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## Examining the Health-Promoting Lifestyle of College Students: A Quantitative Analysis

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### ABSTRACT

Lifestyle is gradually shaped by an individual's daily routine, behavior, and mannerisms. College students develop their lifestyles customary to academic demands and other influences that may construe healthy or unhealthy routines. This study the Health-Promoting Lifestyle profile of college students in the Davao Region using a quantitative analysis approach, which considers gender, department, and year level. The study utilizes the Health-Promoting Lifestyle Profile II (HPLP-II) as its primary tool. A total of 350 students were randomly selected and their responses were subjected to a Shapiro-Wilk test for normality. The results revealed in Table 4 found significant differences between the different demographic groups and their varying significant effects to HPLP. Respectively, in terms of Gender, the significant difference in HPLP was determined by  $F(2, 22.3) = 10.2$ ,  $p < 0.001$  with an effect size, eta-squared ( $\eta^2$ ) 0.056, indicating a small size effect. Moreover, the significant differences in Department reported an  $F(3, 99.5) = 4.82$ ,  $p = 0.003$  with an effect size, eta-squared ( $\eta^2$ ) 0.040, indicating a small size effect. Furthermore, the Year Level differences was revealed by an  $F(5, 135) = 0.952$ ,  $p < 0.001$  with an effect size, eta-squared ( $\eta^2$ ) 0.087 indicating a medium size effect. The data indicates that Year Level is the most influential demographic profile of respondents. Future researchers can explore a qualitative assessment of the dimensions of HPLP to determine the habitual engagements of students in distinct facets of healthy lifestyles. Anent to the study, it may be possible to gain a more comprehensive understanding of the factors that contribute to the promotion of healthy living practices amongst college students.

### INTRODUCTION

Lifestyle is multifaceted and has been defined in various scientific studies (Boldrer *et al.*, 2023). It refers to the conglomeration of routines, behaviors, and mannerisms that have an impact on an individual's holistic health. According to the constitution of the World Health Organization (WHO), health is not just the absence of disease in the body but also the state of an individual's complete physical, social, and mental wellbeing. College students represent a significant population with unique lifestyle behaviors. The college period is a crucial time in early adulthood, where habits pose developments in physical, sexual, psychological, and social relations that may adopt healthy or unhealthy mechanisms. However, incorporating healthy habits is challenging for college students due to schedules, workloads, and stress that come with constant demands, greatly affecting their routines, behaviors, and engagement in healthy lifestyles (Dungog *et al.*, 2021). A cross-sectional study by Alothman *et al.* (2024) indicated that various factors, including age, college major, and lifestyle behaviors, influence differences in lifestyle. College students represent a unique population with distinct lifestyle behaviors that are influenced by various factors.

Based on the reports of the World Health Organization, it was found that a considerable 60% of an individual's health and overall well-being is determined by their conduct and behavior. The crucial importance of lifestyle stewards an individual's well-being; Worldwide, college

students live sedentary and unhealthy lives (Alflayyeh & Alotaibi, 2023). A recent study conducted in the Philippines (Dungog *et al.*, 2021) revealed that the lifestyle of college students was deficient in several critical factors, including exercise, nutrition, water intake, rest, and overall physical condition. Despite the lack of sufficient studies addressing the assessment of healthy lifestyles among college students in the country, the literature has emphasized the importance of implementing programs designed to promote healthy lifestyle behaviors in tandem with addressing the students' health status. The pivotal transition to college constitutes behavioral changes that alter lifestyle; a period marked by biological development, significant social role shifts, and changes in health-related behavior. With this, the Health-Promoting Lifestyle Profile initially developed by Walker, *et al.* in 1987 is a scale designed to measure the health-promoting lifestyle behaviors of people, thus, in the present study to assess the lifestyles of college students in the university, the study utilized the dimensions of Health-Promoting Lifestyle Profile (HPLP) as the rudimentary factors for evaluation. Its dimensions were subjected to successive validity, drawing out the six (6) conceptually accepted subscales as its psychometric measuring tool for lifestyle. The current model explicated in 1995 is named the Health-Promoting Lifestyle Profile - HPLP II (Adult Version) prompted by factors measuring adult engagement in healthy lifestyle (Nursing, S. O. 1995). In a confirmatory factor analysis study by Davis and De Guzman (2022), the HPLP

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and its psychometric dimensions were scrutinized for their reliability and validity in measuring the health-promoting behaviors of nursing students. Although the study drew out a recommendation for a 12-factor model, the 6-factor model demonstrated strong evidence of reliability and validity. The 52-item scale comprised of its dimensions (spiritual growth, interpersonal relations, nutrition, physical activity, health responsibility, and stress management) construe to further examining health-promoting behaviors of college students. The HPLP dimensions provided a framework for evaluating the various aspects of health-promoting behaviors that college students engage in on a habitual basis. In the forthcoming paragraphs, each dimension of the HPLP is provided with relevant references to substantiate the factors, demonstrated on how college students are immersed with the factors in a habitual basis.

