



# ASSESSING INDIVIDUAL DIFFERENCES AMONG FILIPINO MAJOR STUDENTS. AN ANALYSIS OF TEMPERAMENT TRAITS

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## Abstract

*This study aimed to assess the dominant temperament traits among students in the College of Education at Ifugao State University–Potia Campus and examine how these traits vary across demographic variables such as age, sex, year level, and academic program. Utilizing mixed-methods, the researchers gathered quantitative data from a standardized assessment and qualitative results from open-ended interviews. 70 from the Bachelor of Secondary Education Major in Filipino was chosen through cluster sampling. Descriptive statistics were employed to analyze demographic profiles and temperament distribution, and thematic analysis and paired t-test for examining relationships and patterns that repeated. Findings showed that respondents were predominantly female, 17–18 years old, and first-year students. The most common temperament overall was Sanguine in younger and female students and subsequently Phlegmatic in older and upper-year students. Choleric types were common among male students, indicating a potential gender-related inclination towards ambition and assertiveness. Analysis through paired t-test indicated there was significant correspondence between demographic factors (more specifically sex and age) and temperament traits. Qualitative findings showed that each temperament group faced different issues: Sanguine students had problems with time management and focus, Melancholic students with overthinking and fear of failure, Choleric students with control and cooperation issues, and Phlegmatic students with indecisiveness and passivity. These findings suggest that temperament significantly influences academic behavior and emotional responses. The study recommend incorporating temperament-based interventions into teaching methods, classroom organization and counseling services for students as part of teacher education so that students learn to be teachable as well as develop personally.*

**Keywords:** choleric, melancholic, phlegmatic, temperament traits, sanguine

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## **Introduction**

In the Philippines, the value of personality traits in education has been gaining more attention. Cainday et al. (2023) also proved that personality traits are highly connected with work engagement among higher education personnel, which means individual differences have a wide-range effect outside the classroom. These facts notwithstanding, there has been a gap in the in-depth study of temperament traits namely Sanguine, Melancholy, Choleric, and Phlegmatic types among Filipino students, especially in teacher education programs.

Locally, at the Ifugao province in the Philippines, individual differences play a significant role in addressing educational issues, especially among students from far-flung areas. Based on Ormilla (2022), in research, socio-economic and psychological determinants were revealed to influence students' learning achievements in Alfonso Lista District, Ifugao.

The Bachelor of Secondary Education, major in Filipino, a four-year undergraduate program designed to prepare students for teaching Filipino language and literature at the secondary level. The program equips future educators with knowledge, skills, and values essential for effective teaching, focusing on mastery of the Filipino language, literature, pedagogy, and culturally responsive teaching methods.

Temperament categories such as Sanguine, Melancholy, Choleric, and Phlegmatic of student-teachers with a major in Filipino must be determined to allow individual differences in learning style and motivation. Determination of these is in keeping with the program aim of developing analytical and creative thinkers and life-long learners who are responsive to different learner needs and capable of adapting instruction to meet with these. The temperament types of Filipino teacher education students can help them in relating with students and curriculum, which can enhance their emotional responsiveness and instructional effectiveness.

The purpose of this research was to evaluate the prevailing temperament characteristics of students in Ifugao State University–Potia Campus's College of Education and explore how these characteristics differ across demographic factors like age, sex, year level and program of study. Adopting a mixed-method design, the researchers gathered quantitative data from a standardized temperament test and qualitative results from open-ended interviews.

## **Methodology**

### **Research Design**

This study employed a mixed-method research design, integrating both quantitative and qualitative approaches. The quantitative component involved the use of a standardized questionnaire to measure students' temperament traits, while the qualitative component utilized open-ended questions to explore students' personal experiences and perceptions regarding their temperaments.

### **Research Environment**

The study was conducted at the Ifugao State University - Potia Campus College of Education. This university was selected due to its accessibility and the diverse academic

experiences of its students, making it an appropriate setting for examining temperament traits among future educators. The college environment provided a conducive atmosphere for both data collection and participant engagement.

### **Research Respondents**

The participants are the students enrolled in the Bachelor of Secondary Education Major in Filipino, specifically from the first year to third year levels. The researchers employed cluster sampling, treating each year level as a distinct cluster. All students within these clusters was invited to participate, ensuring practicality and efficiency in sample selection. A total of 70 students' participated in the study, 28 from the first-year (Filipino 1), 23 from the second-year (Filipino 2) and 19 from the third-year (Filipino 3).

