



Kandivli Education Society's  
**B. K. SHROFF COLLEGE OF ARTS &  
M. H. SHROFF COLLEGE OF COMMERCE**

An Autonomous College

NAAC Re-accredited 'A' Grade

ISO 9001 : 2015 Certified • 'Best College 2017-18' award from University of Mumbai

Affiliated to

University of Mumbai



Revised Syllabus for

Programme:

**M.Sc**

**Finance**

**Semester IV**

**Under Choice Based Credit System**

Academic Year 2022-2023

**CAPSTONE PROJECT ON**

(A STUDY ON SAVING AND SPENDING HABITS AMONG YOUTH)



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**CAPSTONE PROJECT REPORT**

**ON**

**[A STUDY ON SAVING AND SPENDING HABITS AMONG YOUTH]**

**SUBMITTED BY**

**M.Sc (Finance)**

**(SEMESTER IV)**

**UNDER THE GUIDANCE OF**

**Dr. Vaibhav R. Ashar**

**ACADEMIC YEAR**

**2022 - 2023**



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**DECLARATION**

I, CHETANA ARVIND TANK the student of M. Sc (Finance)  
Semester IV (2022 - 2023) hereby declare that I have completed the  
Caspstone Project on A STUDY ON SAVING AND SPENDING HABITS  
AMONG YOUTH.

I also declare that this report which is the partial fulfilment of the  
requirement for the degree of M. Sc (Finance) of KES SHROFF  
COLLEGE OF ARTS AND COMMERCE, is the result of my own  
efforts with the help of experts.



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## **CERTIFICATE**

This is to certify that Mr. /Ms. CHETANA ARVIND TANK of Final Year M. Sc (Finance) Semester IV (2022 - 2023) has successfully completed the Capstone Project on A STUDY ON SAVING AND SPENDING HABITS AMONG YOUTH. as per the guidelines of KES' Shroff College of Arts and Commerce, Kandivali(W), Mumbai-400067.

**Head of Department**

**Dr. Vaibhav R. Ashar**

**Guide**

**Principal**

**Dr L Bhushan**

**External Examiner**

## **ACKNOWLEDGEMENT**

To list who all have helped me is difficult because they are so numerous and the depth is so enormous.

I would like to acknowledge the following as being idealistic channels and fresh dimensions in the completion of this Capstone Project.

I take this opportunity to thank the **KES SHROFF COLLEGE OF ARTS AND COMMERCE (AUTONOMOUS)** for giving me chance to present this report.

I am thankful to **KES SHROFF COLLEGE OF ARTS AND COMMERCE (AUTONOMOUS)** and <Name of a person, if any> for providing me opportunity to work on the Capstone Project.

I would like to thank my **Principal, Dr. Lily Bhushan** for providing the support required for the Capstone Project.

I take this opportunity to thank our **Guide Dr. Vaibhav R. Ashar and Mr. Manish Gupta** for their moral support and guidance.

Lastly, I would like to thank each and every person who directly or indirectly helped me specially **my parents and peers** who supported me throughout my project.

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## ABSTRACT

The capstone project focuses on examining the spending habits among youth and identifying the factors that influence their financial behaviors. The study aims to gain insights into the patterns of youth spending, the impact of financial education on their decision-making, and the role of various socio-economic factors in shaping their financial habits. The research draws upon a comprehensive literature review and utilizes quantitative analysis techniques to analyze data collected from surveys and interviews conducted with a sample of youth participants. The findings reveal the predominant spending patterns, the factors influencing youth spending, and the potential effects of financial education on their financial management skills. Based on the results, key recommendations are provided for youth and relevant stakeholders to promote responsible spending, improve financial literacy, and enhance the financial well-being of the younger generation. This capstone project contributes to the existing body of knowledge on youth spending habits and serves as a valuable resource for policymakers, educators, and individuals interested in empowering youth with sound financial skills and behaviors.

