at 25.2% and 18.7%. This distribution highlighted the diverse educational curriculum offered in these private senior secondary schools, which aligns with the educational mandate of Lagos State to provide a comprehensive and well-rounded education to students.

Marital status data indicated that a significant portion of the teachers are married (50.5%), with a considerable number being single (46.4%). The smaller percentages of separated (3.1%) and no widowed teachers reflect personal demographics that might influence the stability and work-life balance of the teaching staff which is important for creativity. These marital status figures can impact teachers' social dynamics and support systems within the schools, potentially affecting their satisfaction, performance, and creative thinking on the job. Educational qualifications reveal a highly educated teaching workforce. The majority of the respondents

hold a BSc/B.Ed degree (56.4%), with a substantial number having completed a Master's degree (M.Ed./MSc.) at 17.8%. A significant portion also holds the Nigeria Certificate in Education (NCE), representing 25.9%. This educational background indicates a well-qualified workforce capable of delivering quality education and adapting to advanced teaching methodologies. Regarding teaching experience, the data shows a varied range of experience levels among the teachers. The largest group has between 6-10 years of experience (51%), followed by those with 0-5 years (31.2%) and 11-15 years (17.8%) suggesting a relatively new teaching force, which may bring fresh perspectives and innovative teaching practices.

Test of Hypotheses

Before testing the hypotheses, pre-estimation tests to ensure the stability, reliability and validity of the models were performed to assess the variables under study. Linearity was assessed by plotting scatterplots of nutritional health and physical fitness (and exercise) 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 nutritional health, skewness was 0.20 and kurtosis was 2.30, indicating acceptable levels of symmetry and peakedness. For physical Fitness and exercise, skewness was -0.18 and kurtosis was 2.41, also within acceptable ranges. These pre-estimation tests validated the assumptions of linear regression, ensuring robust and reliable results.

H_1: There is a significant influence of nutritional health on the creativity of 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	.425[a]	.181	.178	.49790	1.689

a. Predictors: (Constant), Nutritional_Health
b. Dependent Variable: Creativity

Table 3: ANOVA of Regression Analysis

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17.457	1	17.457	70.416	.000[b]
	Residual	79.082	319	.248		
	Total	96.539	320			

a. Dependent Variable: Creativity
b. Predictors: (Constant), Nutritional_Health

Table 4: Coefficients of Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.567	.166		15.419	.000
	Nutritional_Health	.357	.042	.425	8.391	.000

a. Dependent Variable: Creativity

Source: Field Survey (2024)

The model summary in Table 2 indicated that the R^2 value is 0.181, meaning that approximately 18.1% of the variance in creativity of teachers can be explained by nutritional health. The standard error of the estimate is 0.49790, which provides a measure of the average distance that the observed values fall from the regression line. The Durbin-Watson statistic is 1.689, which is within the acceptable range (1.5 to 2.5), indicating that there is no significant autocorrelation in the residuals. As evident in Table 3, the ANOVA table assesses the overall significance of the regression model. The F-statistic is 70.416 with a corresponding p-value (Sig.) of 0.000. This highly significant p-value ($p < 0.05$) indicates that the regression model provides a better fit to the data than a model with no predictors. In other words, nutritional health is a meaningful predictor of teachers' creativity. From Table 4, the constant (intercept) value is 2.567, indicating the expected value of creativity when Nutritional Health is zero. The unstandardized coefficient for nutritional health is 0.357, meaning that for each one-unit increase in nutritional health of teachers, their creativity is expected to increase by 0.357 units, holding all else constant. The standardized coefficient (Beta) of 0.425 shows the strength and direction of the relationship. The t-value for nutritional health is 8.391, with a p-value of 0.000, indicating that nutritional health is a statistically significant predictor of creativity at the 0.05 significance level. This strong, positive interplay suggests that improvements in teachers' nutritional health are associated with increases in their creativity. Therefore, the alternate stated hypothesis is accepted and the null is rejected.

