



Student Eating Attitude and Life Style Impact on the Academic Performance: Evidence from the College Students

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ABSTRACT

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students' eating attitude or habits, lifestyle, academic performance, self-esteem; college student is UAE

Purpose: The present research objective is to investigate the impact of students' eating attitudes or habits and lifestyles on the academic performance of college students in the UAE. The research also examines the mediating influence of students' self-esteem among students' eating attitudes or habits, lifestyle, and academic performance in college students in the UAE. **Design / methodology / approach:** The investigators employ primary data collection techniques, such as survey questionnaires, to obtain primary data from the selected students. The researchers utilized smart PLS to assess the reliability of items and variables and examine the relationships between said variables.

Findings: The findings indicate a positive correlation between the dietary habits, lifestyle, and academic achievement of college students in the United Arab Emirates. The findings indicate a significant relationship between the self-esteem of college students in the UAE and their eating attitudes or habits, lifestyle, and academic performance. Specifically, the results suggest that self-esteem is a mediator between these variables. **Practical implications:** This study offers guidance to policymakers regarding the development of policies aimed at achieving high academic performance by promoting practical eating attitudes, habits, and lifestyles among students. The research suggests that implementing strategies to enhance students' teaching practices is imperative for fostering self-esteem and enhancing academic performance. **Originality/value:** Academic achievement is a crucial factor in determining the success of students, which can be achieved through adopting a practical lifestyle and dietary habits. This aspect necessitates the prioritization of novel research and policymakers. Ongoing research examines the correlation between students' eating attitudes or habits, lifestyle, and academic performance.

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Introduction

The adage "a healthy body has a healthy mind" suggests a positive correlation between physical and mental well-being. Cultivating a sound mental state is positively correlated with improved academic performance. A healthy diet is considered one of the fundamental components of a healthy lifestyle. To enhance health quality and mitigate illnesses linked to obesity, individuals must acquire appropriate nutrients and possess sufficient knowledge and attitudes regarding nutrition. Adopting a healthy lifestyle is associated with the development of healthy dietary patterns. Nutrition plays a crucial role in the context of dietary habits. An adequate and proper diet is fundamental to maintaining good health. The health of individuals is considerably influenced by various factors such as lifestyle, dietary patterns, and inadequate nutrition (Qureshi, Bhatti, & Khoso, 2020; Verulava & Devnozashvili, 2021). The adverse health effects stemming from nutritional challenges are well-established, including compromised immunity, reduced productivity, and suboptimal mental and physical development. These challenges have been associated with several chronic diseases, such as obesity, diabetes, cardiovascular disease, and cancer. Between 2017 and 2018, the prevalence of obesity and overweight among adults in the United Arab Emirates was reported as 27.8% and 40.1%, respectively. According to recent studies conducted by Cheikh Ismail et al. (2020), Hashim et al. (2021), and Kilani et al. (2020), the prevalence of obesity among individuals with a college degree was 37.7% from 2012 to 2014. Consequently, there is an increased significance in promoting children's education on healthy dietary habits and fostering optimistic mindsets toward academic pursuits. The current study investigates the impact of lifestyle and dietary habits on academic performance among students, given their significance.

Numerous studies have been conducted on academic performance in the United Arab Emirates (UAE); however, several gaps in the literature persist. The present investigation aims to address these gaps, explicitly focusing on the following research questions: Firstly, while various models related to academic performance have been explored in the UAE, the model that incorporates academic performance, students' lifestyle, eating habits, and diet, with the mediating effect of self-esteem, has not been recently tested. Trigueros et al. (2019) and Yamada et al. (2019) researched to explore the potential relationship between students' lifestyles and academic performance. The present study aims to build upon this research by examining additional variables such as students' eating habits and diet, as well as the mediating effect of self-esteem in the United Arab Emirates, using a new sample set. In 2020, Dubuc, Aubertin-Leheudre, and Karelis conducted a study. In 2021, Reuter, Forster, and Brister conducted another study exploring the potential relationship between students' dietary habits and academic performance. The present investigation aims to expand upon this research by examining the relationship between students' diet and lifestyle, focusing on the mediating effect of self-esteem in the United Arab Emirates, using a new sample set. Chikwere (2019) and Barrios and Vernetta (2021) researched to explore the potential relationship between students' dietary habits and their academic performance. The present study aims to build upon this research by examining additional variables, such as students' lifestyles and eating habits, and assessing the mediating effect of self-esteem on this relationship. The study will be conducted in the UAE using a fresh sample set. The studies conducted by Fan et al. (2019), Poudel, Gurung, and Khanal (2020), and Li et al. (2018) explored the potential mediating role of self-esteem in various contexts. The present investigation uses a new sample set to examine the relationship between students' lifestyles, eating habits, diets, and academic performance.

