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Personality Types and Learning Styles of College Students in Baguio City

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Abstract

Personality and learning preferences are key psychological factors that shape students' academic experiences and responses to instruction. This study examined the relationship between personality types and learning styles among college students at Pines City Colleges in Baguio City as a basis for an enhancement plan. Specifically, it identified students' dominant personality types, determined their preferred learning styles using the VARK model (Visual, Auditory, Read/Write, Kinesthetic), and tested the relationship between these variables. A descriptive-correlational research design was employed, involving 290 college students selected through incidental sampling during the Academic Year 2020–2021. Data were collected using the Glazer-Stress Control Lifestyle questionnaire for personality classification and the VARK questionnaire for learning styles. Frequency counts, rank distribution, and Pearson's correlation coefficient were used for data analysis. Results showed that most students exhibited Type A2 personality traits, characterized by competitiveness, time consciousness, and strong achievement orientation. In terms of learning styles, auditory preference emerged as the most dominant, although students demonstrated varied learning modalities. Statistical analysis revealed no significant relationship between personality type and learning style. These findings suggest that personality does not necessarily determine how students prefer to learn. Therefore, educators are encouraged to adopt flexible, multimodal teaching strategies and promote personality awareness to support diverse learning needs and enhance student development.

Keywords: personality type, learning styles, college students, VARK Model, Pines City Colleges, enhancement plan, descriptive-correlational

INTRODUCTION

Throughout the centuries, human behavior has been widely studied due to its complexity. Despite extensive research, it remains a subject that continues to challenge scholars, particularly in understanding how personality influences the way individuals learn. Personality is a key aspect of human behavior that shapes how individuals think, feel, and act, and it may also play a role in determining how they approach learning tasks.

Understanding personality types enables individuals to recognize their own preferences as well as those of others, including similarities and differences in behavior. Personality types are useful in explaining how individuals lead, communicate, collaborate, and make decisions. In educational settings, this understanding can support more effective interaction between teachers and students and contribute to improved learning environments.

Personality knowledge also has practical applications in various contexts such as schools and workplaces, where it can help resolve conflicts, enhance communication, and improve interpersonal skills. In the classroom, recognizing students' personality traits may assist educators in designing instructional

strategies that are more responsive to learners' needs.

In addition to personality, emerging educational technologies such as generative artificial intelligence (AI) play an increasingly important role in the learning process. Generative AI tools can support students in accessing information, enhancing understanding, and developing critical thinking skills through interactive and personalized learning experiences. These technologies allow learners to engage more actively with content, thereby influencing their attitudes toward learning and academic performance. As emphasized in recent studies, the integration of AI in academic classrooms can significantly shape students' learning experiences, particularly in fostering critical thinking and positive learning attitudes (Villarama et al., 2025).

Several studies have examined the relationship between personality types and learning styles across different populations. For instance, some studies have found a significant relationship between personality traits and learning preferences, suggesting that personality may influence how students learn. However, findings across studies remain inconsistent, with some reporting significant relationships while others show weak or no association (Ngatirin & Zainol, 2020; Chinaveh, 2014).

Despite these existing studies, a clear gap remains. There is limited research examining the relationship between Type A/B personality classifications and VARK learning styles within the context of Philippine higher education, particularly in institutions such as Pines City Colleges. Moreover, few studies have used such findings as a basis for developing practical enhancement plans that can guide teaching strategies and student support initiatives.

In view of this gap, the present study aims to determine the relationship between personality types and learning styles of college students at Pines City Colleges in Baguio City. Specifically, it seeks to identify the dominant personality type of students, determine their preferred learning styles (visual, auditory, reading/writing, and kinesthetic), examine the relationship between these variables, and propose an enhancement plan based on the findings.

