

**STATISTICAL ANALYSIS ON STUDY OF STUDENT PREFERENCES  
( A CASE STUDY OF NDII STUDENT, DEPARTMENT OF STATISTICS,KWARA STATE  
POLYTECHNIC, ILORIN)**

**BY**

**ADERINLEWO TEMILADE CHRISTIANAH**

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## CERTIFICATION

This is to certify that this project was carried out by **Aderinlewo Temilade Christianah** with Matric number **ND/23/STA/FT/0025**. This project has been read and approved as meeting part of the requirement for the award of National Diploma in Statistics, Kwara State Polytechnic, Ilorin.

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MR SULEIMAN SIKIRU  
Project supervisor

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Date

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MRS. ELEPO T.A  
Head of department

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Date

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EXTERNAL EXAMINER

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Date

## **DEDICATION**

This project is dedicated firstly to God Almighty, the source of my strength, wisdom, and inspiration. And also to my family.

## **ACKNOWLEDGEMENT**

First and foremost, I give all thanks and glory to the Almighty God for His grace, wisdom, and strength throughout the duration of this project.

I sincerely appreciate my supervisor, Mr Sikiru Suleiman, for his/her invaluable guidance, encouragement, and support throughout this research work.

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## ABSTRACT

This study titled “Statistical Analysis on Study of Student Preference: A Case Study of NDII Statistics Students, Kwara State Polytechnic” investigates the lifestyle choices of students using statistical methods. Data was collected through a structured questionnaire covering various aspects of student preference such as color, music, beverages, fashion, hobbies, and future careers. The study employed both descriptive and inferential statistics to analyze the data. Findings reveal dominant trends in student preferences, and certain patterns emerge across gender and age groups. The study provides valuable insight for student counselors, academic planners, and institutions seeking to improve student engagement and welfare through informed policy decisions.

**Keywords:** Student Preferences, Color Preference, Music Genre, Beverages, Soft Drink, Hobbies, Future Profession, Statistical Analysis, Demographic Influence.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the Study**

Understanding student preferences in areas such as favorite colors, beverages, soft drinks, fashion styles, music genres, hobbies, and future professions provides valuable insight into human behavior, personality, and societal trends. These preferences reflect

individual identities and are often shaped by cultural background, upbringing, social influences, media exposure, education, and economic status. In an increasingly complex and interconnected world, these preferences also serve as key indicators for decision-making in marketing, branding, education, and career development.

In tertiary institutions, especially polytechnics where technical and vocational education is emphasized, students' preferences extend beyond the classroom. These preferences—ranging from their favorite colors and music genres to their beverage choices and career ambitions—offer a window into their psychological, emotional, and cultural frameworks. For instance, a student's choice of music could reflect their emotional state or cultural background, while career preferences may be shaped by societal expectations, financial ambitions, or personal passions.

Several studies have been conducted to explore the behavior and preferences of students within different contexts. According to Okoye (2017), students' non-academic choices are closely linked to their identity formation and social development. Similarly, Adebayo and Musa (2019)

noted that understanding students' personal preferences helps institutions better design welfare programs and engagement strategies that foster inclusivity and retention.

For instance, favorite color is widely recognized to influence mood, emotional response, and purchasing behavior. Color preferences, for instance, have been linked to emotional responses and cultural symbolism. Studies suggest that individuals often associate specific colors with particular emotions or concepts, influencing their choices in clothing, interior design, and branding (Goethe, 1810). Similarly, music preferences are not only a reflection of cultural exposure but also correlate with personality traits. Research indicates that individuals high in openness to experience tend to prefer complex music genres like classical and jazz (Rentfrow et al., 2011).

Beverage and soft drink choices often reflect lifestyle, health awareness, and social habits. Fashion style is a medium for self-expression and identity, often influenced by age, profession, and social environment. Similarly, musical preferences reveal personality traits, cultural affiliation, and even cognitive styles. Hobbies, as expressions of personal interest and leisure choices, offer clues about how individuals manage stress, develop skills, and engage socially. Lastly, aspirations for future professions are often shaped by a complex interplay of passion, societal expectation, and economic opportunity.

While each of these preference areas has been studied independently in different disciplines, there is a gap in integrative studies that consider them together. This research bridges that gap by exploring these varied preferences through a unified, data-driven approach. The aim is to

uncover patterns across demographic variables such as gender, age, and academic background, and to provide insight into how different preferences may be related.

In academic institutions such as polytechnics, students are exposed to different influences that shape their attitudes, behaviors, and preferences. Understanding these preferences among ND II students in the Department of Statistics, Kwara State Polytechnic, can help educators, marketers, and psychologists develop more effective strategies for communication, branding, mentor ship, and student engagement. This study, therefore, aims to explore and analyze the preferences of students across various domains to gain a comprehensive understanding of youth behavior and interests.

By analyzing these diverse yet interconnected preferences, the study not only contributes to academic understanding but also provides practical implications for educators, marketers, policymakers, and guidance counselors.

## **1.2 Statement of the Problem**

Despite a growing interest in individual preferences and their implications, existing studies often examine these traits in isolation—focusing solely on color psychology, beverage consumption, or music preference—without considering how multiple preference areas interact or correlate with one another. This segmented approach may overlook broader patterns that could be identified through a more comprehensive analysis.

Similar studies have been conducted in other contexts. For instance, Eze and Adetunji (2016) explored beverage consumption patterns among university students in southwestern Nigeria and found significant associations with gender and socio-economic background. Likewise, Yusuf (2020) conducted a study on music preferences and academic performance among polytechnic

students, revealing that music taste could correlate with time management habits and stress relief patterns.

Furthermore, most of the available research is contextually limited, either focused on specific age groups (such as children or adults) or based in Western cultural settings. There is limited local research that examines how youth and young adults in non-Western or developing contexts express themselves through their preferences. This study aims to fill that gap by conducting a multifaceted preference analysis using data collected through a structured questionnaire.

This analysis will help answer key questions such as: What are the most common preferences among a selected population? Do patterns differ across gender or age groups? Are people's preferences in music, fashion, and hobbies linked to their future career aspirations?

