

Research Article

An Analysis of Personality (Introvert, Extrovert, and Ambivert) Students' Learning Styles in English Learning Process at the 11th Grade of SMKN 1 Bukittinggi

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Abstract. This study was due to the high number of students, particularly in the 11th grade, who are not yet aware of their own personalities and learning styles. Students tend to follow the learning process as directed by their teachers, while teachers predominantly use traditional methods with limited variations in the classroom. Consequently, students whose personalities did not align with these methods may struggle to engage effectively in the learning process. This study used a descriptive quantitative research approach with descriptive statistical methods. The population in this research consists of 11th-grade students at SMKN 1 Bukittinggi. The sample for the study was selected using a random sampling technique, resulting in a randomly chosen group of 11th-grade students. The instruments used in the study include questionnaires to investigate learning styles and another set of questionnaires to assess personality types. For data analysis, the researchers applied descriptive statistics with percentages and data visualizations, representing the results in bar and pie charts. The results revealed that the dominant personality type among 11th-grade students at SMKN 1 Bukittinggi is ambivert, accounting for 64% of the total sample. The dominant learning style among these students is kinesthetic, with a total percentage of 26%. The study also found that the dominant learning style for introverted students is visual, while extroverted students primarily prefer kinesthetic learning. Meanwhile, ambivert students tend to prefer a multimodal approach, showing the ability to adapt to various learning styles.

Keywords: descriptive, English Learning Process, Learning Style, Personality, SMKN 1 Bukittinggi

1. Introduction

Each student possesses unique leaning preferences, defined as their favored methods of acquiring, organizing, and processing information (Fleming et al., 2005; Sumarah et al., 2023). Some students prefer quiet study environment, while others thrive in more bustling settings. Joseph (2019) emphasize that a learning style is not merely a set of scores or alphabetic symbols but rather a description of a process or preferences. Encouraging learners contemplate their learning methods through inventories is a valuable step in understanding and enhancing the learning process. Students employ diverse learning styles aligned with their comfort and ease in comprehending materials, with these often reflecting their personalities.

Received: 11 February 2025

Revised: 19 March 2025

Accepted: 15 April 2025

Published: 30 April 2025

Curr. Ver.: 30 April 2025



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There were some students who actively following the learning process in the classroom. These groups of students can be categorized as extrovert personality. They were usually active and want to socialize with a large group of friends (Marie & Law, 2012, p. 13). Pritchard (2009) stated that extrovert learn best when they collaborated with a friend, engage in hands-on experiences rather than passive observation like watching and listening to others explanation. They find value in discussing their ideas with others when faced with challenges in comprehension. Extrovert students are comfortable studying in a bustling classroom environment as they do not experience social anxiety and they like to discuss with their friends and teacher in the classroom.

On the other hand, there were students who passively in participating the class. Throughout the learning process, they rarely vocalize their thoughts and may choose to keep their ideas to themselves (Jung, 2013). These students are characterized as passive, aligning with introvert personality traits. According to Myers's overview as cited by King (2021) introvert people are people who prefer their internal world of their thoughts, feelings, fantasies, imagination and they are often shy and unwilling to speak or join in activities with others. In other words, introverted do not need extra stimulation since they already have sufficient internal stimulation, leading their energy orientation towards an inner world. Introverted students learn best when provided with enough time to reflect and enhance their work in a quiet environment.

On the other hand, there were personalities who were neither extrovert nor introvert, but are somewhere in between, called ambivert. An ambivert is an individual who possesses traits of both introverts and extroverts (Jung, 2013). Unlike pure introverts, who were inwardly focused, and pure extroverts, who are outwardly energetic, ambiverts exhibit a mix of both tendencies. They can thrive in both solitary and social environments, drawing energy from both solitude and interaction. Ambiverts are more adaptable and flexible, making them effective in various roles, including leadership and sales, where they can balance their introverted and extroverted qualities to achieve their objectives (Dunams, 2023). Ambiverts are often referred to as the "Goldilocks" personality type because they can strike a balance between introversion and extraversion, enabling them to navigate different situations effectively.

According to the researcher's preliminary research conducted on July 14, 2024, on eleventh grade students of SMKN 1 Bukittinggi, the researcher found several phenomena that became problems in this research. First, one of the primary challenges teachers face in today's classroom was the lack of understanding of their students' personalities and learning styles. This gap in knowledge made it difficult for teachers to tailor their teaching strategies effectively. When teachers are unaware of how individual students learn best, they may default to a one-size-fits-all approach, which can lead to disengagement and hinder the overall learning experience for many students. Moreover, the diversity in students' personalities and learning styles requires a nuanced approach that goes beyond traditional teaching methods. Without proper insight into each student unique characteristics, teacher might struggle to implement differentiated instruction. This can result in some students thriving while others feel overlooked, ultimately affecting classroom dynamics and the educational outcomes for the entire class. Second, some students struggle to identify their learning styles, which can impede their comprehension during the learning process. Understanding one's learning style is vital because it influences how students absorb, process, and retains information. Without clarity on how they learn best, students often experience frustration and a lack of confidence in their academic capabilities those who are ensured of students' learning styles frequently try different methods without achieving the desired outcomes. For examples, a visual learner may grasp concept better when presented with diagrams or images, while an auditory learner might excel when listening to explanations. This lack of clarity can lead to feelings of being stuck in an ineffective learning process, which may decrease their motivation to engage in learning.