LITERATURE REVIEW

Theoretical Foundations of Personality Types. The Type A and Type B personality theory, originally proposed by Friedman and Rosenman (1974), classifies individuals based on observable behavioral patterns. Individuals with Type A personality are typically described as competitive, time-conscious, achievement-oriented, and prone to impatience, whereas Type B individuals are generally more relaxed, patient, and less driven by time pressure (Friedman & Rosenman, 1974). While this dichotomy provides a useful framework for understanding behavioral tendencies, subsequent studies suggest that these traits may have broader implications in academic contexts.

Empirical studies consistently highlight the association between Type A characteristics and higher levels of stress and performance-related behaviors. For instance, both Alnasir and Alfulij (2014) and Chinaveh (2014) reported that individuals with Type A tendencies exhibit significantly higher stress levels compared to their Type B counterparts. Moreover, Chinaveh (2014) found that personality type is significantly related to academic performance, suggesting that behavioral traits may influence how students respond to academic demands. Similarly, more recent studies (e.g., Ayeras et al., 2024) emphasize that stress-related personality characteristics can affect students' academic engagement and psychological well-being.

However, while these studies agree on the influence of personality on stress and achievement, they do not establish a consistent link between personality type and specific learning preferences. This suggests that personality may shape how students approach academic tasks rather than directly

determining how they prefer to learn. Thus, personality type is treated as a relevant independent variable in the present study.

Theoretical Foundations of Learning Styles. Learning styles refer to individuals' preferred ways of processing and organizing information, with the VARK model (Visual, Auditory, Read/Write, Kinesthetic) being one of the most widely used frameworks in educational research. This model assumes that learners have dominant sensory preferences that influence how they best absorb and retain information.

Despite its popularity, the concept of learning styles remains debated. Pashler et al. (2009) argued that there is limited empirical evidence supporting the effectiveness of aligning instructional methods strictly with learning style preferences. This critique suggests that while learning styles may describe preferences, they may not necessarily lead to improved academic outcomes when used as the sole basis for instruction.

Nevertheless, empirical findings across different contexts show both consistency and variation in learning preferences. Abidin et al. (2011) and Ngatirin and Zainol (2020) both identified visual learning as the most dominant modality among students, highlighting the importance of visual aids such as diagrams and charts. In contrast, Al-Zayed (2017) found that students often exhibit multimodal preferences, particularly combining visual and auditory learning. These contrasting findings indicate that learning styles are not uniform and may vary depending on context, discipline, and instructional exposure.

Recent studies further support the dynamic nature of learning preferences. For instance, Arquero et al. (2024) suggest that students adapt their learning strategies based on technological tools and learning environments, while Ayeras et al. (2024) highlight the role of psychological factors in shaping learning engagement. These findings imply that learning styles are flexible rather than fixed traits, reinforcing the need for diverse instructional approaches.

Learning Styles in Higher Education Context. Research in higher education highlights the diversity and contextual nature of learning preferences among college students. In the Philippine setting, studies present both converging and diverging findings. Magulod Jr. (2019) reported that students in applied science courses preferred visual and kinesthetic learning styles, whereas auditory learning was less dominant. Similarly, Carbonel (2013) found that visual learning was most preferred, followed by auditory and tactile modalities.

While these studies consistently identify visual learning as prominent, they differ in the ranking of other modalities, suggesting variability across disciplines and learning environments. More recent studies (e.g., Arquero et al., 2024; Ayeras et al., 2024) further emphasize that students' learning preferences are influenced by factors such as instructional delivery, digital platforms, and social interaction. This indicates that learning styles in higher education are shaped not only by individual preferences but also by contextual and environmental factors.

Collectively, these findings highlight the importance of adopting flexible and multimodal teaching strategies in tertiary education. They also justify the inclusion of learning styles as a key variable in the present study, particularly within the context of a specific institution.

Relationship Between Personality Types and Learning Styles. Some studies suggest a significant association between these variables. For example, Chinaveh (2014) found that personality traits are significantly related to academic performance, indicating that individual differences may influence how students respond to learning. However, other studies report mixed findings regarding the relationship between personality and learning styles (Ngatirin & Zainol, 2020).