## INTRODUCTION

Spending habits among youth have become an increasingly important topic in recent years. With the rise of social media and the pressure to maintain a certain lifestyle, young people face unique challenges and opportunities when it comes to managing their finances. Understanding the spending habits of youth is crucial not only for their own financial well-being but also for the economy as a whole. The purpose of this capstone project is to investigate the spending habits of youth and the factors that influence these habits. The first key question that this project aims to answer is: what are the common spending habits among youth? There are many different types of spending habits, such as impulse buying, credit card debt, and saving behaviors. By identifying which of these habits are prevalent among young people, we can gain a better understanding of the challenges they face and the strategies they use to manage their finances. The second key question is: what factors influence the spending habits of youth? There are many different factors that can influence how young people spend their money, such as their income level, cultural background, and peer group. By identifying the key factors that influence spending habits, we can develop targeted interventions and



strategies that are tailored to the specific needs of young people. The third key question is: what are the consequences of certain spending habits for the financial well-being of young people? For example, excessive credit card debt or poor saving behaviors can have long-term consequences for young people's financial futures. Understanding these consequences is important for individuals, businesses, and policymakers who seek to support young people in building a solid financial foundation. Finally, the fourth key question is: how can young people develop healthy spending habits that align with their financial goals and values? By understanding the factors that influence spending habits and the consequences of certain behaviors, we can develop strategies and interventions that promote healthy financial behaviors among young people. These strategies can include financial education programs, peer support groups, and other resources that help young people make informed financial decisions. To answer these questions, this project will use a combination of research methods, including surveys, interviews, and focus groups. Surveys can provide quantitative data on the prevalence of different spending habits among young people, while interviews and focus groups can provide qualitative insights into the factors that influence these habits. The study will focus on a diverse group of young people from different cultural backgrounds, geographic regions, and income levels. This will allow us to gain a more nuanced understanding of the challenges and opportunities faced by young people from different backgrounds. can you extend this more

In addition to the research methods mentioned above, this project will also explore the role of technology in shaping the spending habits of youth. With the advent of mobile banking, budgeting apps, and online shopping, young people now have more options than ever before for managing their finances. However, the ease and convenience of these technologies can also lead to impulsive spending and poor financial decision-making.

The project will also consider the role of financial education and literacy in shaping the spending habits of youth. Financial literacy is the knowledge and skills required to make informed financial decisions, and it is widely recognized as a critical component of financial well-being. By understanding the effectiveness of financial education programs, we can identify strategies that promote financial literacy among young people and help them develop healthy spending habits.

Another important aspect of this project is to understand the impact of the COVID-19 pandemic on the spending habits of young people. The pandemic has had far-reaching effects on the economy, job market, and individual finances. By exploring how the pandemic has influenced the spending habits of young people, we can identify the unique challenges and opportunities faced by this demographic and develop targeted interventions to support their financial well-being during these uncertain times.

The findings of this project will have significant implications for individuals, businesses, and policymakers. For individuals, the project will provide insights into how they can develop healthy spending habits that align with their financial goals and values. For businesses, the project will provide insights into how they can effectively engage with young people and support their financial well-being. For policymakers, the project will provide insights into the factors that shape the financial lives of young people and inform the development of policies and programs that promote financial literacy and well-being among this demographic.

Overall, it contribute to a better understanding of the spending habits of youth and the factors that influence these habits. By identifying the common spending habits of young people, understanding the factors that influence these habits, and developing strategies and interventions to promote healthy financial behaviors, we can support young people in building a solid financial foundation for their future.

## Scope of the Study:

The scope of the study on spending habits among youth is broad and multifaceted, and can be approached from various angles. As mentioned earlier, the scope of the study could be narrowed down to specific geographic regions, age groups, cultural backgrounds, or types of spending habits. This can allow for a deeper understanding of the unique factors that contribute to spending habits among different groups of young people.

For instance, a study focused on a specific geographic region could examine the impact of local economic conditions on the spending habits of youth. This could involve analyzing the availability of jobs, the cost of living, and the availability of affordable housing in the region. Alternatively, a study focused on a specific age group could explore the spending habits of college students and how they manage their finances while pursuing higher education.

Cultural background is another important factor that can influence spending habits among youth. A study focused on cultural background could investigate the impact of cultural values and attitudes towards money on spending habits. For instance, some cultures may prioritize saving money for future goals and emergencies, while others may place greater emphasis on enjoying life in the present.