### **Research Instrument**

The researchers utilized structured survey questionnaires, integrating both quantitative and qualitative elements. The quantitative items assessed students' temperament traits using a standardized scale, while the qualitative items consisted of open-ended questions designed to explore the challenges students face based on their temperament traits.

The questionnaire used in this study was adopted from existing literature without modifications. It was directly administered to the respondents without undergoing expert validation or pilot testing, as it was already considered standardized and previously validated in related studies.

### **Data Gathering Procedure**

For a seamless and moral execution of the study, various crucial steps were taken. First, the researchers prepared the required tools, such as the questionnaire, and made sure that they were based on the study goals. Secondly, approval to carry out the study was sought and obtained by the relevant school authorities. The participants were then informed about the study's nature, purpose, and procedures, and written consent was given by all respondents. Data collection was conducted using the in-person administration of survey questionnaires to the targeted participants, which they had sufficient time to fill out both quantitative and qualitative sections. After gathering the responses, they were coded and organized carefully and analyzed using suitable statistical and thematic analysis. During the research process, ethical practices were followed carefully. The participants were notified of their rights, such as the right to refuse or withdraw from the study at any time without penalty. Confidentiality was always assured, and all personal identifiers were anonymous for the sake of maintaining the privacy of the respondents.

### **Statistical Treatment**

The following statistical tools and analysis methods were employed to address the research questions of the study. Descriptive statistics, including measures such frequency, and percentage, were used to analyze the demographic profiles of the respondents and to provide a general summary of the students' temperament traits. For the second research question, descriptive statistics such as frequency were applied to summarize the responses related to each temperament trait.

To address the third research question, a thematic analysis was utilized to identify, analyze, and interpret recurring patterns and themes from the open-ended responses.

Lastly, a Paired t-test was conducted to determine whether there were significant differences between selected demographic variables and the students' temperament traits. The paired t-test is appropriate for comparing the means of two related groups or matched measurements from the same group.

## Results/Findings/Discussions

### The demographic profiles of students in the College of Education, in terms of:

*Table 1. Year Level*

Year Level	Number of Students	Frequency (F)	Percentage (P)
First Year	28	28	40%
Second Year	23	23	32.86%
Third Year	19	19	27.14%
Total	70	70	100%

Table 1 is the distribution in terms of year level, with a total of 70 students Major in Filipino who participated in the study. 28 students from the first year (40%), 23 students from the second year (32.86%), and 19 students from the third year (27.14%) with a total of 70 students. Thus, the data presents that the majority of participants are first-year students.

*Table 2. Sex*

	Gender			Frequency	Percentage
	First Year	Second Year	Third Year		
Male	2	5	2	9	12.86%
Female	26	18	17	61	87.14%
Total	28	23	19	70	100%

In terms of gender, table 2 shows that first year has 2 male and 26 female student a total of 28 students while second year has 5 male and 18 female a total of 23 students. Lastly, third year has 2 male and 17 female a total of 19 students. The 87.14% of the total respondent are female and the remaining 12.86% are male. The table 2 indicates that in terms of sex the majority of the respondents are females.

*Table 3. Age*

	Age			Frequency	Percentage
	First Year	Second Year	Third Year		
17-18	22	9	0	31	44.29%
19-20	1	18	3	22	31.42%
21 and above	0	1	16	17	24.29%
Total	23	28	19	70	100%

Table 3 shows that in terms of age, 44.29% of students are ages from 17-18 years old, 22 students from first year and 9 students from third year a total of 31 students. Also 31.42% of the students are from the age of 19-20 years old, it has a total of 17 students, 1 students from first year, 18 students and 3 students from second year and third year, respectively. This indicates the age of the students from 18-19 years old are the majority of students.

### **The dominant temperament traits of students in the college of education in terms of year level, sex and age.**

The following table shows the prevailing temperament characteristics of students at college of education major in Filipino on the basis of the four human temperaments, the sanguine, melancholic, choleric, and phlegmatic. The temperament of the sanguine is inherently impulsive and hedonistic. Sanguines are outgoing, expressive, and enthusiastic, sociable and thriving in social situations and always looking for excitement. The choleric temperament is ambitious and leadership-oriented. Being the most powerful of the extrovert temperaments, choleric personalities tend to be forceful, goal-oriented, and action-driven tend to be described as "doers". Melancholic temperament is introspective and reflective. They are referred to as "the thinker," being analytical, detail-focused, and prudent. Finally, the phlegmatic temperament is easy-going and passive, varying from warmly observant to slow often described as "the watcher."