Literature Review

There exist various factors that impact the academic performance of students, one of which is their lifestyle. [Trigueros et al. \(2019\)](#) investigated the potential correlation between emotional intelligence, motivation, resilience, adoption of a healthy lifestyle, and academic achievement within this framework. The research was carried out in Spain. The study centered on students of Physical Education. The research is empirical. The research utilized a sample of 615 students aged 14 to 19 years. The data sample was obtained through the utilization of questionnaires. The study utilized the Structural Equation Modeling (SEM) analysis approach for analytical purposes. The findings obtained from the analysis indicated that emotional intelligence, motivation, resilience, adherence to a healthy lifestyle, and academic achievement were significant factors. [Yamada et al. \(2019\)](#) investigated the potential correlation between lifestyle, parental smoking, socioeconomic status, and academic achievement. The research was carried out in Japan. The research is empirical. The research employed a sample of 1663 students' data. The data sample was obtained through the utilization of questionnaires. The study utilized the logistic regression analysis approach for analytical purposes. The findings obtained from the analysis suggest that students' academic performance is significantly influenced by their lifestyle, parental smoking habits, and socioeconomic status. The global community must prioritize implementing healthy lifestyle practices among students to enhance their overall quality of life.

Furthermore, [Mohamed et al. \(2022\)](#) investigated whether a correlation exists between body mass index, lifestyle, and academic achievement. The research was carried out within the geographical boundaries of Saudi Arabia. The research is empirical. The research employed a sample of 250 students' data. The data sample was obtained through the utilization of questionnaires. The study utilized the SPSS2 software and regression analysis methodology for analytical purposes. The findings from the analysis indicate a significant correlation between students' lifestyles, body mass index, and academic performance. [Renau \(2019\)](#) investigated whether a correlation exists between students' academic performance and lifestyle choices. The research was carried out in the country of China. The research is empirical. The research employed a sample of 274 students' data.

The data sample was obtained through the utilization of questionnaires. The study utilized the SPSS2 analysis approach for analytical purposes. The findings obtained from the analysis suggest that there is a significant correlation between the lifestyle of students and their academic achievement. [Barrios and Vernetta \(2021\)](#) investigated whether a correlation exists between students' dietary habits and their academic achievement. The research was carried out in Spain. The research is empirical. The research employed a sample of 129 students' data. The data sample was obtained through the utilization of questionnaires. The study utilized the anthropometric measurement analysis approach for analytical purposes. The findings from the analysis suggest that students' dietary habits have a noteworthy impact on their academic achievements. [Adelantado-Renau et al. \(2019\)](#) conducted a study to investigate the potential correlation between students' dietary habits and their academic achievements. The research was carried out in Spain. The research is empirical. The research employed a sample of 269 students' data. The data sample was obtained through the utilization of questionnaires. The study utilized the simple regression analysis approach for analytical purposes. The findings from the analysis suggest that students' dietary habits have a noteworthy impact on their academic achievement. Therefore, the hypothesis formulated based on the abovementioned discussion is as follows.

H1: *There is a significant nexus between students' lifestyles and academic performance in UAE.*

Scholarly literature suggests that students' dietary habits are crucial to their academic achievement. Dubuc, Aubertin-Leheudre, and Karelis (2020) investigated the potential correlation between the dietary patterns of students and their academic achievement within the context of their lifestyles. The research was carried out on populations of Caucasians, Asians, Arabs, Hispanics, and African-Americans. The research is empirical. The research employed a sample of 205 students' data. The data sample was obtained through the utilization of questionnaires. The study utilized the AMOS analysis approach for analytical purposes. The findings obtained from the analysis suggest that the dietary patterns of students, as a component of their lifestyle, have a noteworthy impact on their academic achievements.

Furthermore, Reuter, Forster, and Brister (2021) investigated the potential correlation between the dietary patterns of students and their academic achievements. The research was carried out on a sample of students enrolled in a university. The research is empirical. The research employed a sample of 577 students at the graduate level of a university. The data sample was obtained through the utilization of questionnaires. The study utilized a statistical analysis approach for analytical purposes. The findings derived from the analysis suggest that the dietary patterns of students have a noteworthy impact on their academic achievements. Ibarra Mora, Ventura-Vall-Llovera, and Hernández-Mosqueira (2019) conducted a study to investigate the potential correlation between the dietary patterns of students and their academic achievement. The research was carried out in the country of Chile. The research is empirical. The research utilized a sample of 2116 students' data. The data sample was obtained through the utilization of questionnaires. The inferential statistics analysis approach was utilized in the study for analytical purposes. The findings from the analysis suggest a significant correlation between students' dietary habits and academic achievement.

Parra-Castillo, Morales-Canedo, and Medina-Valencia (2021) conducted a study to investigate the potential correlation between the dietary patterns of students and their academic achievements. The research was carried out in Colombia. The research is empirical. The research employed a sample of 68 students' data. The data sample was obtained through the utilization of questionnaires. The study utilized the AMOS analysis approach for analytical purposes. The findings from the analysis suggest a significant correlation between students' dietary habits and academic achievement. Kristo et al. (2020) investigated whether a correlation exists between students' lifestyles and academic achievement. The research was carried out in the country of Turkey. The research is empirical. The research employed a sample of data from 29 distinct cities.

The dataset encompasses the period of employment spanning from 2016 to 2017. The data sample was acquired through the utilization of questionnaires. The study utilized the regression analysis approach for analytical purposes. The findings derived from the analysis suggest a significant correlation exists between students' lifestyles and academic performance. Nuevo, Molina, and Ureña (2021) investigated whether a correlation exists between students' academic performance and lifestyles. The research conducted is empirical. The research employed a sample of 55 students' data. The data sample was acquired through the utilization of questionnaires. The study utilized the SPSS2 analysis approach for analytical purposes. The findings from the analysis indicate a statistically significant relationship between students' lifestyles and academic performance. Therefore, the hypothesis formulated from the discussion mentioned above is as follows.