In contrast, other studies present conflicting results. Ngatirin and Zainol (2020) found no

significant relationship between personality traits and learning styles, despite identifying visual learning as the dominant modality. This suggests that learning preferences may operate independently of personality characteristics.

Recent literature further complicates this relationship by emphasizing the role of contextual factors. Studies such as Arquero et al. (2024) indicate that learning behaviors may be more strongly influenced by environmental, technological, and social factors than by personality alone. These mixed findings highlight the lack of consensus in the literature and suggest that the relationship between personality and learning styles may vary depending on the framework, population, and context used.

METHODS

Research Design. This study employed a descriptive-correlational research design. The descriptive component was used to systematically identify and describe the dominant personality types and learning style preferences of the college students. According to Nassaji (2015), descriptive research focuses on describing characteristics of a population or phenomenon without manipulating variables. This approach is appropriate for the present study as it aims to present an accurate profile of students' personality classifications and learning styles.

The correlational component was utilized to examine the relationship between personality types and learning styles. As explained by Kabir (2016), correlational research is designed to determine the degree and direction of relationships between variables without establishing causation. This is particularly suitable for the study since it seeks to determine whether a significant relationship exists between personality type (Type A2, A/B, B2) and learning style preferences (Visual, Auditory, Read/Write, Kinesthetic), rather than to manipulate or control these variables.

The use of a descriptive-correlational design is therefore appropriate because the study involves naturally occurring variables that cannot be experimentally manipulated, such as personality traits and learning preferences. Moreover, this design allows for the simultaneous description of these variables and the analysis of their potential associations within a real-world educational setting. Hence, it provides a practical and methodologically sound approach to addressing the research objectives of the study.

Population and Locale of the Study. The respondents of the study consisted of college students enrolled at Pines City Colleges in Baguio City during the Academic Year 2020–2021. The total population consisted of college students, which served as the basis for determining the sample size. Using Slovin's formula with a 95% confidence level and a 0.05 margin of error, the required sample size was computed to be 287, which was rounded to 290 respondents to ensure adequacy.

The sample included students from different year levels and sex categories. The profile of the respondents is presented in Table 1.

Table 1
Profile of the Respondents

Demographics	N	%
Year Level		
First year	82	28.3
Second year	90	31.0
Third year	58	20.0
Fourth Year	60	20.7
Total	290	100.0 %
Sex		
Male	53	18.3
Female	237	81.7
Total	290	100.0 %

As shown in Table 1, the majority of the respondents were second-year students (31.0%), followed by first-year students (28.3%), fourth-year students (20.7%), and third-year students (20.0%).

In terms of sex, most respondents were female (81.7%), while males comprised 18.3%. This distribution reflects the actual student population of Pines City Colleges, where female students outnumber males.

The study employed incidental sampling, wherein respondents were selected based on their availability and willingness to participate. While this method allowed for efficient data collection, it may limit the generalizability of the findings, as the sample may not fully represent the entire population. Consequently, the results should be interpreted with caution, particularly when generalizing to other institutions or populations.

Research Instrument. To gather the necessary data, the researcher utilized two survey instruments: the Glazer-Stress Control Lifestyle questionnaire for personality classification and the Visual, Auditory, Read/Write, Kinesthetic (VARK) questionnaire for learning styles.

Glazer-Stress Control Lifestyle (Personality Instrument). The Glazer-Stress Control Lifestyle questionnaire was used to determine the personality type of the respondents. It was developed by Dr. Howard Glazer and is based on the Type A and Type B personality framework originally proposed by Friedman and Rosenman. This framework classifies individuals according to behavioral tendencies such as competitiveness, time urgency, and stress responsiveness.

The instrument consists of twenty paired statements, in which respondents are asked to choose the statement that best describes their behavior. Based on their responses, individuals are categorized into personality types such as Type A2, A/B, and B2.

In terms of validity, the instrument demonstrates content validity as it is grounded in an established theoretical framework widely used in behavioral and psychological research. Although the Type A/B personality model has been critiqued in clinical contexts particularly in predicting cardiovascular risk, it remains relevant in educational and behavioral studies for describing general personality tendencies.