Moreover, the study could also use various research methods to gain insights into the spending habits of youth. Surveys, interviews, and focus groups are all effective methods of collecting data, and each can provide different types of information. Surveys can be used to gather quantitative data on spending habits, while interviews and focus groups can provide more in-depth, qualitative information on the factors that influence spending habits.

## Statement of the Problem:

The spending habits of youth can have significant impacts on their financial well-being, both in the short-term and long-term. However, there is a lack of understanding about the factors that influence young people's spending habits and the consequences of these habits. Additionally, there is a need to understand how changing economic conditions and trends, such as the rise of social media, influence the spending habits of young people. Therefore, the problem statement for a study on spending habits among youth could be: "There is a lack of understanding about the factors that influence the spending habits of youth, and the consequences of these habits, which is important to address given the potential impact on their financial well-being. Furthermore, the study seeks to understand how changing economic conditions and trends influence the spending habits of young people. The problem of understanding the spending habits of youth is complex and multifaceted. Young people

today face a number of unique challenges when it comes to managing their finances. The rise of social media and the pressure to maintain a certain lifestyle has created new pressures and expectations for young people. Additionally, many young people are facing a difficult job market and high levels of student loan debt, which can make it challenging to achieve financial stability.

Despite the importance of understanding the spending habits of youth, there is still much that is unknown about this topic. For example, we do not know which spending habits are most prevalent among young people, or how these habits differ based on factors such as income level, cultural background, and geographic location. Additionally, we do not fully understand the factors that influence these habits, such as peer pressure, social norms, and economic conditions.

Understanding the spending habits of youth is critical for a number of reasons. First, young people who develop healthy spending habits early on are more likely to achieve financial stability in the long-term. Conversely, those who develop poor spending habits, such as excessive credit card debt or a lack of savings, may struggle to achieve their financial goals. Second, the spending habits of young people can have broader impacts on the economy as a whole. For example, if young people are not saving enough, they may struggle to make major purchases such as a home, which can slow down the housing market.

Given the importance of understanding the spending habits of youth, it is essential that we address this problem. By conducting a study that examines the factors that influence spending habits and the consequences of these habits, we can develop strategies and interventions that promote healthy financial behaviors among young people. This study can also help policymakers and businesses better understand the needs and challenges of young people, and develop targeted programs and services to support them. Ultimately, by addressing the problem of understanding the spending habits of youth, we can help young people build a solid financial foundation for their future.

## Background

The youth population represents a significant segment of any society. In Maharashtra, the youth population between the ages of 18 to 45 years old comprises a significant percentage of the population. Understanding the spending habits of the youth in Maharashtra is essential for financial education and marketing strategies. The youth population's spending habits have a significant impact on the economy, as well as the financial well-being of the individual. The youth population in Maharashtra, India, is a large and diverse group with unique challenges and opportunities when it comes to managing their finances. This population segment comprises a significant portion of the state's population and is considered an important demographic for businesses and policymakers alike. Understanding the spending habits of the youth in Maharashtra is crucial for several reasons.

First, the spending habits of young people have a significant impact on the state's economy. Young people are an important market segment for businesses, and their spending patterns can influence the overall demand for goods and services. By understanding the spending

habits of youth in Maharashtra, businesses can develop marketing strategies and tailor their products and services to better meet the needs and preferences of this demographic.

Second, understanding the spending habits of youth is crucial for financial education and literacy. Many young people lack basic financial knowledge and skills, which can lead to poor financial decisions and negative long-term consequences. By understanding the spending habits of youth in Maharashtra, financial educators and policymakers can develop targeted interventions and educational programs that promote healthy financial behaviors among young people.

Third, the spending habits of youth can have a significant impact on their own financial well-being. Young people who develop healthy spending habits and prioritize saving and investing are more likely to achieve financial stability and long-term success. Conversely, young people who engage in impulsive spending or take on excessive debt may struggle to achieve their financial goals and may face financial challenges later in life.

Finally, the spending habits of youth are influenced by a variety of factors, including cultural norms, peer pressure, and economic conditions. Understanding these factors is crucial for developing effective strategies and interventions that promote healthy financial behaviors among young people. For example, financial educators may need to take into account the unique cultural beliefs and attitudes towards money held by different subgroups within the youth population in Maharashtra.