H2: *There is a significant nexus between students' eating habits and academic performance in UAE.*

Frequently, students experience suboptimal academic outcomes due to various factors such as lifestyle choices, anxiety, and depression. Several factors contribute to influencing their performance. The scholarly literature suggests that self-esteem is a significant factor that impacts students' academic performance. The study conducted by Fan et al. (2019) aimed to investigate the potential mediating role of self-esteem in the relationship between narcissistic individuals and cyberbullying. The findings suggest that self-esteem significantly mediates the association between individuals with narcissistic tendencies and instances of cyberbullying.

Moreover, parents must prioritize the education of their offspring to foster self-esteem. The ultimate goal of every individual is to attain a sense of contentment with their life. Several factors contribute to this phenomenon, but academic performance is paramount. The correlation between education and self-esteem is significant. There is a positive correlation between self-esteem and academic performance. Arslan (2019) investigated to determine if self-esteem could serve as a mediator in the relationship between social exclusion and life satisfaction. The research was carried out on the populace of Turkey. The research possesses an empirical character. The research employed a sample of 1172 students from grades 9 to 12 for data analysis. The data sample was obtained through the utilization of questionnaires. The study utilized the bivariate correlation analysis approach for analytical purposes. The findings obtained from the analysis suggest that self-esteem plays a significant role as a mediator in the association between social exclusion and life satisfaction. The provision of social support is considered a crucial element of academic achievement. The provision of social support has been found to positively impact students' self-esteem, which has been shown to influence their academic performance. Li et al. (2018) investigated to determine whether self-esteem can serve as a mediator in the relationship between social support and academic achievement. The research was carried out on the populace of China. The research possesses an empirical character. The research employed 262 individuals who had completed their university education. The data sample was acquired through the utilization of questionnaires. The study utilized the path analysis approach for analytical purposes. The findings obtained from the analysis suggest that self-esteem plays a crucial role as a mediator in the correlation between social support and academic achievement. Improved academic performance can enhance students' self-esteem, contributing to their social well-being. Therefore, the hypothesis formulated based on the abovementioned discussion is as follows.

H3: *Self-esteem significantly mediates the nexus between students' lifestyles and academic performance in UAE.*

The academic performance of the students is widely recognized. Several factors contribute to maintaining stability in performance, including dietary habits, emotional composure, and self-confidence. Improved dietary habits have been found to impact psychological well-being positively. Enhanced well-being has a positive impact on the academic performance of students. The study conducted by Poudel et al. (2020) aimed to investigate the potential mediating role of self-esteem in the relationship between perceived social support and psychological well-being. The research was carried out on the populace of Nepal. The research possesses an empirical character. The research used 348 students in grades 9 and 10 for data analysis. The data sample was obtained through the utilization of questionnaires. The research utilized the regression mediation analysis approach for analytical purposes. The findings obtained from the analysis suggest that self-esteem plays a

crucial role as a mediator in the association between perceived social support and psychological well-being. Inadequate academic achievement can result in various factors, such as student anxiety. The factor of self-esteem plays a significant role in aiding individuals to overcome this particular issue. [Bajaj, Robins, and Pande \(2016\)](#) investigated whether self-esteem can mediate the relationship between mindfulness, anxiety, and depression. The research was carried out on the demographic of China. The research possesses an empirical nature. The research employed a sample of 417 undergraduate students from a university. The data sample was obtained through the utilization of questionnaires.

The study utilized the Structural Equation Modeling (SEM) analysis approach for analytical purposes. The findings obtained from the analysis suggest that self-esteem plays a significant role as a mediator in the association between mindfulness, anxiety, and depression. The correlation between social well-being and self-esteem has been found to impact students' academic performance. [Duy and Yıldız \(2019\)](#) investigated whether self-esteem mediates the relationship between optimism and social well-being. The research was carried out on the populace of China. The research possesses an empirical character. The research utilized a sample of 229 individuals who had completed their university education. The data sample was obtained through the utilization of questionnaires. The study utilized the OLS regression analysis approach for analytical purposes. The findings from the proposed analysis indicate that self-esteem plays a significant role as a mediator in the correlation between optimism and social well-being. Therefore, the hypothesis formulated based on the abovementioned discussion is as follows.

H4: *Self-esteem significantly mediates the nexus between eating habits and academic performance in UAE.*

Research Methods

This study explores the correlation between college students' eating habits and lifestyles in the UAE and their academic performance. Additionally, the research will investigate the potential mediating influence of students' self-esteem on the relationship between their eating habits, lifestyle, and academic performance. The investigators employ primary data collection techniques, such as survey questionnaires, to obtain primary data from the selected students. The study employs a questionnaire to measure various constructs. Specifically, students' eating attitude is assessed using eight questions from [Farchakh, Hallit, and Soufia \(2019\)](#), while students' lifestyle is evaluated using six questions derived from [Al-Qahtani \(2019\)](#). Additionally, students' self-esteem is measured using five items obtained from [Zheng et al. \(2020\)](#), and academic performance is assessed using six items adapted from [Alhadabi and Karpinski \(2020\)](#).