On the subject of physical activity, an analysis by Van Sluijs *et al.* (2021) has documented that young individual between the ages of 10-24 years old, which is approximately 81% of adolescents in the world, are associated with a decline in physical activity thus adverse effects are associated with its gradual decline. Silva *et al.* (2022) conducted a systematic review to identify the barriers that hinder university students' engagement in physical activities. The findings of their study revealed that lack of time, lack of motivation, and a dearth of accessible places are the primary hindrances to physical activity. Sánchez- Hernando *et al.* (2021) further assert that the rise of the digital age has exacerbated this issue, as students increasingly spend more time on screens, leading to a reduction in daily physical activity.

With regards to the nutritional needs of college students, it is common to have recently progressed from adolescence to adulthood and to be in a state of relative youth and good health. This may result in a tendency to overlook the importance of maintaining good health (Jang, 2016 & Chao, 2023). Consequently, students may consume non-nutritious food items. Additionally, the transition to university life, with its busy and demanding schedule, may prompt students to turn to easily accessible, ready-to-eat meals such as fast food, canned goods, or instant noodles. In a 2022 study conducted by Grajek *et al.*, found that technological and cultural advancements have brought about a shift in dietary habits, which has resulted in the adoption of new food choices and preferences. The fast-paced lifestyle, the pursuit of self-actualization, and resulting overstimulation and lack of time have contributed to an increase in the consumption of high-calorie and processed foods.

In addition, spiritual growth is considered in the assessment of the holistic health-promoting lifestyle of an individual, especially in college students. This pertains to an individual's development is characterized by their capacity to transcend, connect, and foster growth. The process of spiritual growth includes the realization of one's full potential, the identification of one's sense of purpose, and the pursuit of one's life goals (Walker *et al.*,

1996). Spiritual growth, therefore, is an individual's self-reflection, learning, and growth. Spiritual intelligence influences an individual's problem-solving capacity and general goal setting (Emmons, 2000, Das & Sahoo, 2023) which are beneficial cognitive factors that sustain health-promoting behaviors for college students. The holistic importance of spirituality is admitted in equipping college students to have elevated capacities for resolving and managing stress, having a realistic perception of self, and dealing with everyday events, positively (Sogolittappah, *et al.*, 2018 & Joseph *et al.*, 2021).

More to the subject is interpersonal relations indicating a healthy lifestyle. Interpersonal relationships formed in school are considered the particular social context affecting the development of college students. (Jiang *et al.*, 2021). According to the results from the study of Sun (2023), interpersonal relationships positively correlate with safety awareness and college student planning within college students. This enables a formation of positive psychological resolve significantly affecting their attention, their management of social anxiety, and overall positive attitude in dealing with their emotions.

In the matter of health responsibility, according to Walker *et al.* (1996), health responsibility refers to an individual's obligation to take charge of their own well-being. This involves being accountable for one's health and adopting a proactive approach towards maintaining it. In essence, health responsibility requires individuals to recognize that they play a crucial role in promoting their own health and that it is their responsibility to do so. It is, therefore, imperative that individuals take the necessary steps to safeguard their health by making informed decisions and engaging in healthy behaviors. Study suggests that it is generally attributed to females being more health-conscious and perceived as more responsible. This claims that male adolescents enhance their health-promoting habits, including regular health checkups, maintaining a balanced diet, practicing activities like yoga and meditation, and avoiding health risks, to improve both physical and mental well-being (Bishnoi *et al.*, 2023).

Furthermore, concerning stress management among university students, findings from a 2019 survey by the American College Health Association reveal a significant portion of students experiencing heightened stress levels, with 34.2% identifying stress as a major obstacle to their learning. This heightened stress can escalate into severe mental health challenges such as anxiety, depression, and self-harm (Silver, 2019). The distinct differences in lifestyle often have implications across demographic groups, including gender, department, and year level. The present study aims to identify the lived lifestyle of college students, including their adherence to healthy lifestyle dimensions, and analyze the significant differences across each demographic group. Such an integrative approach has the potential to inform interventions and direct programs aimed at promoting health. AlFLayyeh *et al.* (2023) claimed that lifestyle greatly impacts college students' health yet receives inadequate global attention.