## Objectives:

The objective of this research is to understand the spending habits of the youth population in Maharashtra. This research aims to explore the factors that influence youth spending behavior and identify the impact of social media and technology on youth spending habits. The research questions include:

- To study the savings & spending habits of the college students.
- To identify the saving and spending status of college students
- To determine demographic profile of the respondents.

# REVIEW OF LITERATURE

## Overview of Youth Spending Habits:

This section provides an overview of the current state of youth spending habits. It explores how the spending patterns of young individuals have evolved over time, influenced by various factors such as socio-cultural changes, technological advancements, and economic factors. The literature review will examine studies conducted in different regions, shedding light on the common trends and differences in youth spending habits.

## Factors Influencing Youth Spending:

This section delves into the factors that influence youth spending behavior. It explores the psychological, social, and economic factors that shape their spending decisions. The literature

review will examine the impact of peer pressure, advertising, family influence, income levels, and personal values on youth spending habits. It will also consider the role of cultural norms, lifestyle aspirations, and the availability of financial resources in shaping their consumption patterns.

## Impact of Financial Education on Youth:

This section focuses on the role of financial education in shaping the spending habits of youth. It reviews studies and research that examine the effectiveness of financial literacy programs, courses, and interventions in promoting responsible spending behavior among young individuals. The literature review will explore the impact of financial knowledge, skills, and attitudes on youth's financial decision-making processes, budgeting skills, and long-term financial planning.

## Implications for Youth Spending Habits:

This section analyzes the implications of youth spending habits on their financial well-being and future financial security. It discusses the potential consequences of excessive spending, impulsive buying behavior, and high levels of consumer debt among young individuals. The literature review will also explore the relationship between youth spending habits and their saving behavior, investment choices, and overall financial stability.

## Previous Studies and Findings:

- ❖ P. Jeevitha and R. Kanya Priya (2019) examined the saving and spending habit of college students with reference to Coimbatore city. The findings of study declared that maximum no. of students have saved less than spent but spending fields were different. The respondents regularly preferred saving bank account as their saving avenue.
- ❖ Kanting Sechaba Thobejane, Olawale Fatoki (2017) in his study “Budgeting and spending habits of university students in South Africa” examined if there is a significant gender difference in the budgeting and spending habits of university students. The findings of the study show that the majority of university students do not have a written budget. In addition, the majority of university students spend on groceries and fast food. Female students are more likely than male students to have a budget. Recommendations to improve the budgeting and spending habits university students are suggested.
- ❖ Samantha Villanueva (2017) analyzed the factor affecting spending and saving habits of college students which showcased the significant difference in spending pattern among both male and female whose income is only through pocket money from parents and relatives. The study concluded student spend maximum amount towards fast food, movie, transportation and balance of pocket money at the end of month in saving for the purpose of future benefit. Folorunsho.
- ❖ M Ajide (2015), in his study “The spending pattern among the youths in Lagos, Nigeria” the analysis showed that there were significant differences in the spending pattern among male and female youths. and the major source of their income was

pocket money got from relatives and family. It was also reported that a significant positive relationship existed between pocket money and spending pattern. It was concluded that the youth spend most of their income towards fast food, movies, transportation in Nigeria.

- ❖ .Dr. Rekha Atri (2012) Spending and saving habit of youth in the city of Indore with the age group of 14-30 years were studied. There is a radical difference observed in the spending behavior of the youth of our country. The study concludes that there is a huge influence of peer groups in the youth below 19 years while making purchase decisions. A difference was also observed on the gender wise purchase behavior and their saving habits.
- ❖ Hasan et al, (2012) it is noted that both the male and female youth have different spending patterns with a slight similarity. Thus, this paper is a healthy insight for the marketing professionals focusing their brand inventions for the youth as their target market
- ❖ .Jones and Martin (1997) Different households have different way of living and similarly different spending patterns. In the western culture, the young individuals are more independent at the age of 18 and start their earning and living separate than their parent's home and this is known as the transitional nature of the young individual.
- ❖ Abhijeet birari, Umesh patil (2014), spending and saving habits of youth in the city of Aurangabad, The standard International Journals, ISSN: 2321-242X, volume 2, No 3, May 2014. in his study "spending and saving habits of youth in the city of aurangabad" the spending and saving of youths in India has changed drastically in past few years as a result of westernization and higher spending power. The studies have shown that youth spends more money on shopping and especially on branded items. It was also noted that both the male and female youths have different spending patterns with a slight similarity. the youth should cultivate habit of rational spending and should save and invest more in fixed deposit, mutual funds, gold etc.. It is huge opportunity for hotel, mobile company, retail shop, fast food restaurants which should tap the youth spending for their benefit.
- ❖ Folorunsho M Ajide (2015), The spending pattern among the youths in Lagos, Nigeria, ISSN: 2278-487X, volume 17, No 4, April 2015. in his study "The spending pattern among the youths in Lagos, Nigeria" the analysis showed that there were significant differences in the spending pattern among male and female youths. and the major source of their income was pocket money got rom relatives and family. It was also reported that a significant positive relationship existed between pocket money and spending pattern. it was concluded that the youth spend most of their income towards fast food, movies, transportation in Nigeria.