Furthermore, the researchers chose college students in the United Arab Emirates as the participants for the study. The researchers collected the data by distributing surveys via personal college visits. Additionally, the scholars employed a method of simple random sampling to choose the participants from the student population. The study involved the distribution of 564 surveys, of which 303 responses were deemed valid, resulting in a response rate of approximately 53.72 percent. Furthermore, the researchers utilized the smart-PLS methodology to assess the reliability of items and variables and examine the interrelationships among the variables. According to [Hair Jr, Howard, and Nitzl \(2020\)](#), using complex frameworks and large data sets by researchers does not necessarily provide a more accurate estimation than the one provided by the preferred method.

Furthermore, the investigators employed two predictors: students' eating attitude (SEA) and lifestyle (SLS). In addition, the scholars employed a single intermediary construct referred to as students' self-esteem (SSE) and a solitary outcome variable, namely academic performance (AP). The variables presented in Figure 1 are provided.

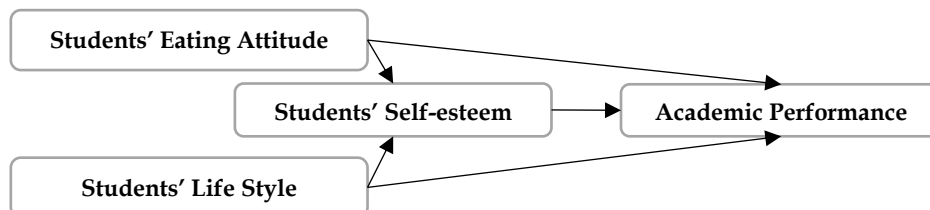


Figure 1: Theoretical model

Research Findings

The results indicate a correlation among the variables. The assessment of the data involved the utilization of various statistical measures. Specifically, the data underwent scrutiny through the application of Alpha, with values exceeding 0.70. Additionally, the data were subjected to examination through the use of average variance extracted (AVE), with figures surpassing 0.50. Furthermore, the data was analyzed through composite reliability (CR), with figures exceeding 0.70. Lastly, the data underwent scrutiny through factor loadings, with figures exceeding 0.50. The data presented suggests a strong correlation between the items. Table 1 presents the figures mentioned above.

Table 1

<i>Convergent validity</i>					
Constructs	Items	Loadings	Alpha	CR	AVE
Academic Performance	AP1	0.712	0.817	0.863	0.515
	AP2	0.783			
	AP3	0.637			
	AP4	0.633			
	AP5	0.717			
	AP6	0.805			
Students Eating Attitude	SEA1	0.655	0.917	0.933	0.636
	SEA2	0.880			
	SEA3	0.808			
	SEA4	0.780			
	SEA5	0.907			
	SEA6	0.717			
	SEA7	0.864			
	SEA8	0.734			
Students' Life Style	SLS1	0.693	0.857	0.890	0.574
	SLS2	0.758			
	SLS3	0.728			
	SLS4	0.753			
	SLS5	0.798			
	SLS6	0.811			
Students' Self-esteem	SSE1	0.902	0.766	0.850	0.593
	SSE2	0.812			
	SSE4	0.749			
	SSE5	0.580			

The results indicate a correlation between the variables. The examination involved the utilization of cross-loadings and the Fornell-Larcker criterion to assess the strength of the relationships between variables. Results indicated that the values indicating the associations between a given variable and itself were more significant than those indicating the associations between the variable and other constructs. The figures suggest a low correlation between the variables. The data mentioned above is presented in [Table 2](#) and [Table 3](#).

Table 2

Fornell Larcker

	AP	SEA	SLS	SSE
AP	0.718			
SEA	0.571	0.797		
SLS	0.610	0.645	0.758	
SSE	0.700	0.452	0.321	0.770

Table 3

Cross-loadings

	AP	SEA	SLS	SSE
AP1	0.712	0.452	0.388	0.362
AP2	0.783	0.328	0.483	0.439
AP3	0.637	0.366	0.349	0.323
AP4	0.633	0.366	0.423	0.318
AP5	0.717	0.467	0.615	0.630
AP6	0.805	0.455	0.697	0.738
SEA1	0.428	0.655	0.487	0.405
SEA2	0.444	0.880	0.488	0.307
SEA3	0.342	0.808	0.387	0.247
SEA4	0.556	0.780	0.642	0.424
SEA5	0.479	0.907	0.516	0.343
SEA6	0.383	0.717	0.396	0.276
SEA7	0.396	0.864	0.478	0.329
SEA8	0.506	0.734	0.585	0.447
SLS1	0.483	0.650	0.693	0.401
SLS2	0.638	0.416	0.758	0.665
SLS3	0.502	0.624	0.728	0.390
SLS4	0.518	0.651	0.753	0.458
SLS5	0.515	0.344	0.798	0.732
SLS6	0.596	0.416	0.811	0.739
SSE1	0.699	0.437	0.757	0.902
SSE2	0.661	0.363	0.606	0.812
SSE4	0.397	0.313	0.704	0.749
SSE5	0.311	0.248	0.410	0.580

The outcomes also show the correlation between the variables. It is checked using Heterotrait Monotrait (HTMT) ratio, with values lower than 0.90. These figures indicated that low correlation between variables. These figures are given in [Table 4](#).