Understanding these connections can help shape marketing strategies, educational interventions, and career guidance initiatives.

### **1.3 Objectives of the Study**

The primary aim of this project is to study the preferences of students using ND II Statistics (2024/2025 session) in the Statistics department, Kwara State Polytechnic, Ilorin.

Specific Objectives:

- I. To examine the distribution of students based on gender, age group and ethnicity.
- II. To determine the distribution of students favorite music genre based on gender.
- III. To determine the distribution of students favorite beverages based on gender.
- IV. To determine the distribution of students favorite fashion style based on age group.

## **1.4 Research Questions**

This study is guided by the following research questions:

1. What are the most common color preferences among ND II students?
2. What are the favorite beverages among the students?
3. Which fashion styles are most popular among the students?
4. What are the preferred music genres among the students?
5. What hobbies are commonly practiced by the students?
6. What professions do the students aspire to pursue in the future?
7. Is there any significant relationship between students' demographic characteristics and their preferences?

## **1.5 Significance of the Study**

This study is significant for several reasons:

- I.**For Marketers and Business Owners: The results will help businesses tailor products and services to align with consumer preferences in fashion, beverages, and entertainment.
- II.**For Educators and Career Counselors: Understanding students' hobbies and career aspirations will support more personalized guidance and academic planning.
- III.** For Researchers and Social Scientists: The findings offer a rich datasets for exploring the intersections of culture, lifestyle, and consumer behavior.
- IV.** For the General Public: The study contributes to increased self-awareness and social

understanding of how preferences develop and what they reveal about individual and group identity.

### **1.6 Scope of the Study**

This study focuses on the analysis of students preferences including favorite colors, beverages, soft drinks, fashion styles, music genres, hobbies, and future professions. The data for this research was collected through a structured questionnaire distributed among students of ND II Statistics Department, Kwara State Polytechnic, Ilorin.

The research is limited to this specific population and does not extend to other departments or institutions. The demographic variables considered include gender, age group, and possibly other background characteristics relevant to the analysis. The study primarily employs descriptive and inferential statistics using SPSS to identify trends and explore relationships among the various preference categories.

While the study offers insight into the preferences of the selected group, its findings are not necessarily generalized to the broader population. Furthermore, the study does not delve into the psychological motivations behind each preference but rather aims to identify patterns and associations that can be useful for academic, commercial, and developmental purposes.

### **1.7 Limitations of the Study**

The following limitations are acknowledged:

- Sampling Limitations: The sample may not fully represent the broader population, which could affect generalization.

- Self-Reported Data: Participants may provide socially desirable responses or change preferences over time, affecting accuracy.
- Geographical Constraints: The study may be limited to one institution or locality, and the findings may not reflect broader cultural dynamics.
- Scope of Analysis: While multiple preferences are analyzed, the study focuses on patterns and associations rather than deep causality or psychological analysis.

Despite these limitations, the research provides a valuable foundation for further studies and practical applications in various fields.

## **1.8 Definition of Terms**

Preference: A greater liking for one alternative over others.

Color Preference: An individual's favorite color or color choice.

Beverage: Any drink other than water, including soft drinks, tea, and coffee.

Soft Drink: A non-alcoholic, carbonated beverage typically sweetened and flavored.

Fashion Style: The particular way of dressing or presenting oneself.

Music Genre: A category of music characterized by similarities in form, style, or subject matter.

Hobbies: Activities done regularly for enjoyment during leisure time.

Future Profession: The career or job an individual intends or hopes to pursue.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.4 Review of Related Literature**

The concept of personal preferences has been studied extensively across various domains, including color, beverages, fashion, music, hobbies, and future professions. Each preference provides a unique window into understanding human behavior, identity, and societal influences. This section reviews existing literature on these preferences to highlight key findings and theories that inform the present study.

##### **2.4.1 Concept of Preferences**

Preference is defined as the act of choosing or favoring one thing over another. In the context of student behavior, preferences are shaped by several factors including culture, personality, peer influence, media exposure, and psychological development (Ajayi & Banjo, 2018). Preferences are significant in educational institutions because they influence how students interact with their environment, make decisions, and plan for the future.

Understanding preferences allows institutions to better cater to student needs. As noted by Akinyemi (2017), when schools are responsive to students' preferences in areas like recreational activities, fashion expression, and personal interests, there is often an increase in student satisfaction and performance.

### **2.4.2 Color Preferences**

Color preferences have long been a subject of psychological study, with researchers linking certain colors to personality traits, emotions, and behaviors. According to Eysenck (1941), individuals who prefer bright colors like yellow and red are often associated with extroversion, energy, and enthusiasm, while those who prefer cooler colors like blue and green are typically seen as calm, introspective, and reliable.

In a Nigerian context, Olatunji and Adeyemi (2017) found that most university students preferred blue and black, especially among males, while females leaned towards pink and purple. The study noted that students associated blue with intelligence and trustworthiness, which may explain its dominance.

Chukwu and Ibrahim (2019) reported in their study at the University of Nigeria that color preference could be influenced by regional fashion trends and social identity. For example, northern students preferred earth tones (brown, cream), while southern students favored brighter tones. This underlines the connection between color and cultural orientation.

Cultural and gender differences also play a significant role in color preferences. Miller and Moore (2018) found that in Western societies, women tend to favor softer, pastel colors, while men are more inclined toward bold or darker tones. Cultural influences further impact color choices; for instance, in some Eastern cultures, red symbolizes prosperity and happiness, while in Western cultures, it can represent passion or danger. The intersection of personality, culture, and emotion explains the complex nature of color preferences and their role in individual identity.

### **2.4.3 Beverages Preferences**

Non-alcoholic beverages such as tea, coffee, and cocoa drinks are popular among students, especially during study hours or cold weather. Research by Adebayo and Musa (2019) reported that Milo and Bournvita were top choices among Nigerian students, attributed to affordability, availability, and taste familiarity. The same study noted that coffee was more common among students who studied overnight.

Ogundipe (2018) found that gender also influenced beverage preference. Females preferred Milo and chocolate-based drinks for their perceived nutritional benefits, while males were more inclined towards energy drinks and coffee for stimulation.