Further research revealed a significant connection between college students' academic achievements and a healthy lifestyle (Al-Momani, 2021). Corresponding inhibitions to practicing health-promoting behaviors are necessary to be addressed to render college students capable of longer run after university. Therefore, it is imperative to set intentional objectives to address this issue, starting with local initiatives. Schools can organize events and activities that encourage and support students in leading healthy lives. Teaching health-related topics in college settings is a cost-effective way to help students adopt healthy lifestyles, given their developmental stage. The significance of this study extends beyond college students to psychology practitioners, counselors, and other stakeholders. The goal is to promote human-focused welfare, and the results of this study can be integrated into the university's community engagement agenda in the Davao Region to inform future operational plans. Identifying the population that needs interventions can reinforce the dimensions of healthy lifestyles, leading to a consolidated approach to achieving this goal. Finally, the data and findings of the present study can be utilized to make psychological recommendations for college students' lifestyles.

**Research Objectives**

The course of the study aimed to garner data that will meet the objectives, as follows.

1. To determine the demographic distribution of the study, in terms of:
  - 1.1 Gender
  - 1.2 Department
  - 1.3 Year Level
2. To draw out the level of health-promoting lifestyle profile (HPLP) of the respondents.
  - 2.1 Spiritual Growth
  - 2.2 Interpersonal Relations
  - 2.3 Nutrition
  - 2.4 Physical activity
  - 2.5 Health responsibility
  - 2.6 Stress management
3. To assess the significant difference between the Health-Promoting Lifestyle Profile of college students, in terms of:
  - 3.1 Gender
  - 3.2 Department
  - 3.3 Year level

**MATERIALS AND METHODS**

**Research Respondents**

The study exclusively involved college students from the university in Davao Region, enrolled for the second semester of the school year 2023-2024. The researchers utilized a simple random sampling technique, commonly employed in making statistical inferences about a population (Mohajan, 2024). Moreover, the simple random sampling method allowed the researchers to statistically measure a subset of individuals selected from a larger group or population to approximate a response from the entire group. A total of 350 college students were included in the study corresponding the sample size through Slovin's formula for a 5% margin of error with a 95% level of confidence with a total population of 3,868 college students in the premise.

**Research Instrument**

The present study employed the Health-Promoting Lifestyle Profile II (HPLP II) as a primary assessment tool to gauge health-promoting behavior. The 52-item questionnaire consisted of six dimensions, namely spiritual growth, interpersonal relations, nutrition, physical activity, health responsibility, and stress management. Responses to each item were rated on a 4-point scale (4 = Routine, 3 = Sometimes, 2 = Often, 1 = Never), with higher scores indicating more frequent engagement in health-promoting behavior among the college students. Developed by Walker, Sechrist, and Pender in 1995, HPLP II has undergone extensive reliability and validity testing, with results consistently showing its refined psychometric properties (Guzman, 2022). The researchers were eager to request authorization from the author to employ the material in their study. Consequently, followed through by composing a message sent via electronic mail (e-mail). Moreover, the researchers conducted a pilot study on a sample of 50 respondents to evaluate the contextualized relevance of HPLP-II in the Philippine context, specifically in the university setting in the Davao Region. To ensure the internal consistency of the questionnaire, the researchers computed Cronbach's Alpha for each item, with the coefficient reaching 0.941, indicating high reliability. A Cronbach's Alpha coefficient closer to 1 is indicative of a higher level of internal consistency. Table 1 shows the index used to evaluate the mean scores of the dimensions conglomerate to HPLP-II of the college students at the university in Davao Region. The mean interval is displayed in the first column, while its

**Table 1:** Index component to Health-Promoting Lifestyle of College Students

Mean Interval	Description	Interpretation
3.26-4.00	Routinely	The health-promoting lifestyle is met routinely.
2.51-3.25	Sometimes	The health-promoting lifestyle is met sometimes.
1.76-2.50	Often	The health-promoting lifestyle is met often.
1-1.75	Never	The health-promoting lifestyle is met never.

descriptive equivalence for interpretation is shown in the second and last columns. The dimensions of the scale were employed as the basis for factors requisite to a healthy lifestyle that are observed for presumptive differences in gender, year level, and department to be illustrated in the following tables that address the objectives of the study.