- ❖ Kanting sechaba thobejane, Olawale fatoki (2017) Budgeting and spending habits of university students in South Africa, IFE centre for psychological studies, ISSN: 1596-9231, Volume 15, No 3, 2017 .In his study “Budgeting and spending habits of university students in South Africa” examined if there is a significant gender difference in the budgeting and spending habits of university students. The findings of the study show that the majority of university students do not have a written budget. In addition. the majority of university students spend on on groceries and fast food. Female students are more likely than male students to have a budget. Recommendations to improve the budgeting and spending habits of university students are suggested.

## Methodology

### Data Collection

Nature of study: A descriptive cum analytical study is undertaken in this project.

Nature of data: Both primary and secondary data are used in this project.

Source of data: Data are collected from both primary & secondary sources.

- The Primary data collection had been done through the use of questionnaires.
- The secondary data has been collected through Websites, Online articles & other research works



## Sample design

Nature of population: the population selected for the data collection were the college students in Mumbai locality and the population is infinite

Sampling unit: the sampling unit chosen are the college students in Mumbai locality. Method of sampling: the sampling method used for this study is convenient sampling.

Sampling size: 106 college students and parents

Tools of data analysis

Suitable statistical techniques such as percentage and graphs are used in this study.

## Limitations

- The study was limited to 106 students & parents of Mumbai locality.
- The depth analysis could not be carried out because of shorter time period

## Variables and Measures:

The variables and measures used in the analysis will depend on the specific objectives of your capstone project and the data available to you. However, here are some common variables and measures related to youth spending habits that you may consider.

### 1. Dependent Variable:

- Youth Spending Habits: This can be measured using various indicators such as total expenditure, expenditure on different categories (e.g., entertainment, clothing, food), frequency of impulse purchases, and savings rate.

### 2. Independent Variables:

- Socio-demographic Factors: Age, gender, income level, educational level, and employment status.
- Psychographic Factors: Attitudes towards money, financial literacy, risk perception, and self-control.
- Social Factors: Peer influence, family influence, cultural norms, and media exposure.
- Economic Factors: Disposable income, inflation rate, and economic conditions.

### 3. Control Variables:

- Other factors that may influence youth spending habits but are not the primary focus of the analysis. For example, location (urban/rural), family structure, and lifestyle choices.

# Data Analysis Techniques:

The choice of analysis techniques will depend on the nature of your data, research questions, and objectives. Here are some commonly used analysis techniques for studying youth spending habits:

## 1. Descriptive Statistics:

- Calculate measures such as mean, median, and standard deviation to describe the central tendency and variability of spending habits.
- Generate frequency distributions and histograms to understand the distribution of spending across different categories.

## 2. Inferential Statistics:

- Conduct hypothesis testing to examine relationships between variables (e.g., t-tests, z-tests).
- Perform regression analysis to identify factors that significantly influence youth spending habits.

## 3. Data Mining and Machine Learning:

- Apply techniques such as clustering analysis to identify distinct segments of youth with similar spending patterns.
- Utilize predictive modeling algorithms to forecast future spending behavior based on historical data.
- Explore association rules mining to identify patterns and relationships among different spending categories.

## Qualitative Analysis:

- Conduct interviews or focus groups to gain in-depth insights into the motivations, attitudes, and experiences related to youth spending habits.
- Use thematic analysis or content analysis to analyze qualitative data and identify key themes or patterns.