Sociocultural factors also shape beverage preferences. In many cultures, beverages are tied to rituals and traditions; for example, tea drinking is a central cultural practice in countries like China and Japan, while coffee is an integral part of social life in many Western countries.

### **2.4.4 Soft Drink Preferences**

Soft drinks are a major part of student social life. Ayoola and Adekunle (2017) examined soft drink consumption among Nigerian undergraduates and found Pepsi and Coca-Cola as top favorites. The study cited branding, advertisement, and peer influence as contributing factors.

Another study by Uchechi and Bello (2021) examined how soft drink preferences change over time due to health concerns. The study noted a gradual shift toward sugar-free or low-calorie drinks among health-conscious students.

Interestingly, cultural background played a minor role in brand preference, while accessibility and pricing were more significant. Students living off-campus showed greater brand diversity than those in campus hostels (Nwosu & Akinleye, 2019).

#### **2.4.5 Fashion Style Preferences**

Fashion is a powerful form of self-expression and plays an important role in shaping an individual's identity. Gurel & Gurel (2015) argue that fashion choices, particularly among students, are strongly influenced by peer groups, media, and societal expectations. Young adults, in particular, often choose fashion styles that align with social trends, group affiliations, and cultural symbols. For instance, casual wear and street fashion have become widely popular among younger generations, often reflecting a desire for comfort and individuality.

Gender differences also play a significant role in fashion preferences. Research has shown that women tend to have a broader range of fashion choices compared to men, often experimenting with different styles and colors to express their moods and identities. On the other hand, men's fashion preferences tend to be more structured and uniform, focusing on simplicity and practicality. As fashion is closely tied to social and cultural values, changes in fashion trends reflect the evolving nature of these values over time.

#### **2.4.6 Music Genre Preferences**

Music preferences are not only a reflection of personal identity but also influenced by cultural, psychological, and social factors. The choice of music genres such as hip hop, fuji, juju, and apala provides insight into various aspects of individual and group identity.

Psychological research suggests that music preferences are closely tied to personality traits. For example, individuals who enjoy hip hop may display higher levels of extraversion, seeking energy and social connection through rhythm and lyrics. On the other hand, those who prefer more traditional genres like fuji, juju, or apala might value cultural heritage and emotional expression, which can align with traits such as agreeableness or conscientiousness.

Cultural background plays a major role in music preferences. Hip hop is often associated with urban youth culture, while fuji, juju, and apala reflect deep cultural roots, especially among Yoruba-speaking populations in Nigeria. These traditional genres connect listeners to cultural events, religious practices, and social gatherings.

Emotionally, music serves as an outlet for expression and mood regulation. Hip hop provides energizing, often socially conscious content, while fuji and related genres may offer emotional resonance during traditional ceremonies and family events. These musical preferences also reinforce identity and community belonging.

Behaviorally, music choices can influence lifestyle, social interactions, and even consumption patterns. The relationship between music and behavior illustrates how deep-rooted and influential music preferences can be in an individual's daily life.

#### **2.4.7 Hobbies and Interests**

Hobbies are an essential component of leisure, relaxation, and personal growth. According to Stebbins (2007), hobbies are often categorized into serious leisure (e.g., reading, writing, sports)

and casual leisure (e.g., watching TV, socializing). These activities reflect not only personal interests but also underlying personality traits and social needs.

Hobbies also serve as tools for self-expression and identity formation. For instance, a person's interest in music, art, or technology can influence their future career choices and social affiliations. Research by Liu and Wang (2016) shows that students who actively engage in hobbies related to their academic interests tend to have better focus and success in their professional lives, as these activities foster skills and provide motivation for personal growth.

#### **2.4.8 Future Profession Preferences**

Career preferences are often influenced by personal interests, societal expectations, and educational experiences. Super's Life-Span, Life-Space Theory emphasizes that career development occurs through stages, shaped by the individual's interests, values, and experiences. In the early stages, students often explore various career options, influenced by family, peers, and role models, before settling on a profession that aligns with their skills and passions.

In educational settings, students often align their career aspirations with subjects or activities they enjoy. For instance, students interested in science may aspire to become doctors or engineers, while those with an inclination toward the arts may pursue careers in design or media. Parental influence and societal expectations also significantly affect career choices, with certain professions being more highly regarded in particular cultures or communities.

#### **2.4.9 Interconnections Between Preferences**

It is important to note that the preferences in color, beverages, fashion, hobbies, and professions are often interconnected. For instance, individuals who prefer bold colors might also be drawn to

energetic music genres like hip hop or rock, while those who favor more subdued colors may gravitate toward genres such as classical or jazz. Similarly, people who enjoy active hobbies, like sports, may be more likely to choose drinks that energize them, such as sports drinks or coffee, aligning with their active lifestyle. Furthermore, fashion preferences may intersect with music and hobby choices, as individuals tend to express their identities through a combination of these areas.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Research Design**

This study adopted a descriptive survey research design. The design was considered appropriate because it enables the researcher to obtain data from respondents on their preferences using a structured questionnaire. The descriptive approach allows for a detailed analysis of various characteristics and preferences among a defined group of individuals.

#### **3.2 Population and Sample**

The population for this study comprised all ND II students of the Department of Statistics, Kwara State Polytechnic, Ilorin. This population was selected because of their accessibility and relevance to the research topic, especially given their familiarity with statistical concepts and data handling.

The sample used consisted of a representative portion of this population, selected to reflect various demographic characteristics such as age, gender, and background to ensure diversity and validity in the responses obtained.

#### **3.3 Sampling Techniques**

The sampling technique adopted for this study was simple random sampling. This technique was used to give all ND II students in the Statistics Department an equal chance of being selected, thus eliminating bias in the selection process. A total of 50 students were randomly selected to participate in the study.



### **3.4 Research Instrument**

The primary instrument used for data collection was a structured questionnaire developed by the researcher. The questionnaire was divided into two sections:

- I. Section A: Demographic data (e.g., gender, age group)
- II. Section B: Student preferences (favorite color, beverage, soft drink, music genre, fashion style, hobby, and future profession)

The questions were closed-ended, enabling ease of analysis and consistency in response interpretation. The questionnaire was administered manually and collected on the same day to ensure a high response rate.