**Design and Procedure**

The researchers esteem its objectives and the information sought in the category of quantitative research, construed in its nature a descriptive-comparative correspondence: a statistical method focused on arranging, analyzing, interpreting, and presenting numerical data. Quantitative research is concerned with quantifying and explaining a phenomenon more objectively. Moreover, the ability to conduct quantitative research in huge populations or under well-regulated circumstances is a significant advantage (Mohajan, 2020). The researchers accumulated relevant literature and utilized validated questionnaires sourced from prominent researchers, Walker *et al.* (1995), focusing on health-promoting lifestyle behaviors of people. Data collection involved a dual approach: traditional distribution of printed questionnaires and the utilization of modern technology through Google Forms, ensuring accessibility and ease of participation for respondents. To uphold ethical standards, the researchers obtained permission letters signed by the adviser and endorsed by the Dean of the university before administering the questionnaires. Additionally, participants were provided with letters outlining the research’s ethical considerations. Following data collection, the researchers systematized and analyzed the gathered information using JAMOVI to conduct comprehensive analyses aligned with the study’s primary objectives.

**Statistical Treatment**

Pertinent to the quantitative approach, the researchers transcribed the data from the resolved questionnaires using JAMOVI, a statistical software, to realize the significant differences among independent variables (gender, year level, department) and the dependent variable (HPLP-II). Statistical methods that were carried out for the succession of the study were also assessed, as follows: The average (mean) from the collected resolved questionnaires were analyzed per dimension of the Health-Promoting Lifestyle Profile of the college students. The mean of every dimension discloses the data for the first objective of the study which attests to the levels of health-promoting behaviors of the respondents. Moreover, in this study, the standard deviation follows the mean for every dimension and precedes to identifying differences within the independent variables (IV). This allowed the data to ascertain the intervals of the IV - within the genders, departments, and year levels - and the dispersed values concerning the mean. The researchers followed the sample size requirement for the field. The consideration of the total college population consisted of 3,868 college students which required a sample size of

350 respondents, with a confidence level of 95% and a margin error of 5% for the representation. The course of analysis was addressed for the Shapiro Wilk p, which is a hypothesis test that determines the normality of the data inputs. The researchers were able to analyze the data and demonstrated the normal distribution with a Shapiro-Wilk  $p = <0.001$  corresponding to the criteria for a parametric test. Consequently, the ANOVA particularly tested the differences between the means of the HPLP-II of the different classifications of populations. More to the procedure, the data were subjected to a post-hoc test. Thus, the Tukey’s Honest Significant Difference (HSD) test was selected as an appropriate method for this purpose. The HSD test was administered to determine any statistically meaningful differences among the variables. This post-hoc test is commonly used to compare the means of multiple groups and is known for its high level of accuracy and reliability. The findings of this analysis will be crucial in interpreting the results of the study and drawing valid conclusions.

**RESULTS AND DISCUSSION**

**Demographic Profile of the College Students**

The study utilized the HPLP survey questionnaire to gather relevant data to address the research questions and objectives. The survey was administered to a diverse group of participants to ensure that the demographic distribution of the study was representative of the target population. The demographic distribution report presents information on the characteristics of the 350 respondents. Table 2 illustrates how individuals are distributed based on gender, department, and year level. Respectively, it indicates that 44.3% identify as male, 53.1% as female, and 2.6% as LGBTQ+. This suggests

**Table 2:** Frequency Distribution of Gender, Department, and Year Level

Profile	f	%
<b>Gender</b>		
Female	155	44.3 %
Male	186	53.1 %
LGBTQ+	9	2.6 %
<b>Department</b>		
DTP	48	13.7 %
DBA	52	14.9 %
DTE	72	20.6 %
DAS	59	16.9 %
DCJE	91	26.0 %
DAE	28	8.0 %
<b>Year Level</b>		
Second year	155	44.3 %
First year	118	33.7 %
Third year	41	11.7 %
Fourth year	36	10.3 %

that most respondents identify as male or female, while a smaller percentage identifies as LGBTQ+. Similarly, the survey was disseminated to all departments of the university, and the findings indicated that the Department of Technical Programs (DTP) garnered 48 respondents, accounting for 13.7% of the study; the Department of Business Administration (DBA) recorded 52 respondents, representing 14.9% of the total number of respondents; meanwhile, the Department of Teacher Education (DTE) had 72 respondents, making up 20.6% of the overall representatives of the study. Moreover, the Department of Arts and Sciences (DAS) recorded 59 respondents, accounting for 16.9% of the total number of respondents. The Department of Criminal Justice Education (DCJE) had 91 respondents, which is equivalent to 26% of the total number of respondents. Lastly, the Department of Accounting Education (DAE) recorded 28 respondents, accounting for 8% of the overall representatives in the study.