Table 4

Heterotrait Monotrait ratio

	AP	SEA	SLS	SSE
AP				
SEA	0.633			
SLS	0.804	0.742		
SSE	0.789	0.513	0.741	

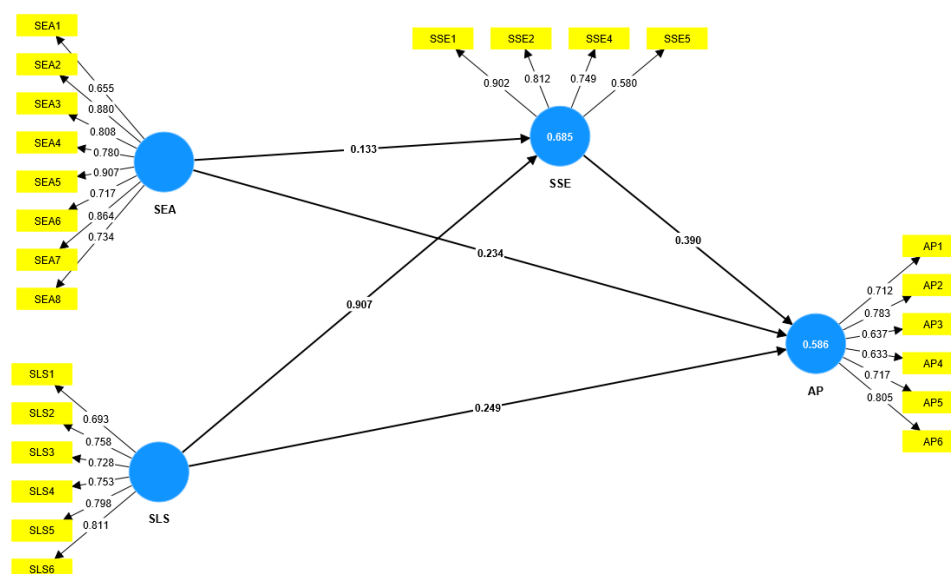


Figure 2: Measurement model assessment

The findings indicate a positive correlation between the dietary habits and lifestyle of college students in the UAE and their academic performance, thereby supporting hypotheses H1 and H2. The results indicate a significant mediation effect of students' self-esteem on the relationship between their eating attitudes or habits, lifestyle, and academic performance in UAE college students. These findings support the acceptance of hypotheses H3 and H4. Table 5 presents the linkages.

Table 5

Path analysis

Relationships	Beta	Standard deviation	T statistics	P values
SEA -> AP	0.234	0.065	3.606	0.000
SEA -> SSE	0.133	0.046	2.915	0.004
SLS -> AP	0.249	0.123	2.017	0.044
SLS -> SSE	0.907	0.035	25.719	0.000
SSE -> AP	0.390	0.081	4.803	0.000
SEA -> SSE -> AP	0.052	0.022	2.368	0.018
SLS -> SSE -> AP	0.354	0.076	4.626	0.000

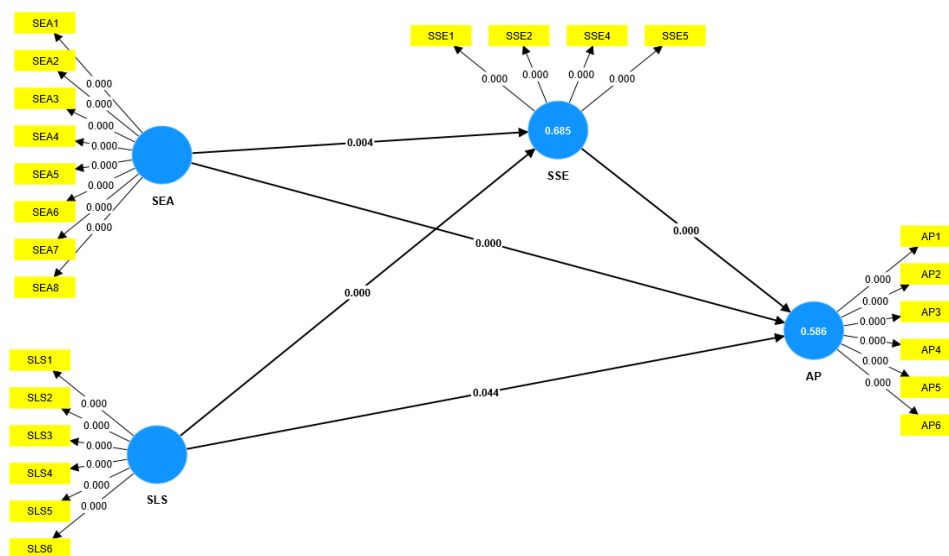


Figure 3: Structural model assessment

Discussions

The findings indicate a significant correlation between students' lifestyles and academic achievement. The findings presented are corroborated by the research conducted by [Dubuc et al. \(2020\)](#). The research suggests that how students manage their personal, familial, and societal obligations and their standard of living can impact their academic performance. Students who maintain an innovative, active, and comfortable lifestyle tend to feel supported, resulting in improved attention and higher academic performance. The findings presented herein are consistent with those of [Dubuc et al. \(2020\)](#), who investigated the influence of students' lifestyles on their academic achievements. As per prior research findings, students who adopt a structured and innovative lifestyle can effectively manage their learning resources and allocate ample time for academic pursuits. All of these factors have a positive impact on the academic performance of students.