VARK Questionnaire (Learning Style Instrument). The VARK questionnaire, developed by (Fleming, 2001), was used to assess the learning style preferences of the respondents. It is a self-report inventory consisting of 16 items with four response options corresponding to the four learning modalities: visual, auditory, read/write, and kinesthetic. The instrument is based on the assumption that learning preferences are multifaceted and vary across individuals. Each item allows respondents to select the option that best represents their preferred way of processing information, and responses are categorized into the four learning style subscales.

In terms of reliability, the VARK questionnaire has demonstrated acceptable internal consistency in previous studies. Based on Cronbach's alpha coefficients, the visual subscale has a reliability of 0.85, auditory 0.82, read/write 0.84, and kinesthetic 0.77. These values indicate that the instrument is sufficiently reliable for measuring learning style preferences.

Data Gathering Procedure. Prior to data collection, permission to conduct the study was secured from the appropriate authorities of Pines City Colleges. The researcher also ensured that ethical considerations were observed by informing the respondents of the purpose of the study and obtaining their voluntary consent.

The questionnaires were then distributed to the selected respondents using incidental sampling. The researcher provided brief instructions to guide the participants in answering the instruments. After completion, the questionnaires were collected, checked for completeness, and organized for data analysis.

Analysis of Data. The following tools were used to treat the data:

Frequency Count. This was used to determine the personality type and learning style of the college students.

Rank Distribution. This was used to determine the chronological order of the dominant learning style of the college students.

Pearson's Correlation Coefficient. This statistical tool was used to determine the relationship between personality type and learning style preference of the college students. Pearson's correlation is appropriate for this study as it measures the strength and direction of the linear relationship between variables. In this research, the variables were treated as quantitative measures, making Pearson's r suitable for determining whether a significant relationship exists between personality type and learning style. Correlation coefficient was interpreted as follows:

Table 2
Interpretation Table

r	Degree/Level	Strength
.90 – Above	Very High	Very strong
.70 – .89	High	Strong
.40 – .69	Moderate	Marked/Substantial
.20 – .39	Low	Weak
Below .20	Very Low	Very Weak

RESULTS

Dominant Personality Type of College Students. Personality types of the respondents are presented in terms of Type A2, Type A/B, and Type B2. Table 3 shows the distribution of respondents according to personality type. The majority of respondents were classified as Type A2 (56.2%, n = 163), followed by Type A/B (43.4%, n = 126), while only 0.4% (n = 1) were categorized as Type B2.

Table 3
Personality Types of the Respondents

Score	Personality	Frequency	Percentage
80 – 109	TYPE A2	163	56.2
60 – 79	TYPE A/B	126	43.4
30 – 59	TYPE B2	1	0.4
	Overall	**290**	**100%**

Learning Styles of College Students at Pines City Colleges in Baguio City. The following tables present the distribution of respondents' learning styles in terms of visual, auditory, reading/writing, and kinesthetic.

Table 4
Visual Learning Styles of the Respondents

Indicators	f	Rank
When using the Internet, I like interesting design and visual features.	133	1
If I need to find the way to a shop that a friend has recommended, I will use a map.	129	2
A website has a video showing how to make a special graph or chart. There is a person speaking, some lists and words describing what to do and some diagrams. I would learn most from seeing the diagrams.	123	3
I want to learn how to play a new board game or card game. I would use the diagrams that explain the various stages, moves and strategies in the game.	121	4
When choosing a career or area of study, these are important for me working with designs, maps or charts.	113	6
You want to save more money and to decide between a range of options. I would use graphs showing different options for different time periods.	113	6
I want to find out about a house or an apartment. Before visiting it, I would want a plan showing the rooms and a map of the area.	113	6
You want to save more money and to decide between a range of options. I would use graphs showing different options for different time periods.	112	9
I want to learn about a new project. I would ask for: diagrams to show the project stages with charts of benefits and costs.	112	9
I want to learn how to take better photos. I would use diagrams showing the camera and what each part does.	112	9
I prefer a presenter or a teacher who uses diagrams, charts, maps or graphs.	110	11.5
I have finished a competition or test, and I would like some feedback. I would like to have feedback using graphs showing what I achieved.	110	11.5
I have a problem with my heart. I would prefer that the doctor showed me a diagram of what was wrong.	109	13
I want to assemble a wooden table that came in parts (kitset), I would learn best from diagrams showing each stage of the assembly.	106	14
When I am learning I see patterns in things.	100	15
I want to learn to do something new on a computer. I would follow the diagrams in a book.	96	16