A copy of the questionnaire is attached as an appendix at the end of the full project report.

### **3.5 Method of Data Collection**

The data was collected by distributing printed copies of the questionnaire to the selected respondents. The purpose of the study was explained to the participants, and they were assured of the confidentiality and anonymity of their responses. The completed questionnaires were collected within a specified period for proper analysis.

### **3.6 Method of Data Analysis**

The collected data were analyzed using descriptive and inferential statistical techniques, including:

- 1. Frequency distribution to summarize categorical data (e.g., most preferred colors or hobbies).

2.Bar charts and pie charts to visually present preference trends.

3.Cross-tabulation to compare preferences across gender and other demographics.

4. Chi-square tests to examine whether there were significant associations between selected variables (e.g., gender and favorite music genre).

All analyses were carried out using SPSS (Statistical Package for the Social Sciences)

## **CHAPTER FOUR**

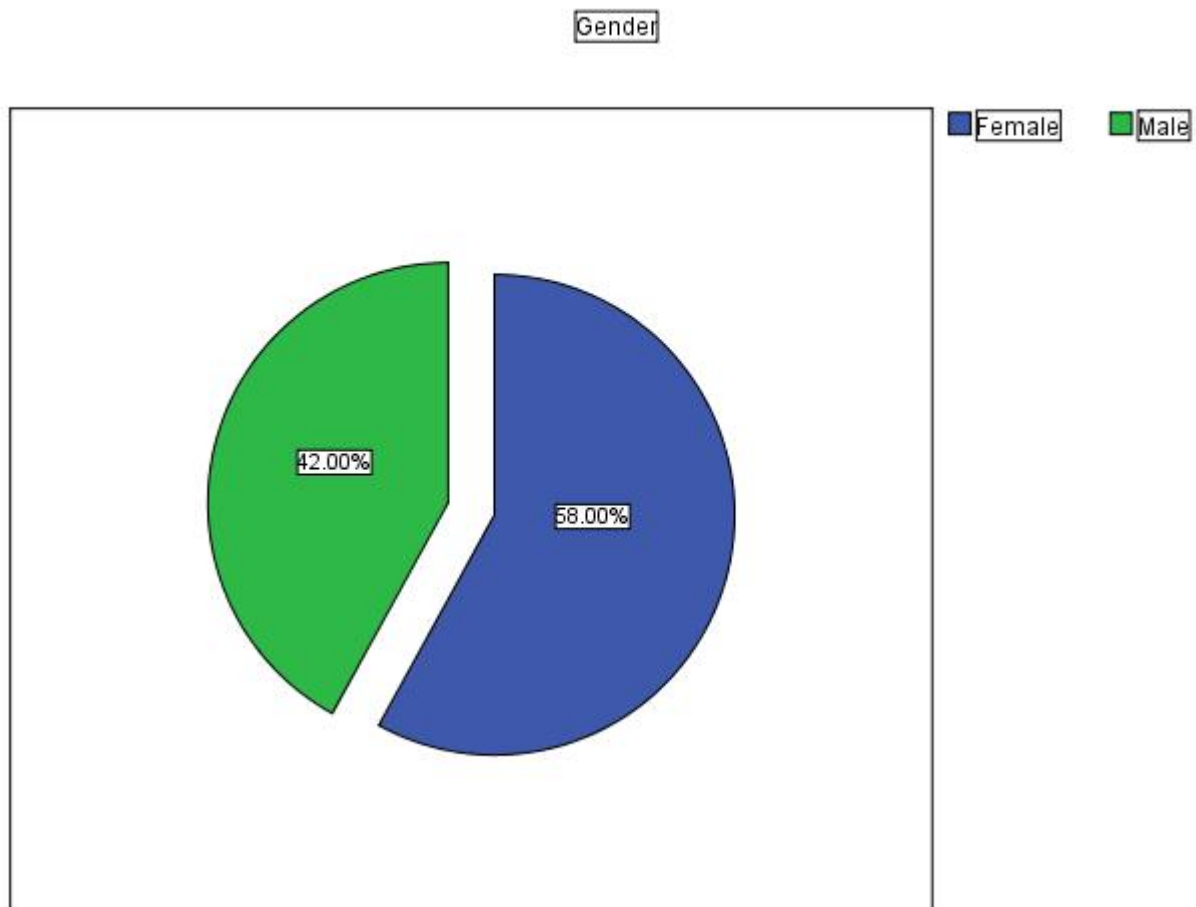
### **DATA PRESENTATION, ANALYSIS AND INTERPRETATION**

#### **4.1 Introduction**

This chapter presents the analysis and interpretation of the data collected from 50 random full-time ND II Statistics students of Kwara State Polytechnic . The analysis is structured around the specific objectives of the study, and it was carried out using SPSS software. Descriptive statistics, cross-tabulations, and charts are used to represent the findings.