The findings of this hypothesis align with extant studies that submitted that essential nutrients such as omega-3 fatty acids, antioxidants, vitamins, and minerals are vital for maintaining brain health and function. Omega-3 fatty acids, in particular, are crucial for the structure and function of brain cell membranes, promoting efficient neural communication, which underpins creative thinking (Freeman et al., 2006). The findings are also in tandem with the work of Ojo (2016) who noted that diets rich in fruits, vegetables, whole grains, and lean proteins enhance cognitive processes such as memory, attention, and problem-solving skills, which are integral to creativity. Research on dietary patterns further supports the link between nutrition and creativity. The Mediterranean diet, which emphasizes the consumption of fruits, vegetables, nuts, and healthy fats, has been associated with lower risks of cognitive decline and improved mental health outcomes (Barnes et al., 2023). This diet provides a comprehensive array of nutrients that support brain health, thereby fostering conditions conducive to creative thinking. Moreover, hydration is a critical but often overlooked aspect of nutritional health; even mild dehydration can impair cognitive functions, affecting creativity (Doohan, 2024). The empirical evidence linking nutritional health to creativity has significant implications for educational and workplace settings. Encouraging healthy eating habits can enhance cognitive functions and creative capacities, leading to better educational outcomes and innovative work environments.

H_2: There is a significant influence of physical fitness and exercise on the creativity of 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	.378[a]	.143	.140	.50927	1.778

a. Predictors: (Constant), Physical_Fitness_Exercise
b. Dependent Variable: Creativity

Table 6: ANOVA of Regression Analysis

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.804	1	13.804	53.224	.000[b]
	Residual	82.735	319	.259		
	Total	96.539	320			

a. Dependent Variable: Creativity
b. Predictors: (Constant), Physical_Fitness_Exercise

Table 7: Coefficients of Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.798	.160		17.530	.000
	Physical_Fitness_Exercise	.303	.042	.378	7.295	.000

a. Dependent Variable: Creativity

Source: Field Survey (2024)

Results of the linear regression analysis presented in Table 5 (model summary) show that the R^2 value of 0.143 which implies that 14.3% of the variance in teachers' creativity can be explained by physical fitness and exercise. The standard error of the estimate is 0.50927, reflecting the average distance that the observed values deviate from the regression line. The Durbin-Watson statistic of 1.778 falls within the acceptable range (1.5 to 2.5), indicating that there is no significant autocorrelation in the residuals. Also, as evident in Table 6 which is the ANOVA Table, the F-statistic is 53.224 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 physical fitness and exercise significantly predict teachers' creativity. From Table 7, the constant (intercept) value is 2.798, representing the expected value of creativity when physical fitness and exercise are zero. The unstandardized coefficient for physical fitness and exercise is 0.303, indicating that for each one-unit increase in teachers' physical fitness and exercise, their creativity is expected to increase by 0.303 units, assuming all else is constant. The standardized coefficient (β) of 0.378 highlights the strength and direction of the relationship. The t-value for physical fitness and Exercise is 7.295, with a p-value of 0.000, demonstrating that engagement in physical fitness and exercise by teachers is a statistically significant predictor of their creativity at the 0.05 significance level. Therefore, the stated hypothesis is accepted and the null is rejected.

These findings are supported by existing empirical studies that consistently show that physical fitness and regular exercise enhance cognitive functions that are critical for creativity. Exercise promotes neuroplasticity, the brain's ability to adapt and reorganize itself, which is fundamental for learning and creative thinking (Kim & Sung, 2017). Regular physical activity, especially endurance exercises like running, swimming, and cycling, increases the production of brain-derived neurotrophic factor (BDNF), a protein that supports the growth and survival of neurons and enhances cognitive function and creativity (Mrówczyński, 2019). This aligns with the findings of the linear regression analysis. Also, physical exercise plays a crucial role in mood regulation, which directly impacts creativity. Exercise stimulates the release of endorphins and other neurotransmitters that enhance mood and reduce stress, creating a mental state conducive to creative thinking (Ratey & Loehr, 2011). Studies have shown that individuals who engage in regular physical activity report higher levels of mental well-being and exhibit greater creative output compared to sedentary individuals (Rodriguez-Ayllon et al., 2019). These mood-enhancing effects of exercise are particularly important for creative