Visual Learning Style. Table 4 presents the frequency and rank of the visual learning style indicators. The highest-ranked items include preference for visual features in online materials (Rank 1), use of maps for navigation (Rank 2), learning through diagrams (Rank 3), and use of diagrams to explain processes (Rank 4).

Auditory Learning Style. Table 5 presents the frequency and the rank of the auditory learning style indicators. The highest-ranked items include preference for oral explanations of medical conditions (Rank 1), question-and-

answer interactions with teachers (Rank 2), learning from verbal advice (Rank 3), discussion when making decisions (Rank 4), and listening to explanations when learning games (Rank 5).

Table 5
Auditory Learning Styles of the Respondents

Indicators	f	Rank
I have a problem with my heart. I would prefer that the doctor described what was wrong.	141	1
I prefer a presenter or a teacher who uses question and answer, talk, group discussion, or guest speakers.	132	2
I want to assemble a wooden table that came in parts (kitset), I would learn best from advice from someone who has done it before.	130	3
I want to find out about a house or an apartment. Before visiting it, I would want a discussion with the owner.	128	4
I want to learn how to play a new board game or card game. I would listen to somebody explaining it and ask questions.	126	5
When using the Internet, I like audio channels where I can listen to podcasts or interviews.	125	6
I want to learn about a new project. I would ask for an opportunity to discuss the project.	124	7
I need to find the way to a shop that a friend has recommended. I would ask my friend to tell me the directions.	122	8.5
I want to learn how to take better photos. I would ask questions and talk about the camera and its features.	122	8.5
When choosing a career or area of study, these are important for me Communicating with others through discussion.	121	10.5
You want to save more money and to decide between a range of options. I would talk with an expert about the options	121	10.5
I have finished a competition or test, and I would like some feedback. I would like to have feedback from somebody who talks it through with me.	120	12
I want to find out more about a tour that I am going on. I would talk with the person who planned the tour or others who are going on the tour.	119	13
I want to learn to do something new on a computer. I would talk with people who know about the program.	118	14
When I am learning I like to talk things through.	115	15
A website has a video showing how to make a special graph or chart. There is a person speaking, some lists and words describing what to do and some diagrams. I would learn most from listening.	111	16

Reading / Writing Learning Style. Table 6 presents the frequency and rank of the reading/writing learning style indicators. The highest-ranked items include writing down directions for recall (Rank 1), reading printed materials such as brochures (Rank 2), reading itineraries (Rank 3), preference for written feedback (Rank 4), and reading written instructions (Rank 5).