*Table 4. The dominant temperaments traits of students in the college of education in terms of Year Level.*

Temperament	First Year		Second Year		Third Year	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Saguine	12	42.86%	7	30.435%	5	26.32%
Melanchony	3	10.71%	3	13.043%	2	10.52%
Choleric	5	17.86%	5	21.739%	5	26.32%
Phlegmatic	8	28.57%	8	34.783%	7	36.84%
Total	28	100%	23	100%	19	100%

Table 4 shows the temperament breakdown of Filipino students. Out of the first-year students, 12 (42.86%) are sanguine, 3 (10.71%) melancholic, 5 (17.86%) choleric, and 8 (28.57%) phlegmatic, with a total of 28 students. Out of the second-year students, 7 (30.43%) are sanguine, 3 (13.04%) melancholic, 5 (21.74%) choleric, and 8 (34.78%) phlegmatic, totaling 23 students. Among the third-year students, 5 (26.32%) are sanguine, 2 (10.52%) are melancholic, 5 (26.32%) are choleric, and 7 (36.84%) are phlegmatic with the total of 19 students.

Table 4 illustrated the most prevalent first-year students' temperament is sanguine, and the most prevalent among second-year and third-year students is phlegmatic.

*Table 5. The dominant temperaments traits of students in the college of education in terms of Sex.*

Temperaments	Gender			
	Male		Female	
	Frequency	Percentage	Frequency	Percentage
Saguine	2	22.22%	20	32.79%
Melanchony	2	22.22%	15	24.59%
Choleric	4	44.44%	17	27.87%
Phlegmatic	1	11.11%	9	14.75%
Total	9	100%	61	100%

In table 5 show the distribution of temperament of the students according to sex. The temperaments of the male in table 5 shows that 22.22% (2) of the male students has

sanguine temperaments as well as the melanchony temperaments, while 4 (44.44%) male and 1 (11.11%) male has a temperament of choleric and phlegmatic, respectively. In the other hands in female temperaments there are 20 (32.79%) of the students has sanguine temperaments. For melanchony temperaments there is 15 (24.59%) students, for choleric there are 17 (27.87%) students, lastly 9 (14.75%) students has the phlegmatic temperaments.

Table 5 shows that the dominant temperament among male students is choleric, while among female students, it is sanguine.

Table 6. *The dominant temperaments traits of students in the college of education in terms of age.*

Temperaments	Age					
	17 - 18		19 - 20		21 and above	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Saguine	12	42.86%	7	30.43%	8	42.11%
Melenchony	3	10.71%	3	13.04%	2	10.53%
Choleric	5	17.86%	5	21.74%	5	26.32%
Phlegmatic	8	28.57%	8	34.78%	4	21.05%
Total	28	100%	23	100%	19	100%

Table 6 shows the distribution of temperament among Filipino students across age groups. Of 17–18-year-old students, 12 (42.86%) are sanguine, 3 (10.71%) melancholic, 5 (17.86%) choleric, and 8 (28.57%) phlegmatic, with a total of 28 students. For 19–20-year-old students, 7 (30.43%) are sanguine, 3 (13.04%) are melancholic, 5 (21.74%) choleric, and 8 (34.78%) phlegmatic, with a total of 23 students. Among students who are 21 years and older, among a total of 19, 8 (42.11%) are sanguine, 2 (10.52%) are melancholic, 5 (26.32%) are choleric, and 4 (21.05%) are phlegmatic.

Table 6 indicates that sanguine temperament is prevalent among students in the age groups 17–18 and 21 and over, but phlegmatic temperament is prevalent among students between the ages 19–20.