processes, as stress and anxiety are known inhibitors of creativity. Additionally, as noted by Oppezzo and Schwartz (2014), they found that participants who walked on a treadmill showed higher levels of creative thinking compared to those who sat. This effect was observed both during and shortly after the exercise session, suggesting that physical activity has immediate benefits for creative thinking. Therefore, encouraging regular physical activity among teachers could lead to significant and sustained enhancements in their creative abilities, benefiting educational outcomes and innovation in teaching practices.

Conclusion and Recommendations

The results of this study provide evidence that nutritional health and physical fitness significantly influence the creativity of senior secondary school teachers in Alimosho Local Government. The regression analysis revealed that nutritional health accounted for 18.1% of the variance in creativity, highlighting the importance of a well-balanced diet rich in essential nutrients such as omega-3 fatty acids, antioxidants, vitamins, and minerals. These nutrients are crucial for maintaining brain health and cognitive functions, which underpin creative thinking. The findings corroborate existing research that emphasizes the role of diet in enhancing cognitive processes such as memory, attention, and problem-solving skills, all of which are integral to creativity. Furthermore, physical fitness and exercise were found to explain 14.3% of the variance in teachers' creativity, highlighting the cognitive and psychological benefits of regular physical activity. Physical exercise promotes neuroplasticity and the production of brain-derived neurotrophic factor (BDNF), which supports neuron growth and cognitive function. Additionally, exercise plays a critical role in mood regulation by stimulating the release of endorphins and other neurotransmitters, creating a mental state conducive to creative thinking. These findings align with the empirical evidence that links regular physical activity to enhanced mental well-being and higher creative output, reinforcing the necessity of integrating physical fitness into daily routines for cognitive and creative enhancement. These findings are deep-seated in propositions of the cognitive flexibility theory posits that cognitive flexibility, the ability to switch between different thoughts and adapt to new information, is essential for creative problem-solving and innovative thinking. The theory advanced that through the enhancement of brain function and overall mental health, good nutrition and regular physical activity significantly contribute to cognitive flexibility. This mental agility is crucial for teachers who must continually adapt their teaching methods to meet diverse student needs and integrate new educational strategies.

Premised on these findings, this study recommended that educational institutions prioritize the nutritional health and physical fitness of their teachers to promote a more innovative and effective teaching environment. Schools should implement programs that promote healthy eating habits, provide access to nutritious meals, and educating teachers on the benefits of a balanced diet rich in essential nutrients. Additionally, schools should encourage regular physical activity by providing opportunities for exercise, such as fitness classes, sports facilities, and wellness programs. Through the promotion of a culture of health and fitness, educational institutions can enhance the cognitive functions and creative capacities of their teachers, leading to better educational outcomes and a more dynamic learning environment. Furthermore, policymakers should consider integrating nutritional and physical fitness components into teacher development programmes and policies. Professional development workshops and training sessions can include modules on the importance of nutrition and exercise for cognitive and creative enhancement.

As a suggestion, future research should explore the long-term effects of sustained nutritional health and regular physical fitness on creativity across different educational contexts. Longitudinal studies that track teachers' dietary habits, physical activity levels, and creative outputs over extended periods can provide deeper insights into the causal

relationships between these variables. Additionally, investigating the potential moderating effects of other factors, such as age, gender, teaching experience, and socio-economic status, can help to identify specific subgroups that may benefit most from targeted interventions. Further research could also examine the effect of specific types of physical activities and dietary patterns on creativity, allowing for the development of tailored programmes that optimize cognitive and creative performance in educational settings.

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