Table 6
Reading / Writing Learning Styles of the Respondents

Indicators	f	Rank
I need to find the way to a shop that a friend has recommended. I would write down the street directions I need to remember.	142	1
You want to save more money and to decide between a range of options. I would read a print brochure that describes the options in detail.	136	2
I want to find out more about a tour that I am going on. I would read about the tour on the itinerary.	135	3
I have finished a competition or test, and I would like some feedback. I would like to have feedback using a written description of my results.	133	4
I want to learn how to take better photos. I would use the written instructions about what to do.	129	5
I have a problem with my heart. I would prefer that the doctor gave me something to read to explain what was wrong.	128	6
I want to learn to do something new on a computer. I would read the written instructions that came with the program.	125	7.5
I prefer a presenter or a teacher who uses handouts, books, or readings.	125	7.5
When I am learning I read books, articles and handouts.	122	9
I want to learn how to play a new board game or card game. I would read the instructions.	120	10.5
I want to find out about a house or an apartment. Before visiting it, I would want a printed description of the rooms and features	120	10.5
A website has a video showing how to make a special graph or chart. There is a person speaking, some lists and words describing what to do and some diagrams. I would learn most from reading the words.	118	12.5
I want to learn about a new project. I would ask for a written report describing the main features of the project.	118	12.5
I want to assemble a wooden table that came in parts (kitset). I would learn best from written instructions that came with the parts for the table.	112	14
When using the Internet, I like interesting written descriptions, lists and explanations.	111	15
When choosing a career or area of study, these are important for me using words well in written communications.	108	16

Kinesthetic Learning Style. Table 7 presents the frequency and the rank of the kinesthetic learning style indicators. The highest-ranked items include learning by observing actions in videos (Rank 1), using trial-and-error in computer tasks (Rank 2), use of applications and demonstrations (Rank 3), considering practical examples in decision-making (Rank 4.5), observing others before participating in activities (Rank 4.5), and learn how to take better photos (Rack 5).

Table 7
Kinesthetic Learning Styles of the Respondents

Indicators	f	Rank
A website has a video showing how to make a special graph or chart. There is a person speaking, some lists and words describing what to do and some diagrams. I would learn most from watching the actions.	137	1
I want to learn to do something new on a computer. I Would K) start using it and learn by trial and error.	136	2
When I am learning I use examples and applications.	132	3
You want to save more money and to decide between a range of options. I would consider examples of each option using my financial information	129	4.5
I want to learn how to play a new board game or card game. I would watch others play the game before joining in.	129	4.5
I need to find the way to a shop that a friend has recommended. I would find out where the shop is in relation to somewhere I know.	128	6
When choosing a career or area of study, these are important for me like applying my knowledge in real situations.	125	7
When using the Internet, I like videos showing how to do or make things.	122	8.5
I prefer a presenter or a teacher who uses demonstrations, models or practical sessions.	122	8.5
I have finished a competition or test, and I would like some feedback. I would like to have feedback using examples from what I have done.	119	10
I want to learn how to take better photos. I would use examples of good and poor photos showing how to improve them.	118	11.5
I want to find out about a house or an apartment. Before visiting it, I would like to view a video of the property.	118	11.5
I want to find out more about a tour that I am going on. I would look at details about the highlights and activities on the tour.	117	13
I want to learn about a new project. I would ask for examples where the project has been used successfully.	114	14.5
I want to assemble a wooden table that came in parts (kitset). I would learn best from watching a video of a person assembling a similar table.	114	14.5
I have a problem with my heart. I would prefer that the doctor used a plastic model to show me what was wrong.	111	16

Relationship Between Personality Type and Learning Style at Pines City Colleges in Baguio City. Table 8 presents the correlation coefficients between A2 personality type and the four learning styles. All correlation coefficients were not statistically significant (p > .05).

Table 8
Relationship Between A2 Personality type and the Learning Styles

Learning Style	A2 Personality Type		
	R	Sig. Level	Remarks
Visual	.006	.941	Not Significant
Auditory	.103	.191	Not significant
Reading/Writing	.020	.803	Not Significant
Kinesthetic	.028	.727	Not Significant

Table 9 presents the correlation coefficients between A/B personality type and the four learning styles. Similarly, all correlation coefficients were not statistically significant (p > .05).

Table 9
Relationship Between AB Personality Type and Learning Style

Learning Style	A2 Personality Type		
	R	Sig. Level	Remarks
Visual	.020	.821	Not Significant
Auditory	.165	.066	Not significant
Reading/Writing	.007	.935	Not Significant
Kinesthetic	.066	.460	Not Significant

No significant relationships were found between personality type and learning styles among the respondents.