2. Proposed Method

The methodology of this study employed a descriptive quantitative approach using descriptive statistical methods. This approach is characterized by its focus on collecting and analyzing numerical data related to observed phenomena, with the goal of describing or explaining the characteristics of a particular population or sample. Rather than attempting to establish causal relationships, this method aims to present an accurate portrayal of distributions, frequencies, or relationships among variables within a defined group. The

population in this study consisted of 11th-grade students at SMKN 1 Bukittinggi, totaling 702 individuals. A random sampling technique was used to select 10% of the population, resulting in a sample of 70 students. This sampling decision was based on Arikunto's (2006) guidelines, which recommend taking 10–25% of the population when it exceeds 100 individuals. Thus, students were selected randomly as respondents to ensure fair representation.

To collect data, the researcher used two instruments: a personality questionnaire and a learning style questionnaire. The personality instrument was adapted from the NEO PI-R test developed by McCrae & Costa (1986), which identifies personality types based on extroversion indicators. Meanwhile, the learning style questionnaire was based on the VARK model by Fleming, which categorizes learning preferences into Visual, Auditory, Reading/Writing, and Kinesthetic. Students' dominant learning styles were determined based on their highest scores in these categories, and those with equal scores across categories were classified as having a multimodal learning style. The validity of these instruments was ensured through expert review using content validity techniques, where items were rated on a scale of 1 to 5 and analyzed using Excel. The reliability of the personality questionnaire was assessed through a test-retest method with students from class XI TE 1, verifying response consistency across two administrations. For data analysis, percentage calculations were used to identify the dominant personality traits and learning styles among students. Data visualization techniques were also applied to explore the relationship between personality types and preferred learning styles.

3. Results and Discussion

The Analysis of Students Personality

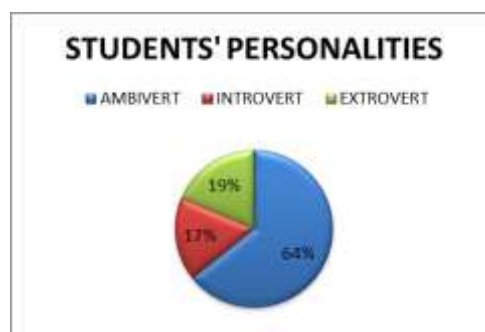


Figure 1 Students' Dominant Personality

The chart shows the distribution of students' personalities based on three categories: ambivert, introvert, and extrovert. The blue section, representing ambivert students, accounts for the largest proportion at 64%. This indicates that the majority of the students exhibit characteristics that are a mix of both introversion and extroversion. The red section, representing introvert students, makes up 17%, showing that a smaller portion of students prefer solitude and introspection. Finally, the green section, representing extrovert students, accounts for 19%, indicating that this group prefers social interactions and outgoing behavior, though it is not as dominant as the ambivert personality.

The Analysis of Students' Learning Style

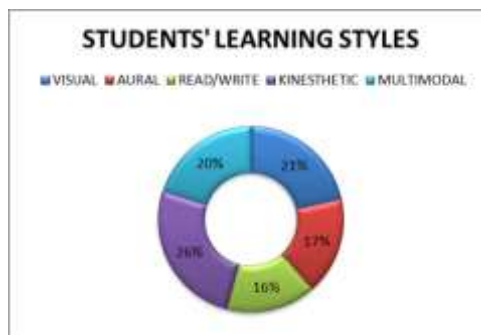


Figure 2 Students' Dominant Learning Style

The pie chart provides a detailed representation of the students' diverse learning styles in the English learning process. The largest group, comprising 26% of the students, are Kinesthetic learners (purple), who excel by engaging in hands-on activities and learning through physical involvement. These students tend to grasp concepts better through practical experiences and actions rather than traditional methods. Following closely, Visual learners (dark blue) represent 21% of the students. This group prefers learning through visual aids such as diagrams, charts, and images, relying heavily on what they can see to process information effectively. A significant portion of students, accounting for 20%, are Multimodal learners (light blue). These students do not adhere to a single learning style but instead blend various approaches—visual, auditory, reading/writing, and kinesthetic—depending on the learning context. The students' flexibility allows them to adapt to different teaching methods and situations. Aural learners (red), who make up 17% of the group, learn best through listening to spoken information such as lectures, discussions, or audio recordings. They rely on auditory input to understand and retain information effectively. Finally, Read/Write learners (green) form 16% of the students. These individuals prefer traditional learning methods, such as reading textbooks, writing notes, and engaging with written materials. The students thrive when they can process information through reading and writing activities.

The Analysis of Students' Learning Style based on their Personality.