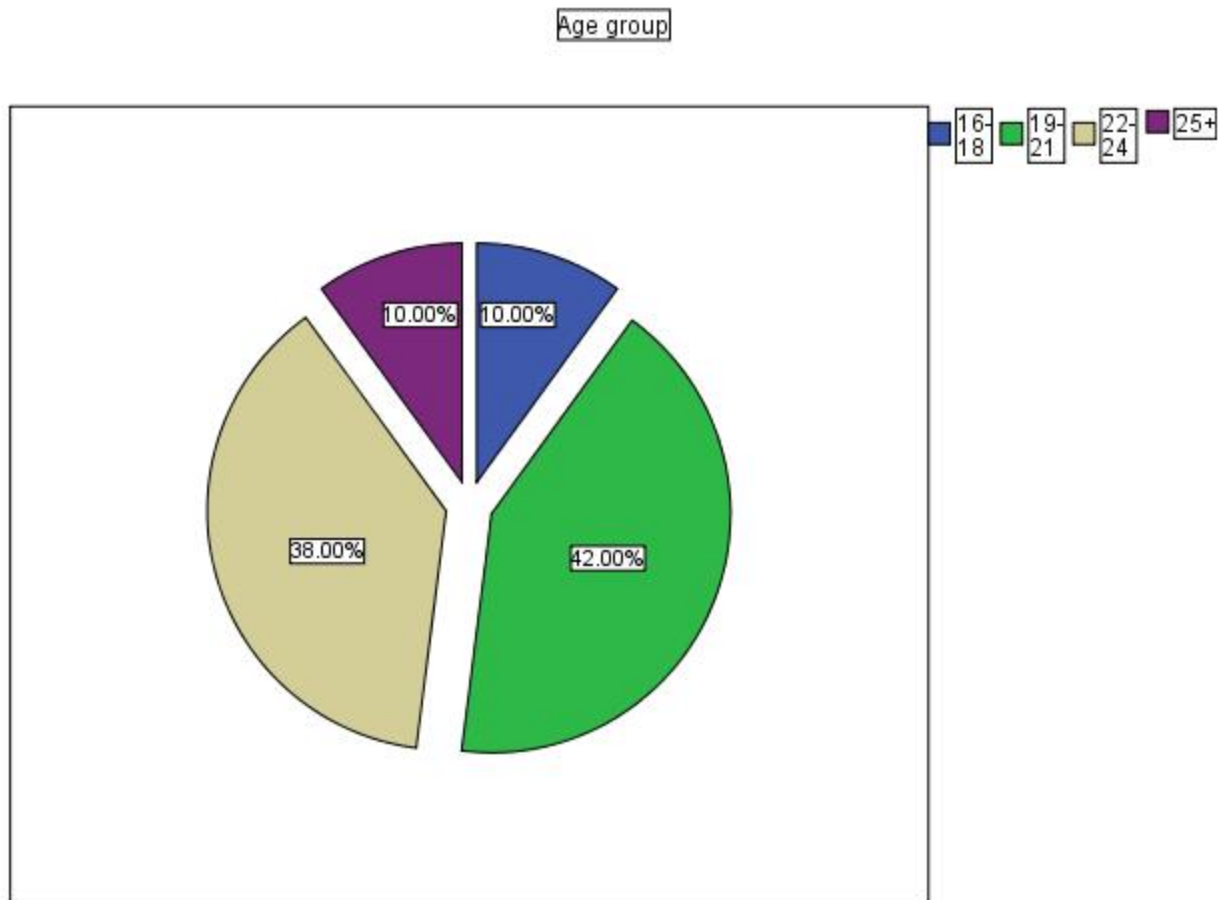
#### **4.2 OBJECTIVE ONE: To examine the distribution of students by Gender, Age Group, and Ethnicity**

#### 4.2.1 Gender Distribution



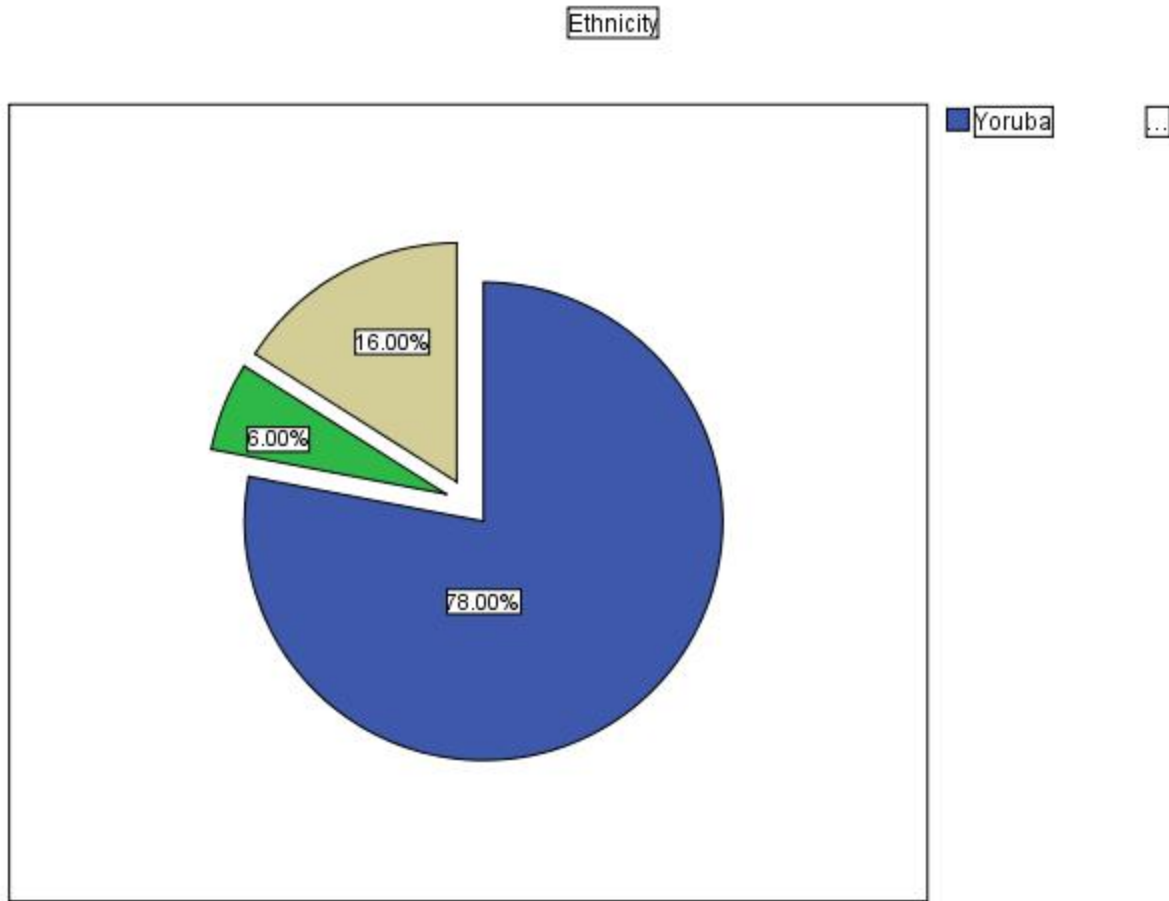
**Interpretation:** The gender distribution indicates that there are more female respondents (58.00%) than male (42.00%).