The findings indicate a positive correlation between students' dietary habits and academic achievement. The findings presented are corroborated by the research conducted by [Reuter et al. \(2021\)](#). The preceding research indicates that sustenance is a fundamental necessity for human existence. The human body requires adequate food at specific intervals and in a particular sequence to maintain optimal health and activity levels. Students who adhere to a routine of consuming meals at appropriate intervals and conscientiously assessing the nutritional value of their food during consumption are more likely to experience favorable health outcomes and exhibit greater academic engagement.

Consequently, these pupils achieve exceptional academic outcomes. These findings are consistent with [Antonopoulou et al.'s \(2020\)](#) study, which investigated the relationship between student eating habits and academic performance. The research suggests that adhering to a proper meal schedule and maintaining a nutritious diet can lead to improved physical fitness, reduced absenteeism due to illness, and enhanced cognitive abilities among students. All of this contributes to the maintenance of students' academic performance.

The findings indicate that self-esteem is crucial in mediating the relationship between students' lifestyles and academic performance. The findings are consistent with the study conducted by [Al-Khani et al. \(2019\)](#), which suggests that students with elevated living standards and a propensity to embrace progressive and sophisticated lifestyles exhibit more significant levels of self-esteem. Students with elevated levels of self-esteem are motivated to demonstrate their superiority over their peers, leading them to intensify their academic efforts. Consequently, the academic performance of students will probably experience enhancement. The findings presented in this study are consistent with those of [Trigueros et al. \(2019\)](#), who assert that enhancing students' lifestyles can lead to increased self-esteem among students. A positive correlation exists between a student's level of self-esteem and their desire to outperform their peers, which leads to higher academic achievement. Self-esteem serves as a mediator between the lifestyle of students and their academic performance.

The study's findings indicate that self-esteem is crucial in mediating the relationship between students' dietary habits and academic performance. The findings presented are consistent with the research conducted by [Kristo et al. \(2020\)](#). According to the authors of the previous study, students who maintain healthy eating habits are more likely to experience positive health outcomes and an improved emotional state. Students' positive outlook on physical fitness and well-being enhances their self-regard and fosters their drive to outperform their peers in pursuit of their objectives. These students exhibit superior academic performance by exerting additional effort. Therefore, a correlation exists between students' self-esteem and their academic performance regarding their eating habits. These findings are consistent with the assertions made by [Serra et al. \(2020\)](#), who suggest that enhanced dietary practices among students are associated with increased levels of self-esteem. Higher levels of self-esteem motivate students to utilize more effective learning resources, establish and execute efficient learning strategies, and exhibit resilience. Thus, the academic performance of students is enhanced. The concept of self-esteem establishes a correlation between students' dietary patterns and academic achievements.

Implications

The study guides authors on how to approach enhancing students' academic achievement. This study sheds light on the impact of students' lifestyles and dietary habits on their academic performance, with self-esteem serving as a mediator in the context of the United Arab Emirates. The present article holds immense importance for developing nations' social and economic progress that heavily depends on graduates from educational institutions. This study guides governmental bodies, educational ministries, and institutional administrators regarding strategies to enhance students' academic achievement. The research suggests that enhancing students' lifestyles can improve academic performance. The study suggests that there ought to be a favorable alteration in the dietary patterns of students. Enhancing academic performance among students could be achieved. This study guides policymakers in formulating policies to enhance academic performance by adopting practical eating attitudes, habits, and lifestyles among students. The article posits that for students to cultivate higher self-esteem, they must adopt a healthier lifestyle. Thus, students can exhibit improved academic achievement. Additionally, the research suggests that formulating strategies to enhance students' teaching practices to foster self-esteem and enhance academic performance is imperative.

Conclusion

This study aimed to investigate the impact of students' lifestyles and dietary habits on their academic achievement and explore the potential mediating role of self-esteem in the relationship between students' lifestyles, dietary habits, and academic performance. Empirical evidence was gathered from the United Arab Emirates. The findings indicate a positive correlation between students' lifestyles, dietary habits, and academic achievement. The research findings suggest that students who adopt an innovative, peaceful, managed, and controlled lifestyle are more likely to effectively comprehend and retain information presented through learning material and lectures. Consequently, their academic performance may be elevated. The research findings indicate that adhering to a consistent eating schedule and consuming nutrient-dense foods positively impacts students' health and academic performance. Specifically, students with good dietary habits demonstrate greater engagement and higher academic achievement. The research findings indicate that self-esteem is crucial in mediating the relationship between students' lifestyle choices, dietary habits, and academic achievements. The possession of a positive lifestyle by students is likely to result in elevated levels of self-esteem, which in turn has been shown to enhance academic achievement. Likewise, pupils who exhibit positive dietary practices tend to possess elevated levels of self-confidence, thereby enhancing their academic achievements.

Limitations

The research also exhibits certain constraints. Further research should aim to address these limitations identified in the literature. The present article investigates the correlation between certain variables, such as students' lifestyle and dietary habits, and their academic achievement, with self-esteem as a mediator. Authors must broaden the scope of their study and incorporate additional potential factors into the research framework that impact students' academic performance. Furthermore, it should be noted that the research's validity relies solely on the data obtained from the education system of the United Arab Emirates. To achieve generalizability in research, it is recommended that data be collected from a broader range of countries with exemplary education systems.