1) Extrovert Students' Learning Style

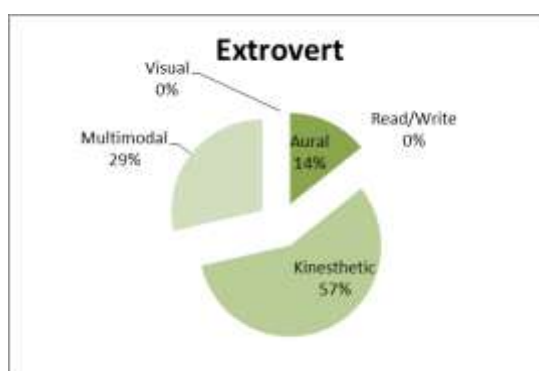


Figure 3 Extrovert Students' Learning Style

The pie chart analyzes the learning preferences of extroverted students at SMKN 1 Bukittinggi using Fleming's VARK model, which includes visual, aural, read/write, kinesthetic, and multimodal styles. Results show that the majority (57%) of extroverted students prefer kinesthetic learning, thriving in hands-on, interactive tasks where they can apply knowledge in real or simulated settings. This aligns with extroverts' tendency to engage actively and socially. Another 29% are multimodal learners, adapting flexibly to different styles based on context, while 14% favor aural learning, excelling through listening, discussions, and verbal explanations. Notably, no students preferred visual or read/write styles, highlighting extroverts' inclination toward experiential and social learning over solitary study or observation.

Introvert Students' Learning Style

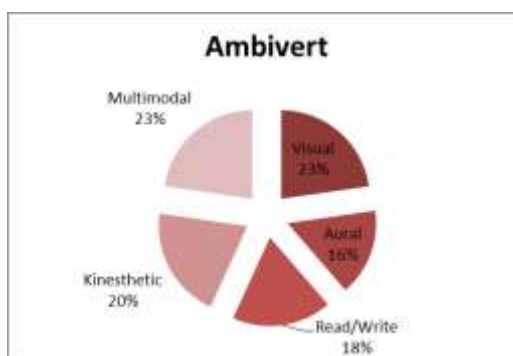


Figure 1.4 Introvert Students' Personality

The figure illustrates the learning style preferences of introverted students based on Fleming's VARK model. The largest group, 42%, favors visual learning, benefiting from visual aids like diagrams and charts. Following this, 25% are split between aural and read/write styles: aural learners excel through listening, while read/write learners prefer engaging with text. Only 8% prefer kinesthetic learning, indicating hands-on activities are less favored among introverts. Notably, no introverted students (0%) showed a multimodal preference, suggesting a focus on singular learning approaches. These findings indicate that introverted students benefit most from structured, individual environments with visual and text-based materials, while educators may also support auditory learners through discussions.

Ambivert Students' Learning Style

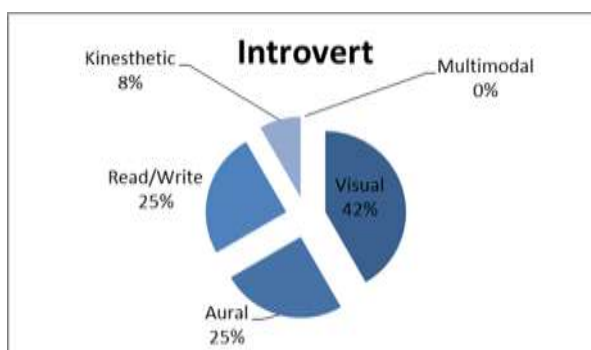


Figure 1.5 Ambivert Students' Personality

The "Ambivert" chart provides an overview of an individual's balanced learning preferences across multiple styles. As a multimodal learner (23%), this person adapts to different methods based on the context, switching between visual aids, auditory learning, and hands-on activities as needed. Visual learning also makes up 23%, indicating a strong preference for diagrams and charts, while 16% is dedicated to aural learning, showing a preference for lectures and discussions. The individual also engages with text-based methods (18%) and benefits from reading, note-taking, and writing exercises. Lastly, 20% kinesthetic learning reflects a preference for hands-on activities, where learning by doing enhances comprehension. This diverse distribution suggests a flexible approach, with the ability to draw from various methods to optimize learning.

4. Conclusions

Based on the findings, the researcher concludes that 64% of students are ambiverts, indicating a balance between introverted and extroverted characteristics. This suggests that most students can flexibly adapt to both independent and collaborative learning environments, which supports the implementation of diverse and adaptable teaching methods. In terms of learning style, kinesthetic learning emerges as the most dominant overall at 26%, highlighting a general preference for activity-based, hands-on experiences in the classroom.

Further analysis shows that learning style preferences differ across personality types. Among introverted students, 42% prefer visual learning, which aligns with their reflective and independent tendencies, often favoring diagrams, charts, and written materials. In contrast, 57% of extroverted students prefer kinesthetic learning, consistent with their energetic and social disposition that thrives on interactive tasks. Ambivert students show balanced preferences, favoring both visual and multimodal learning styles at 23% each, reflecting their versatile nature and ability to thrive in a variety of instructional settings.

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