Table 7. *Thematic Analysis on the challenges perceived of the Filipino students.*

Qualitative Response	Code	Theme
<p>Sanguine</p> <ul style="list-style-type: none"> <li>I stay focused in class, but complex topics might distract me and my Friends motivate me to do better in school.</li> <li>Noisy places slightly distract me, but I adapt it quickly.</li> <li>My friends keep me accountable and motivated.</li> <li>I minimize distractions to stay focused on my schoolworks.</li> <li>A positive environment, including supportive friends enhances my schoolwork.</li> <li>I seek help with my friends when needed to stay on track.</li> </ul>	<p>The code in sanguine students is productivity habits, including staying focused, minimizing distractions, seeking help and celebrating progress to boost motivation levels.</p>	<p>Empowered Productivity</p>

<ul style="list-style-type: none"> <li>• Being around with my friends can boost my mood and productivity.</li> <li>• Socializing with my friends is fun, but I prioritize my schoolwork.</li> <li>• My positive attitude helps me overcome my challenges.</li> <li>• Positive attitude and self care keep me focused.</li> <li>• I celebrate small wins to stay motivated and engaged.</li> <li>• Not usually, I'm pretty engaged when the topic interests me.</li> </ul>		
<p>Melancholy</p> <ul style="list-style-type: none"> <li>• Hard schoolwork stresses me out because I fear not meeting standards.</li> <li>• When my work isn't perfect, I feel disappointed and self-critical.</li> <li>• Imperfections in my work bother me, making me feel inadequate</li> <li>• I get anxious about not meeting my own high standards.</li> <li>• Fear of failure drives my stress and worry about schoolwork.</li> <li>• I often reflect on what I could've done better.</li> <li>• The pursuit of perfection can be both motivating and debilitating.</li> <li>• Self-criticism can be overwhelming when my work isn't perfect.</li> <li>• Difficulty with schoolwork makes me question my abilities.</li> <li>• The pressure to perform well weighs heavily on my mind.</li> <li>• I feel frustrated when I don't understand material, leading to self-doubt.</li> <li>• I worry that my work won't meet expectations.</li> </ul>	<p>The code in melancholy students is perfectionism tendencies, simulating the emotional impact of imperfection and high standards on their mental state.</p>	<p>Perfectionism</p>
<p>Choleric</p> <ul style="list-style-type: none"> <li>• When others resist my ideas, I push harder to convince them.</li> <li>• When disagreements arise, I stand firm and advocate for my approach.</li> <li>• When others disagree, I assertively express my perspective and try to convince them.</li> <li>• I find it frustrating to work with classmates who don't follow my ideas, as I believe my way is most efficient.</li> <li>• I take charge and lead the group to ensure my ideas are implemented.</li> <li>• I get annoyed when others don't meet my expectations, but I'll guide them.</li> <li>• I try to dominate the discussion to make sure my ideas prevail.</li> </ul>	<p>A code in choleric students is work together and lead group, showcasing their assertive and results-driven personality. It demonstrate how they prioritize their own ideas, assert dominance, and lead others. When collaborating, they might resist alternative ideas, instead pushing their</p>	<p>Assertive Leadership</p>

<ul style="list-style-type: none"> <li>• I can become impatient with others who don't share my vision.</li> <li>• I expect others to follow my lead and adapt to my work style.</li> <li>• Collaboration works best when others align with my goals and methods.</li> <li>• I'd rather take control and drive the project myself than compromise.</li> <li>• Collaboration works best when others align with my goals and methods.</li> </ul>	<p>own approach. This code reflects the choleric student's tendency to take charge, drive projects, and sometimes struggle with compromise. It provides a simple yet insightful representation of their leadership style and potential challenges in teamwork.</p>	
<p>Phlegmatic</p> <ul style="list-style-type: none"> <li>• Group work is okay if someone else takes the lead and organizes.</li> <li>• I'm not one for confrontation, so I'll often yield to others' ideas.</li> <li>• I'll contribute my thoughts, but won't push them if others disagree.</li> <li>• My priority is maintaining good relationships, so I'll avoid conflict.</li> <li>• When issues occur, I listen to both sides and seek a compromise.</li> <li>• I don't mind speaking up, but I prefer to listen and avoid conflict.</li> <li>• I'd rather follow others' lead and contribute in a supportive role.</li> <li>• I avoid leading group activities, as I prefer harmony over taking charge.</li> <li>• Speaking up isn't hard, but I need time to think before sharing my thoughts.</li> <li>• I'm comfortable with silence and won't force my opinions on others.</li> <li>• I'd rather focus on my own tasks than take on a leadership role.</li> <li>• When problems arise, I try to mediate and find a peaceful solution.</li> </ul>	<p>A code in phlegmatic students is contribute idea and resolve conflict, showcasing their diplomatic and accommodating nature. It demonstrate how they prioritize harmony, listen to others, and seek compromise. When contributing ideas, they might hesitate to assert themselves, instead focusing on supporting others. In conflict resolution, they strive to mediate and find peaceful solutions, avoiding confrontation whenever possible. This code reflects the phlegmatic student's calm and cooperative approach to group work and interpersonal dynamics.</p>	<p>Harmonious Collaboration</p>



### Sanguine – Empowered Productivity

The *Empowered Productivity* theme embodies the sanguine student's optimistic and proactive approach to learning. Sanguine students thrive in social settings that foster motivation and accountability, where emotional intelligence plays a role in sustaining performance and goal-directed behavior (Sanchez-Ruiz & El Khoury, 2019).