References

- Adelantado-Renau, M., Beltran-Valls, M. R., Esteban-Cornejo, I., Martínez-Vizcaíno, V., Santaliestra-Pasías, A. M., & Moliner-Urdiales, D. (2019). The influence of adherence to the Mediterranean diet on academic performance is mediated by sleep quality in adolescents. *Acta Paediatrica*, 108(2), 339-346. <https://doi.org/10.1111/apa.14472>
- Al-Khani, A. M., Sarhandi, M. I., Zaghloul, M. S., Ewid, M., & Saquib, N. (2019). A cross-sectional survey on sleep quality, mental health, and academic performance among medical students in Saudi Arabia. *BMC research notes*, 12(1), 1-5. <https://doi.org/10.1186/s13104-019-4713-2>
- Al-Qahtani, M. F. (2019). Comparison of health-promoting lifestyle behaviours between female students majoring in healthcare and non-healthcare fields in KSA. *Journal of Taibah University Medical Sciences*, 14(6), 508-514. <https://doi.org/10.1016/j.jtumed.2019.10.004>
- Alhadabi, A., & Karpinski, A. C. (2020). Grit, self-efficacy, achievement orientation goals, and academic performance in University students. *International Journal of Adolescence and Youth*, 25(1), 519-535. <https://doi.org/10.1080/02673843.2019.1679202>

- Antonopoulou, M., Mantzorou, M., Serdari, A., Bonotis, K., Vasios, G., Pavlidou, E., Trifonos, C., Vadikolias, K., Petridis, D., & Giaginis, C. (2020). Evaluating Mediterranean diet adherence in university student populations: Does this dietary pattern affect students' academic performance and mental health? *The International journal of health planning and management*, 35(1), 5-21. <https://doi.org/10.1002/hpm.2881>
- Arslan, G. (2019). Mediating role of the self-esteem and resilience in the association between social exclusion and life satisfaction among adolescents. *Personality and Individual Differences*, 151, 109514. <https://doi.org/10.1016/j.paid.2019.109514>
- Bajaj, B., Robins, R. W., & Pande, N. (2016). Mediating role of self-esteem on the relationship between mindfulness, anxiety, and depression. *Personality and Individual Differences*, 96, 127-131. <https://doi.org/10.1016/j.paid.2016.02.085>
- Barrios, E. M. P., & Vernetta, M. (2021). Adherence to the mediterranean diet and academic performance in schoolchildren from 1st and 2nd of Compulsory School. *Clinical Nutrition and Hospital Dietetics*, 41(3), 79-88. <https://doi.org/10.12873/413pelaez>
- Cheikh Ismail, L., Osaili, T. M., Mohamad, M. N., Al Marzouqi, A., Jarrar, A. H., Abu Jamous, D. O., Magriplis, E., Ali, H. I., Al Sabbah, H., & Hasan, H. (2020). Eating habits and lifestyle during COVID-19 lockdown in the United Arab Emirates: a cross-sectional study. *Nutrients*, 12(11), 3314. <https://doi.org/10.3390/nu12113314>
- Chikwere, P. (2019). Diet, a factor for academic performance in school-aged children: systematic review of recent studies. *All Nations University Journal of Applied Thought*, 7, 76-90. <https://anujat.anuc.edu.gh/universityjournal/anujat/Vol7/No1/6.pdf>
- Dubuc, M.-M., Aubertin-Leheudre, M., & Karelis, A. D. (2020). Lifestyle habits predict academic performance in high school students: the adolescent student academic performance longitudinal study (ASAP). *International journal of environmental research and public health*, 17(1), 243. <https://doi.org/10.3390/ijerph17010243>
- Duy, B., & Yildiz, M. A. (2019). The mediating role of self-esteem in the relationship between optimism and subjective well-being. *Current Psychology*, 38(6), 1456-1463. <https://doi.org/10.1007/s12144-017-9698-1>
- Fan, C.-y., Chu, X.-w., Zhang, M., & Zhou, Z.-k. (2019). Are narcissists more likely to be involved in cyberbullying? Examining the mediating role of self-esteem. *Journal of interpersonal violence*, 34(15), 3127-3150. <https://doi.org/10.1177/0886260516666531>
- Farchakh, Y., Hallit, S., & Soufia, M. (2019). Association between orthorexia nervosa, eating attitudes and anxiety among medical students in Lebanese universities: results of a cross-sectional study. *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity*, 24, 683-691. <https://doi.org/10.1007/s40519-019-00724-6>
- Hair Jr, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, 109, 101-110. <https://doi.org/10.1016/j.jbusres.2019.11.069>
- Hashim, M., Coussa, A., Al Dhaheri, A. S., Al Marzouqi, A., Cheaib, S., Salame, A., Abu Jamous, D. O., Naja, F., Hasan, H., & Stojanovska, L. (2021). Impact of coronavirus 2019 on mental health and lifestyle adaptations of pregnant women in the United Arab Emirates: a cross-sectional study. *BMC pregnancy and childbirth*, 21, 1-11. <https://doi.org/10.1186/s12884-021-03941-z>
- Ibarra Mora, J., Ventura-Vall-Llovera, C., & Hernández-Mosqueira, C. (2019). Level of physical activity, eating habits, and their relationship with academic performance in adolescent students at COMEDUC foundation, Chile. *Journal of Health Issue*, 2, 1-18. <http://hdl.handle.net/BibUnACh/1783>