Proposed Personality Type and Learning Style Enhancement Plan for College Students of Pines City Colleges. The enhancement program presented in Table 10 is specially designed for Pines City Colleges. It aims to enrich the personality of students and their learning styles in order to reinforce the teaching strategies of the faculty.

Table 10
Proposed Personality Type and Learning Style Enhancement Plan for College Students of Pines City Colleges

Key Result Area	Objectives	Strategies	Activities	Persons Involved	Time Frame
Personality Development	To enhance wholesome personality among the Pines City College students. To increase the awareness of the students about their personality type. To be effective in personal life as well as interpersonal interactions.	Develop a plan of action for improving weaknesses. Discussion about personality types/tests. Promote time management.	Psychological testing activities in the guidance center. Administration of personality test. Conduct webinars focusing on time consciousness.	All students enrolled in PSYCHO 101 (Understanding the Self)	Annually 1st Semester
Learning Style	To encourage the use of auditory focused teaching methods. To identify the preferred learning style/s To gain understanding of the learning styles	Stimulate the auditory learning style of the students. Introduce Glazer's questionnaire. Provide related handouts.	Synchronous lecture discussion and PowerPoint presentation with audio recording. Administer the questionnaire. Create mind map using their creativity.	All students	Every semester

DISCUSSION

The findings indicate that the majority of students at Pines City Colleges exhibit a Type A2 personality, suggesting a tendency toward

achievement orientation, competitiveness, and time urgency. This result is consistent with the Type A/B personality framework of Friedman and Rosenman, which characterizes Type A individuals as goal-driven and performance-oriented. Such traits may contribute positively to academic engagement and persistence. However, prior studies have also associated Type A characteristics with increased stress levels (Ayeras et al., 2024; Chinaveh, 2014), highlighting the need for institutional support mechanisms that promote students' psychological well-being alongside academic success.

In terms of learning styles, the findings suggest a preference for auditory learning, indicating that students tend to benefit from verbal explanations, discussions, and interactive instructional approaches. This finding is consistent with the study of Arquero et al. (2024), which reported that students adapt their learning modalities based on instructional contexts and learning environments, highlighting the importance of aligning instructional strategies with learners' needs.

This may reflect the continued influence of lecture-based teaching practices in higher education. Students' learning preferences can influence how effectively they engage with instructional materials, as suggested by studies on adaptive learning modalities (Arquero et al., 2024). While auditory strategies appear to be prominent, it remains important to consider the diversity of learning preferences by incorporating multimodal teaching methods to enhance overall learning effectiveness.

In a local context, Villarama et al. (2025) emphasized the role of emerging technologies, such as generative artificial intelligence, in enhancing students' engagement and critical thinking, highlighting the need for innovative and adaptive instructional approaches in higher education.

The study further revealed no significant relationship between personality type and learning style, indicating that students' learning preferences are not dependent on their Type A/B personality classification. This supports the view that learning styles may be shaped more by educational experiences and environmental factors rather than personality traits alone. Although some studies have reported associations using broader personality models, the present findings suggest that personality type, as classified in this study, is not a strong predictor of learning preferences.

Overall, the results emphasize the importance of adopting flexible and inclusive instructional strategies that accommodate varied learning styles, rather than relying on personality-based assumptions.

Recommendations. Based on the findings of the study, the following are recommended:

1. Guidance counselors may design and implement personality awareness and stress management programs to support students, particularly in managing achievement-related pressure and promoting psychological well-being.

2. Teachers are encouraged to employ diverse and multimodal instructional strategies that address visual, auditory, reading/writing, and kinesthetic learning preferences. While auditory learning was found to be prominent, instructional approaches should remain inclusive of all learning styles.

3. The school administrators may organize seminars or workshops on effective teaching strategies and student learning styles for both faculty and students to enhance teaching effectiveness and learning engagement.

4. Future researchers may conduct similar studies involving a broader population and explore other variables such as academic performance, motivation, and stress, to further examine factors influencing learning preferences.

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