Furthermore, the respondents categorized by their year level as follows: with 155 individuals representing the second-year students, making up the largest group at 44.3% of the total number. The subsequent group comprised of first-year students, with 118 respondents, representing 33.7% of the respondents. The third-year students accounted for 41 respondents, which is 11.75% of the total number. Lastly, fourth-year students totaled 36 individuals, representing 10.3% of the respondents. Levels of Health-Promoting Lifestyle of College Students The data presented in Table 3 represents the mean ( $\bar{x}$ ) per-indicator obtained from the responses of the population's representatives. The data is derived from the six subscales of the Health-Promoting Lifestyle Profile, which serve as indicators of health-promoting

behavior. These subscales include health responsibility, physical activity, nutrition, spiritual growth, interpersonal relations, and stress management. The subscales have been identified as reliable measures of health-promoting behaviors and provide a comprehensive understanding of the factors that contribute to healthy living. The scoring interpretations of the subscales are determined by employing the scale that was devised by Walker *et al* (1995).

The subscale showing the highest level ( $\bar{x} = 3.08$ ,  $SD=0.510$ ) in the survey results was the respondents' spiritual growth. This suggests that the practice of spiritual growth is prevalent among college students attending the university in the Davao Region. The dimension is defined by an individual's development in transcending, connecting, and developing. Such development encompasses the maximization of one's potential, the discovery of a sense of purpose, and the pursuit of one's life goals (Walker *et al*, 1996). The findings imply that practicing spiritual growth has a positive impact on the mental health, healthy minds, and quality of life of college students, as noted by Satpathy and Samanta (2020). Furthermore, the results indicate that college students have developed the necessary skills to manage stress, possess a realistic perception of self, and can handle everyday events more effectively, as per Sogolittapph *et al*. (2018) and Joseph J *et al*. (2021). Notably, spiritual care is a challenging area to learn and practice (Cone & Giske, 2017; Rykkje *et al*, 2021; Weathers *et al*, 2016). However, incorporating spiritual intelligence into the curriculum can be a deliberate effort to ensure success (Das & Sahoo, 2023) and promote health-promoting behaviors that sustain the lifestyles of college students.

**Table 3:** Health-Promoting Lifestyle Profile of College Students

Subscale	( $\bar{x}$ )	Std. Deviation	Description
Health responsibility	2.17	0.630	The health-promoting lifestyle is met often.
Physical Activity	2.42	0.623	The health-promoting lifestyle is met sometimes.
Nutrition	2.51	0.506	The health-promoting lifestyle is met sometimes.
Spiritual Growth	3.08	0.510	The health-promoting lifestyle is met sometimes.
Interpersonal Relations	2.89	0.447	The health-promoting lifestyle is met sometimes.
Stress management	2.71	0.444	The health-promoting lifestyle is met sometimes.
HPLP overall mean	2.63		The health-promoting lifestyle is met sometimes.

On the other hand, the findings of the study indicate that the respondents demonstrated a lack of concern for health responsibility ( $\bar{x} = 2.17$ ,  $SD = 0.630$ ). Health responsibility, as defined by Walker *et al*. (1996), pertains to an individual's sense of responsibility for their own well-being. These results suggest that participants only occasionally prioritized health-promoting factors, including their attention to health education and professional assistance for their health status. According to Chao (2023), this phenomenon may be attributed to the perception of college students regarding their young

and healthy bodies, leading them to neglect their health. The over-all mean reveal that health-promoting behaviors are met sometimes ( $\bar{x} = 2.63$ ) among college students, indicating that their health profile is frequently, albeit not consistently, attended to. It is common among adolescents to encounter impediments when it comes to sustaining a healthy lifestyle, as Tomy *et al* (2019) have noted. Stress has been identified as the most significant barrier, followed by diet, for college students. In addition, college students are known to have high stress levels, inadequate sleep, unhealthy dietary habits, and sedentary

lifestyles (Alzamil *et al*, 2019, Almutairi *et al*, 2018, and Al-Qahtani, 2022). Research has shown that the absence of physical activity can have a proportional impact on one's health, mood, and stress management (Schultchen, 2019) all of which make it challenging to engage in health-promoting behavior due to the ripple effect from dimension to dimension.