- Kilani, H. A., Bataineh, M. a. F., Al-Nawayseh, A., Atiyat, K., Obeid, O., Abu-Hilal, M. M., Mansi, T., Al-Kilani, M., Al-Kitani, M., & El-Saleh, M. (2020). Healthy lifestyle behaviors are major predictors of mental wellbeing during COVID-19 pandemic confinement: A study on adult Arabs in higher educational institutions. *Plos one*, 15(12), e0243524. <https://doi.org/10.1371/journal.pone.0243524>
- Kristo, A. S., Gültekin, B., Öztağ, M., & Sikalidis, A. K. (2020). The effect of eating habits' quality on scholastic performance in Turkish adolescents. *Behavioral sciences*, 10(1), 31-49. <https://doi.org/10.3390/bs10010031>
- Li, J., Han, X., Wang, W., Sun, G., & Cheng, Z. (2018). How social support influences university students' academic achievement and emotional exhaustion: The mediating role of self-esteem. *Learning and individual differences*, 61, 120-126. <https://doi.org/10.1016/j.lindif.2017.11.016>
- Mohamed, E. Y., Almhmd, A. E., Alenazi, S. H. K., Alrashidi, A. G., Aldhafeeri, B. M., & Binmuhareb, A. N. (2022). Retraction: Association of Body Mass Index and Lifestyle with Academic Performance of Students from the College of Medicine of Majmaah University, Saudi Arabia. *Maedica*, 17(1), 242-254. <https://doi.org/10.26574/maedica.2022.17.1.242>
- Nuevo, C. E. L., Molina, J. S., & Ureña, G. D. (2021). Adherence to healthy habits and academic performance in Vocational Education Students. *Retos: nuevas tendencias en educación física, deporte y recreación*, (42), 118-125. <https://doi.org/10.47197/retos.v42i0.87138>
- Parra-Castillo, A., Morales-Canedo, L., & Medina-Valencia, M. (2021). Relationship Between Eating Habits and Academic Performance in Students of Public and Private Universities in Chapinero, Bogotá. *Perspectivas en Nutrición Humana*, 23(2), 183-195. <https://doi.org/10.17533/udea.penh.v23n2a05>
- Poudel, A., Gurung, B., & Khanal, G. P. (2020). Perceived social support and psychological wellbeing among Nepalese adolescents: the mediating role of self-esteem. *BMC psychology*, 8(1), 1-8. <https://doi.org/10.1186/s40359-020-00409-1>
- Qureshi, J. A., Bhatti, T., & Khoso, P. (2020). Relationship between Healthy Nutrition and Academic Performance of Students at Primary School Level: An experimental study. *Psychology and Education*, 57(8), 1170-1183. <https://doi.org/10.17762/PAE.V57I8.1418>
- Renau, M. A. (2019). *Healthy lifestyle factors and academic performance in secondary school students*. (Doctoral dissertation). Universitat Jaume I. <https://investiga.upo.es/documentos/5eb5e35729995206431d3723>
- Reuter, P. R., Forster, B. L., & Brister, S. R. (2021). The influence of eating habits on the academic performance of university students. *Journal of American College Health*, 69(8), 921-927. <https://doi.org/10.1080/07448481.2020.1715986>
- Serra, R., Kiekens, G., Vanderlinden, J., Vrieze, E., Auerbach, R. P., Benjet, C., Claes, L., Cuijpers, P., Demyttenaere, K., & Ebert, D. D. (2020). Binge eating and purging in first-year college students: Prevalence, psychiatric comorbidity, and academic performance. *International Journal of Eating Disorders*, 53(3), 339-348. <https://doi.org/10.1002/eat.23211>
- Trigueros, R., Aguilar-Parra, J. M., Cangas, A. J., Bermejo, R., Ferrandiz, C., & López-Liria, R. (2019). Influence of emotional intelligence, motivation and resilience on academic performance and the adoption of healthy lifestyle habits among adolescents. *International journal of environmental research and public health*, 16(16), 2810. <https://doi.org/10.3390/ijerph16162810>

- Verulava, T., & Devnozashvili, R. (2021). Nutrition and academic performance among adolescences. *Romanian Journal of Diabetes Nutrition and Metabolic Diseases*, 28(3), 275-283. <http://rjdnmd.org/index.php/RJDNMD/article/view/1019>
- Yamada, M., Sekine, M., Tatsuse, T., & Asaka, Y. (2019). Association between lifestyle, parental smoke, socioeconomic status, and academic performance in Japanese elementary school children: the Super Diet Education Project. *Environmental health and preventive medicine*, 24, 1-9. <https://doi.org/10.1186/s12199-019-0776-x>
- Zheng, L. R., Atherton, O. E., Trzesniewski, K., & Robins, R. W. (2020). Are self-esteem and academic achievement reciprocally related? Findings from a longitudinal study of Mexican-origin youth. *Journal of personality*, 88(6), 1058-1074. <https://doi.org/10.1111/jopy.12550>