#### 4.2.2 Age Group Distribution



**Interpretation:** The majority of respondents (42.00%) fall within the 19-21 age range, while the next (38.00%) which are the 22-24 age range, suggesting that most students are in their late teen to early twenties.

#### 4.2.3 Ethnicity Distribution



**Interpretation:** The majority of students are of Yoruba ethnicity, representing 78.00% of the sample which reflects the geographical makeup of the institution.

#### **4.3 OBJECTIVE TWO: To determine the distribution of students' favorite Music Genre by Gender**

This table is present using a cross-tabulation

			Favorite Music genre				Total
			Hip Hop	Fuji	Juju	Apala	
Gender	Female	Count	24	2	0	3	29
		Expected Count	21.5	4.6	.6	2.3	29.0
	Male	Count	13	6	1	1	21
		Expected Count	15.5	3.4	.4	1.7	21.0
Total		Count	37	8	1	4	50
		Expected Count	37.0	8.0	1.0	4.0	50.0

### Expected Count Interpretation

The expected counts were closely aligned with the observed counts, indicating that the differences in genre preference between male and female students were not statistically significant

### Chi-Square Tests

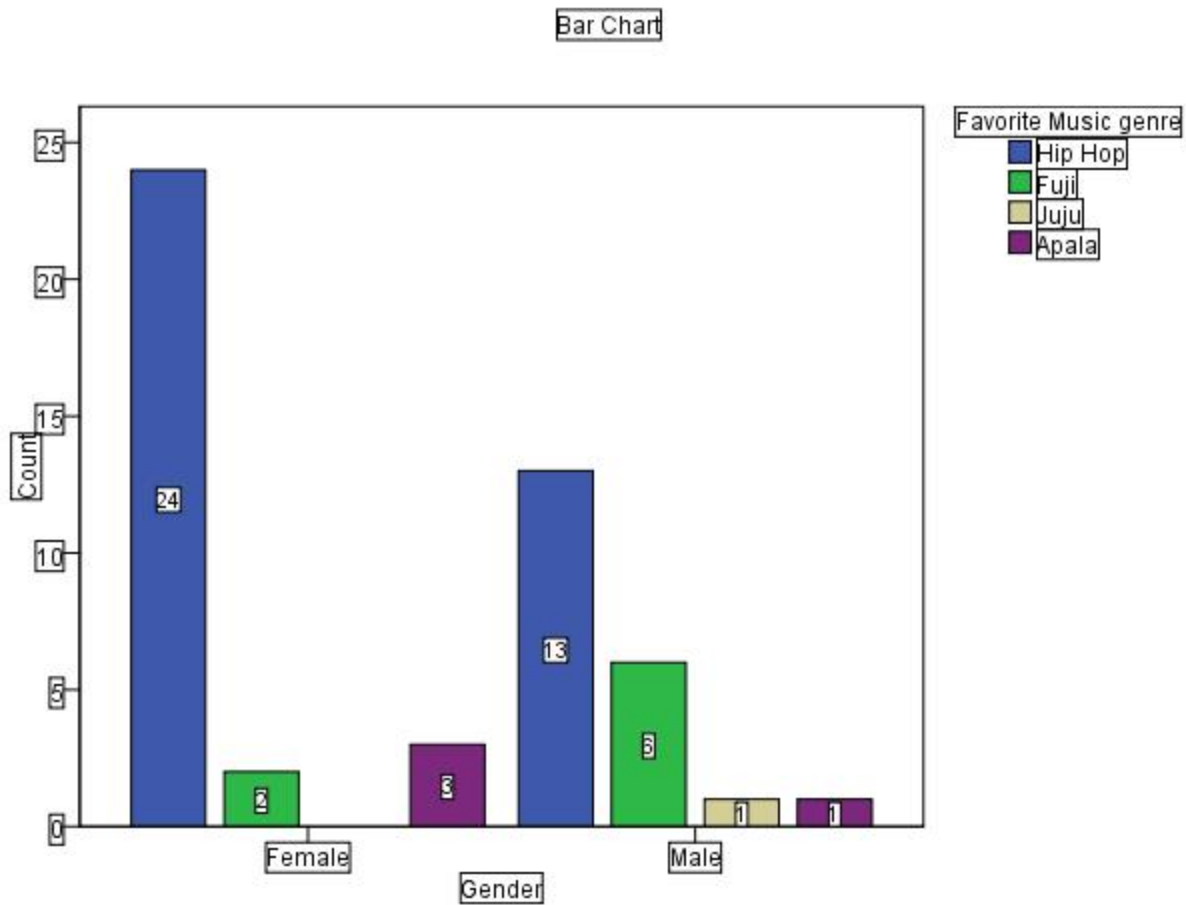
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.148 <sup>a</sup>	3	.105
Likelihood Ratio	6.560	3	.087
Linear-by-Linear Association	.325	1	.569
N of Valid Cases	50		

a. 6 cells (75.0%) have expected count less than 5. The minimum expected count is .42.

### Chi-Square Test Interpretation

A chi-square test was conducted to assess the relationship between gender and favorite music genre. The Pearson Chi-Square value is 6.148 with a p-value of 0.105. Since the p-value is greater than 0.05, there is no statistically significant association between gender and music genre preference.





### Bar Chart Interpretation

From the bar chart, it is observed that Hip Hop is the most preferred music genre among both male and female students. Females showed a stronger preference for Hip Hop, while males displayed more variety in music preference, including Fuji, Juju, and Apala.

### 4.4 OBJECTIVE THREE: To determine the distribution of Student' Favorite Beverages by Gender

**Gender \* Favorite beverages Crosstabulation**

			Favorite beverages				Total
			Milo	Coffee	Bourn-vita	Cadbury chocolate	
Gender	Female	Count	9	4	4	12	29
		Expected Count	9.3	5.8	5.8	8.1	29.0
	Male	Count	7	6	6	2	21
		Expected Count	6.7	4.2	4.2	5.9	21.0
Total	Count		16	10	10	14	50
	Expected Count		16.0	10.0	10.0	14.0	50.0

**Expected Count Interpretation**

Observed values slightly deviated from expected counts, particularly in Cadbury Chocolate and Bourn-vita preferences among females, explaining the near-significant chi-square result.