The present study has produced significant antecedents regarding the health-promoting routines and behaviors of college students. Based on these findings, health interventions can be strategically targeted towards dimensions that are susceptible to low levels of

engagement in such habits. By implementing interventions derived from the study, it is possible to address the global issue of neglected health habits among college students (AlFLayyeh, *et al.*, 2023) starting in the locale.

### Significant Differences in HPLP on Different Demographics

An analysis through ANOVA was performed to investigate the extent to which the demographic groups (independent variables), Gender, Department, and Year Level affect the Health-Promoting Lifestyle Profile of college students in the university.

**Table 4:** Significant Differences in HPLP on Different Demographics

	Sum of Squares	df1	df2	Mean Square	F	P	$\eta^2$
Gender	3.06	2	22.3	1.531	10.2	<0.001	0.056
Department	2.21	3	99.5	0.736	4.82	0.003	0.040
Year level	4.76	5	135	0.952	6.52	<0.001	0.087

The results revealed in Table 4 found significant differences between the different demographic groups and their varying significant effects to HPLP. Respectively, in terms of Gender, the significant difference in HPLP was determined by  $F(2, 22.3) = 10.2, p < 0.001$  with an effect size, eta-squared ( $\eta^2$ ) 0.056, indicating a small size effect. Moreover, the significant differences in Department reported an  $F(3, 99.5) = 4.82, p = 0.003$  with an effect size, eta-squared ( $\eta^2$ ) 0.040, indicating a small size effect. Furthermore, the Year Level differences was revealed by an  $F(5, 135) = 0.952, p < 0.001$  with an effect size, eta-squared ( $\eta^2$ ) 0.087 indicating a medium size effect. The data indicates that Year Level is the most influential demographic profile of the respondents. This finding is consistent with the research conducted by Marendi *et al* (2024), which demonstrated that older college students are better equipped to cope with college stressors than their younger counterparts. As a result, higher-year students are better able to manage the challenges associated with college life, indicative of better health-promoting practices.

In 2010, Diez and Fortis conducted a study to determine the socio-demographic variables that predict healthy behaviors. The research revealed that interventions aimed at promoting healthy behaviors should be tailored to each demographic group as they exhibit different

characteristics that influence their health-promoting behavior. Additionally, a study by Anderson (2023), discovered that distinct lifestyle patterns exist among college students. Moreover, Castro *et al* (2020) addressed that a proportion of college students in the university have higher levels of sedentary lifestyle comparable to the total population of adolescence and young adults, suggesting a precedence of varying lifestyles from different demographic groups.

Nevertheless, it is imperative to conduct further research to gain a deeper understanding of the factors that significantly influence the Health-Promoting Lifestyle Profile (HPLP) of college students. A comprehensive analysis has a possibility to determine which factor can report a large effect on HPLP of college students.

Furthermore, subsequent to the ANOVA, the study tests the differences between the means of the different classification by demography, thus evaluated through the Tukey's Honest Significant Difference (HSD) post-hoc test, as follows.

In Table 5, a gender-based association of Health-Promoting Lifestyle Profile (HPLP) reported expounded the results of its significant difference ( $p < 0.001$ ) in HPLP. The result of the study identified prominent mean difference between Male and Female (0.175\*\*\*), and Male and LGBTQ+ (0.327\*).

**Table 5:** HPLP differences in terms of Gender

		Male	Female	LGBTQ+
Male	Mean difference	-	0.175***	0.327*
	p-value	-	<.001	0.038
Female	Mean difference		-	0.152
	p-value		-	0.484
LGBTQ+	Mean difference			-
	p-value			-