### Melancholy – Perfectionism

The *Perfectionism* reflects the melancholy student's relentless drive for excellence, marked by self-criticism, anxiety, and fear of failure. Their high standards often lead to feelings of inadequacy and frustration when faced with imperfections or challenges. Furthermore, recent research found a strong connection between self-critical perfectionism and psychological distress, including symptoms of depression and suicidal ideation in students (Fernández-García et al., 2022).

### Choleric – Assertive Leadership

The *Assertive Leadership* theme reflects the choleric student's dominant and results-driven approach, where they prioritize their own ideas and methods. These students assertively express opinions, take charge in group work, and often struggle with compromise. Research by Lykourantzou et al. (2015) suggests that team performance is significantly influenced by personality compatibility, and dominant traits may cause friction when collaboration is required. While assertiveness can drive projects forward.

### Phlegmatic – Harmonious Collaboration

The *Harmonious Collaboration* theme embodies the phlegmatic student's diplomatic and accommodating nature, prioritizing harmony and cooperation in group settings. Lykourantzou et al. (2015) highlight that individuals with collaborative and supportive traits create a more cohesive group dynamic.

## Discussions

### Theoretical or Conceptual Framework

#### The Thomas and Chess Approach

In 1977 Thomas and Chessin made a significant contribution to the literature with their longitudinal study, temperament can be observed especially intensely in infants because infancy is the period when human beings are least exposed to environmental stimuli or variables and learned behaviors are very limited in this period( Kodak et al. 2024).

#### The Goldsmith Approach

The Goldsmith Approach is based on the psychobiological theory of temperament, emphasizing the individual differences in emotional expressiveness and reactivity. Goldsmith and colleagues posits that temperament traits such as fear, sadness, anger, and activity level emerge early in life and are relatively stable over time. These traits are considered innate but are also shaped by environment including parenting style and cultural context. For instance, Murillo et al. (2024) identified three temperament types: Negative

Dysregulated, Positive Well-Regulated, and Typical Expressive. These types were found to have moderate heritability and were influenced by shared environmental factors, supporting the notion that temperament is both biologically based and environmentally influenced.

### **The Rothbart Approach**

The Rothbart Approach defines temperament as constitutionally rooted differences in reactivity and self-regulation, influenced by biological, neural, and experiential processes. Rothbart's theory establishes three general dimensions: Negative Affectivity, Surgency/Extraversion, and Effortful Control. The model highlights the development of self-regulation, specifically effortful control, which is crucial in emotion and attention management. Current studies have extended Rothbart's model to multiple developmental outcomes.

Additionally, Rothbart's framework has been instrumental in understanding the development of self-regulation. Lengua et al. (2024) emphasized the significance of integrating contextual, relational, and dynamic systems approaches to fully comprehend the role of temperament in children's development. They underscored the importance of considering social and environmental contexts when examining temperament and its influence on developmental outcomes.

### **Conclusions**

Most of the participants in the College of Education were female students (87.14%), aged between 17–18 years old, and who were mostly first-year students taking up the Bachelor of Secondary Education major in Filipino. This demographic composition signifies a high proportion of females in the teaching profession and a young group at the initial stages of teacher education. Sanguine temperament predominated in the 17–18-year-old and 21 years and above students, with high sociability and enthusiasm. Phlegmatic temperament was most common in the 19–20 years age group, with calmness and a desire for stability. Male students were mostly Choleric goal-oriented and extroverted, whereas female students demonstrated Sanguine tendencies, with sociability and expressiveness. First-year students were predominantly Sanguine, with Phlegmatic emerging as the prevailing characteristic in second- and third-year students, indicating a change toward more reflective and even-tempered behavior as students advance in their studies.

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## Conflicts of Interest

The author declares no conflict of interest.

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