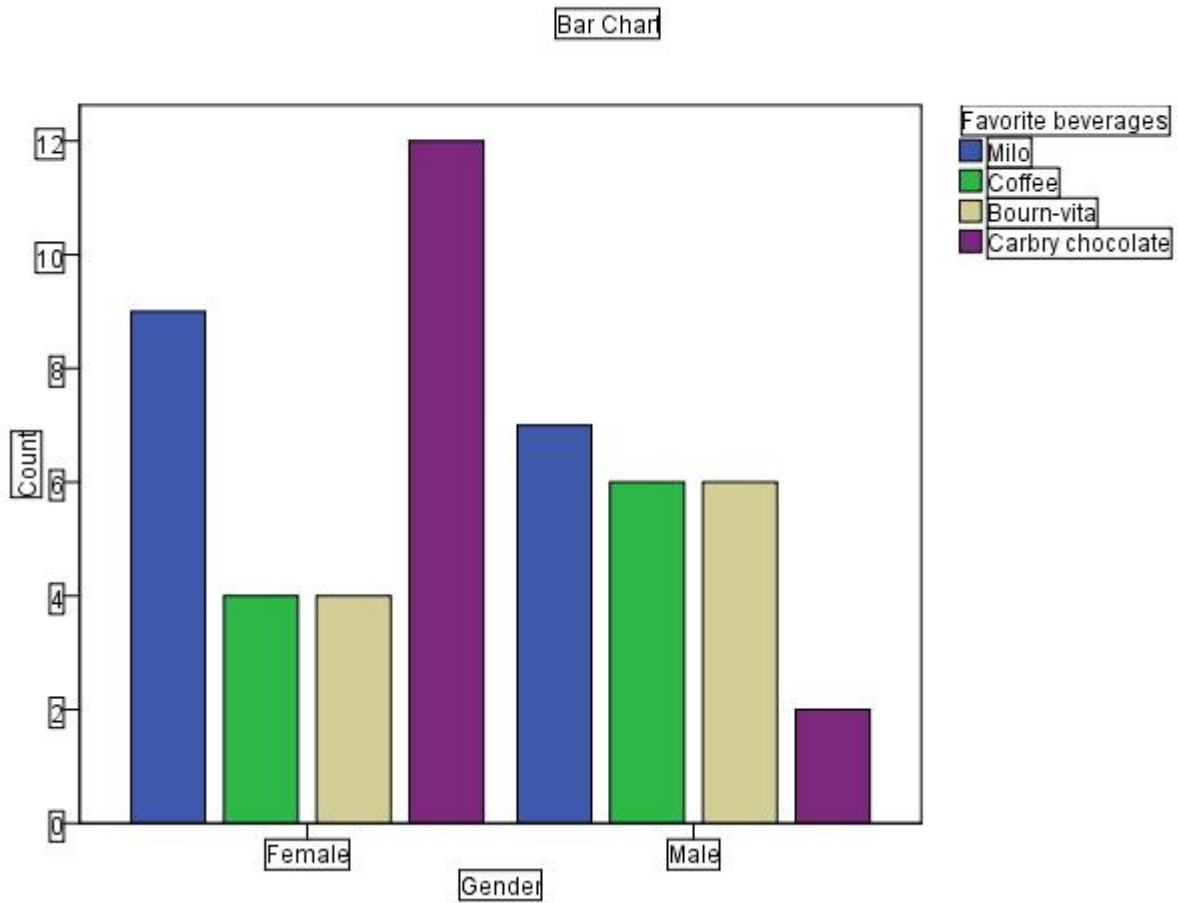
### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.094 <sup>a</sup>	3	.069
Likelihood Ratio	7.695	3	.053
Linear-by-Linear Association	2.166	1	.141
N of Valid Cases	50		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 4.20.

### Chi-Square Test Interpretation

The chi-square test yielded a Pearson Chi-Square value of 7.094 with a p-value of 0.069. Since the p-value is greater than 0.05 but less than 0.10, there is a weak or suggestive relationship between gender and beverage preference, though not statistically significant at the 5% level.



### Bar Chart Interpretation (Descriptive)

Females showed the highest preference for Cadbury Chocolate and Milo, while males preferred Milo, Bourn vita, and Coffee. Cadbury Chocolate had the least preference among males.

### 4.5 OBJECTIVE FOUR: To determine the distribution of students' Favorite Fashion Style by Age Group

**Age group \* Favorite fashion style Crosstabulation**

			Favorite fashion style		Total
			Local	Foreign	
Age group	16-18	Count	1	4	5
		Expected Count	1.1	3.9	5.0
	19-21	Count	4	17	21
		Expected Count	4.6	16.4	21.0
	22-24	Count	5	14	19
		Expected Count	4.2	14.8	19.0
	25+	Count	1	4	5
		Expected Count	1.1	3.9	5.0
	Total	Count	11	39	50
		Expected Count	11.0	39.0	50.0

**Expected Count Interpretation**

The observed values closely matched the expected counts, confirming that age group does not significantly influence fashion style preference.