In adolescence, different genders associate themselves with different habits, challenges, and routines that embody their lifestyle (Bishnoi, *et al*, 2023). The practices they engage in at this stage, including their health-promoting behaviors, may be enduring throughout adulthood. More to the claims of Bishnoi *et al* suggests that male adolescents enhance their health-promoting habits, including regular health checkups, maintaining a balanced diet, practicing activities like yoga and meditation, and avoiding health risks, to improve both physical and mental well-being. Male university students typically exhibit healthier lifestyles, characterized by increased exercise and better stress management, while female students prioritize stronger relationships (Núñez *et al.*, 2020). Moreover, Mustafa *et al.* (2021) highlights a disparity in physical activity levels between genders, with males showing a greater tendency to engage in regular physical activity, such as exercising five times a week and achieving their target heart rate during workouts, compared to females. In addition, the difference suggests precedence in

the study of Singh R, B., (2021), as there is a notable difference in spirituality between working females and males. The research indicates that males generally exhibit lower levels of spirituality compared to females. However, despite this difference, the study found that the overall life satisfaction levels of working males are comparable to working females, who tend to have higher levels of spirituality. According to (Craft, Carroll, & Lustyk, 2014), it is important to examine the quality of life, physical activity, and motives of various genders. More to the study, the reasons for physical activity may vary according to gender and may include weight loss, increased self-esteem, psychological well-being, and maintaining physical fitness. Additionally, to achieve the best health outcomes for each gender, the gender difference needs to be differentiated between different types of physical activity, including strength, endurance, flexibility, and balance. In Table 6, the departmental classification of HPLP reported a significant difference ( $p < 0.001$ ) elaborated through Tukey's HSD particularly assessing the variations in the mean values of every department.

**Table 6:** HPLP differences in terms of Department

		DTP	DBA	DTE	DAS	DCJE	DAE
DTP	Mean difference	-	-0.0339	-0.0783	0.0941	-0.243***	-0.00333
	p-value	-	0.998	0.881	0.803	0.005	1.000
DBA	Mean difference		-	-0.044	0.1280	-0.210*	0.03058
	p-value			0.988	0.492	0.022	0.999
DTE	Mean difference			-	0.1725	-0.165	0.7500
	p-value			-	0.108	0.070	0.951
DAS	Mean difference				-	<0.338***	-0.09746
	p-value					<.001	0.877
DCJE	Mean difference					-	0.24011*
	p-value					-	0.045
DAE	Mean difference						-
	p-value						-

The most identifiable difference was found in Department of Criminal Justice Education (DCJE) and Department of Arts and Sciences (DAS) (-.338\*\*\*), followed by DCJE and Department of Technical Programs (DTP) (-0.243\*\*), also with DCJE and Department of Accounting Education (DAE) (0.24011\*), and lastly with DCJE and Department of Business Administration (DBA) (-0.210\*). A consistent difference was found in DCJE. According to the institutional objectives for the department (2023), the DCJE program integrates learning focused on the mission to equip the students in delivering efficient skills in crime prevention, crime detection, and investigation, harbingers to physical training and activities of which other departments (DAS, DTP, DAE, DBA) do not consider as priority for conduct. The goals of various programs offered at the college are distinguished by their focus on interrelations, communication, and research. For example, the DTP

program seeks to promote technological competency by imparting training on technological disciplines and developing information technology (IT) skills among students. Similarly, the DAE program aims to affiliate students with professional organizations and provide them with financial and business education components related to accounting. The DBA program emphasizes technological advancements and entrepreneurial facets, and it immerses college students in communication and technology-focused learning ventures. A study conducted by Castro and colleagues (2020) revealed that the sedentary lifestyle of college students is primarily caused by increased computer use, which is pertinent to the objectives of DAS, DTP, DAE, and DBA. In addition, studies provide evidence that physically active students had a superior quality of life than their non-active counterparts; in this example, sports-inclined departments were distinguished from students in other

departments. (Çiçek, 2018 & Alothman, *et al.* 2024). Recent studies indicate that physical inactivity can have a significant impact on an individual's health, mood, and stress management. The interrelatedness of these dimensions creates a ripple effect, which can further compound the challenges of engaging in health-promoting behavior. Schulthen (2019) highlights the importance of physical activity in maintaining an overall healthy lifestyle. Furthermore, the extreme difference in DCJE and DAS attested the results of the study of Gilan *et al.* (2021), wherein medical sciences students have the highest HPLP score on interpersonal relations and physical activity addressed as the lowest attended health-promoting behavior. Researchers of the present study infer that the literature is pertinent to the representatives from the Bachelor of Science in Psychology, under DAS. In a recent study by Edelmann *et al.* (2022), it was found that sedentary behaviors among individuals in different fields of study were distinctively organized. These fields

include natural sciences, mathematics, social sciences, media, medicine, and education, among others. The study showed that such behaviors were primarily characterized by extended periods of sitting during lectures, seminars, and studying, with minimal physical exertion. The findings of this study suggest that the nature of academic work may contribute significantly to a sedentary lifestyle across different fields. In addition to Çiçek, (2018) & Alothman, *et al.* (2024), their study presented evidence that physically active students had a superior quality of life than their non-active counterparts; in this example, sports-inclined departments were distinguished from students in other departments.