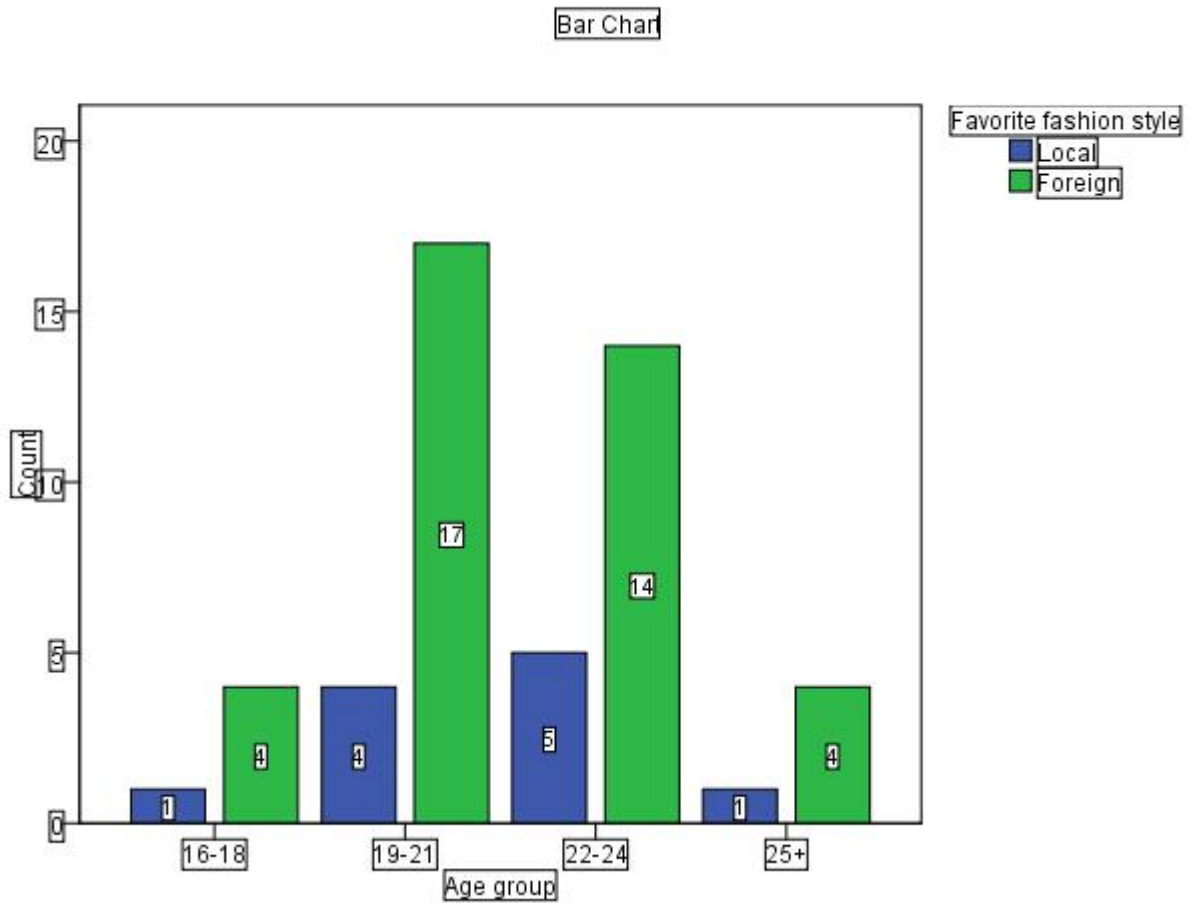
### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.336 <sup>a</sup>	3	.953
Likelihood Ratio	.332	3	.954
Linear-by-Linear Association	.091	1	.763
N of Valid Cases	50		

a. 6 cells (75.0%) have expected count less than 5. The minimum expected count is 1.10.

### Chi-Square Test Interpretation

The Pearson Chi-Square value was 0.336 with a p-value of 0.953. As the p-value is much greater than 0.05, there is no statistically significant relationship between age group and fashion style preferences



### Bar Chart Interpretation (Descriptive)

Foreign fashion is the most preferred across all age groups, especially among students aged 19–21 and 22–24. Local fashion had significantly lower preference across all age ranges.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Summary of Findings**

This study focused on the Statistical Analysis on Study of Student Preference among 50 full-time ND II students in the Department of Statistics, Kwara State Polytechnic. The primary aim was to understand student preferences regarding music, beverages, fashion, and career aspirations in relation to demographic characteristics like gender and age.

Key findings from the analysis are summarized below:

##### **1. Distribution Based on Gender, Age Group, and Ethnicity:**

The demographic distribution showed a balanced representation of both male and female students, with the majority falling within the age groups of 19–21 and 22–24. Students represented a variety of ethnic backgrounds, showing cultural diversity in the department.

##### **2. Music Genre Preference Based on Gender:**

Hip Hop emerged as the most preferred music genre among both male and female students. The Chi-square test revealed no significant relationship between gender and music preference ( $p\text{-value} = 0.105$ ), indicating that gender does not significantly influence music tastes among the students.

##### **3. Beverage Preference Based on Gender:**



Beverages like Milo and Cadbury Chocolate were popular among females, while males showed more variety in beverage preferences. Although the chi-square result indicated a suggestive (but not statistically significant) relationship between gender and beverage preference (p-value = 0.069), it suggests gender might have a mild influence.

#### 4. Fashion Style Preference Based on Age Group:

Foreign fashion was the most favored across all age groups, with the highest preference among students aged 19–24. The Chi-square test showed no significant association between age group and fashion preference (p-value = 0.953).

## 5.2 Conclusion

The study concludes that while students express distinct preferences in music, beverages, fashion, and future professions, demographic factors like gender and age do not significantly influence most of these preferences. The only slightly suggestive association found was between gender and beverage preference.

Overall, the preferences observed provide useful insights into the lifestyle and choices of students, which can be useful for departmental planning, student engagement programs, and even marketing decisions targeted at this demographic.

## 5.3 Recommendations

### 1. Student Engagement:

The Department or Student Union could organize events (e.g., talent shows, music weeks, cultural fashion days) that align with students' popular interests in music and fashion.

## 2. Cafeteria/Menu Planning:

Since certain beverages like Milo and Cadbury Chocolate are more popular, food vendors around campus might consider stocking more of these products to meet student demand.

## 3. Career Counseling:

Given students' varied preferences in future professions (as captured in the broader project), academic advisors should offer targeted counseling to support students in aligning their preferences with viable career paths.

## 4. Broader Awareness Programs:

Awareness programs on local cultural identity could be enhanced to balance the current strong tilt toward foreign fashion.

## **5.4 Suggestions for Further Study**

1. Future research can be extended to cover a larger sample size across other departments or institutions for broader generalization.

2. Additional variables like academic performance, socio-economic background, or digital preferences could be included to explore deeper relationships.

3. A longitudinal study could track how student preferences evolve from ND I to HND II, providing insights into shifting youth trends.

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