Also, the data presented in Table 7 reveals a significant variance in the Health-Promoting Lifestyle Profile (HPLP) based on the classification of year level ( $p = 0.003$ ). The table reveals significant mean differences between Second Year and First Year ( $- 0.132 *$ ), and within Fourth Year and Second Year ( $-0.2124 *$ ).

**Table 7:** HPLP differences in terms of Year Level

		Second year	First year	Third year	Fourth year
Second year	Mean difference	-	-0.132*	0.0121	-0.2124*
	p-value	-	0.031	0.998	0.018
First year	Mean difference		-	0.1439	-0.0806
	p-value		-	0.178	0.700
Third year	Mean difference			-	-0.2245
	p-value			-	0.059
Fourth year	Mean difference				-
	p-value				-

The result of the study corroborates the claim that different year levels encounter distinct phases in life, necessitating different tasks, academic performance, and capacity, and levels of pressure. Additionally, Parande *et al.* (2021) report that age is a significant factor in stress management and health responsibility. Furthermore, other studies reveal that the year of study is a contributing factor to health-promoting lifestyles (Alzahrani *et al.*, 2019, Muller, El-Ansari, El, 2022).

### CONCLUSIONS

The study examined the Health-Promoting Lifestyle profile of college students in a university in the Davao Region. Demographic distribution of respondents was ensured through simple random sampling to uphold the validity of representation. Demographic profiles such as gender, department, and year level categorized the respondents. The survey data revealed that the male demographic comprised the highest number of respondents, while the LGBTQ community had the lowest representation. The Department of Criminal Justice (DCJE) had the highest number of respondents among departments, whereas the Department of Accounting Education (DAE) had the fewest. Additionally, second-year students constituted the highest number of respondents, with fourth-year students having the lowest representation. The study results

indicated that college students exhibit moderate tolerance towards practicing Spiritual Growth. This suggests a developing sense of purpose in their pursuits and effective stress management, contributing to a positive outlook on daily circumstances. However, college students tend to pay less attention to their Health Responsibilities, a common trend among young and healthy adolescents who may overlook such responsibilities. While the overall Health Promoting Lifestyle Profile (HPLP) of students in the region is moderately met, routine practice is lacking. Recognizing the significant impact of a health-promoting lifestyle on current and future health underscores its importance in student development. The findings of the study can inform future interventions targeting the assessed dimensions. Moreover, the study concluded that significant differences exist in health-promoting lifestyles among college students, particularly concerning Gender, Department, and academic Year Level. Among demographic groups, Year Level was identified as the most influential profile affecting HPLP among college students. Additionally, health-promoting behaviors such as health responsibility, physical activity, nutrition, interpersonal relations, spiritual growth, and stress management were found to be influenced by the demographic profiles of respondents, indicating that different characteristics lead to varied habitual practices.

## RECOMMENDATIONS

The study effectively fulfilled its objectives by investigating the Health-Promoting Lifestyle Profile of college students in a university located in the Davao Region. However, there are areas where further attention and analysis could be beneficial for future endeavors. For students and readers, increasing awareness of health-promoting behaviors can serve as motivation to prioritize their well-being. Understanding the significant impact these behaviors can have on long-term health, starting from college years and extending into adulthood, underscores the importance of cultivating healthy habits regardless of individual differences in approach. For the university and its organizations, the study's findings offer valuable insights into the lifestyle patterns of the student population. This information can inform the development of targeted interventions aimed at promoting healthy behaviors among students. Recommendations can be directed towards the university's Community Extension Center and other relevant departments to design programs tailored to meet the specific needs identified in the study. To future researchers, while the study focused on the dimensions of the HPLP-II, there remains a need to explore other factors influencing students' engagement in health-promoting behaviors. Additionally, the findings suggest that demographic factors may not be the sole determinants of such behaviors, highlighting the importance of considering individual traits and characteristics. Future research could delve deeper into the relationship between personality types and health-promoting lifestyles to provide a more comprehensive understanding of these dynamics. Furthermore, future studies could expand on the findings by examining how health-promoting behaviors relate to various aspects of students' lives, such as academic performance and overall well-being. Understanding these connections can provide valuable insights for developing holistic approaches to support student success and thriving.

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