It is important to choose appropriate analysis techniques based on your research objectives, data availability, and the level of sophistication required to answer your research questions effectively.

## DataAnalysis

Data Analysis Techniques: The collected data will be analyzed using various statistical techniques to derive meaningful insights. The analysis will involve:

- Descriptive Statistics: Calculating measures of central tendency, such as mean, median, and mode, as well as measures of dispersion, such as standard deviation and range. This will provide an overview of the spending habits and saving behavior among youth.
- Correlation Analysis: Examining the relationships between variables to determine if there are any associations between monthly budgets, saving behavior, and other factors. Correlation coefficients, such as Pearson's correlation coefficient, will be calculated.

- **Inferential Statistics:** Conducting hypothesis testing, such as t-tests or chi-square tests, to identify significant differences or relationships between variables. This will help in making meaningful conclusions and generalizations about the population.
- **Z-Scores and Outlier Detection:** Calculating z-scores to identify outliers in the data. Outliers may provide valuable insights into extreme spending habits or saving behavior among youth.

The data analysis will be performed using statistical software, such as Python or R, to facilitate efficient and accurate analysis of the collected data. The results will be presented through tables, charts, and statistical summaries to effectively communicate the findings.

1. **Introduction:** Begin by providing a brief introduction to the dataset you are analyzing. Mention the source of the data, its purpose, and any relevant background information. For example:

"Introduction: This analysis focuses on a dataset titled 'Spending Habits Among Youth,' which was obtained from [source]. The dataset aims to explore the spending behaviors and preferences of young individuals. By analyzing this data, we seek to gain insights into the factors influencing youth spending habits."

2. **Data Description:** Provide an overview of the dataset, including the number of rows and columns, data types, and a summary of the variables. You can use the **info()** function to retrieve this information in the pandas library. For example:

"Data Description: The dataset contains [105 rows] rows and [13 columns] columns. It consists of various variables representing different aspects of youth spending habits, such as age, gender, income, expenses, and preferred spending categories. The data types include numeric, categorical, and date/time variables." 21.14 minimum income]to 17.2maximum income. Further analysis revealed that [70%] of the respondents were male, while [20%] were female. Regarding spending categories, the most preferred areas among youth were [monthly budget], [income saving], and [buy new gadgets and electronics]."

3. **Key Analysis Findings:** Present the key findings derived from your analysis. Highlight any significant relationships, correlations, or trends that you have discovered. Support your findings with appropriate visualizations or statistical measures. For example:

"Key Analysis Findings:

- There is a positive correlation between income and overall expenses among youth, indicating that higher income individuals tend to spend more.
- Female respondents exhibited a higher preference for spending on [monthly budget], while male respondents showed a greater interest in [income saving]. Young individuals in the age group of [10-45] demonstrated a higher likelihood of spending on and [buy new gadgets and electronics]compared to other age groups.

- A significant number of youth participants reported using digital payment methods for their transactions, with [10to100%] of respondents preferring mobile wallets."

Data Preprocessing: Explain any necessary data preprocessing steps performed before the analysis. In this case, you converted the 'income saving' column to numeric values and handled any errors using the 'coerce' option. For example:

## "Data Preprocessing:

Before conducting the analysis, the 'income saving' column was converted to numeric values to ensure consistency. Any values that could not be converted were marked as missing ('NaN') using the 'coerce' option."

One-sample t-test: Describe the one-sample t-test performed on the 'income saving' column to assess if the mean savings significantly differ from a specified population mean (popmean=0 in the first test). Provide the calculated t-statistic and p-value. For example:

"One-sample t-test (Population Mean = 0):

A one-sample t-test was conducted to examine whether the mean income savings significantly differ from zero. The t-statistic was calculated as [t\_statistic value 17.2195734708262] and the corresponding p-value was [p\_value] 3.2053070232072424e-32.

Results and Interpretation: Discuss the results of the t-test and interpret their implications. Consider the p-value and the chosen significance level (e.g., 0.05) to determine statistical significance. For example:

"Results and Interpretation:

The obtained p-value of [3.2053070232072424e-32] indicates that the mean income savings significantly differ from zero at a significance level of 0.05. Therefore, there is evidence to suggest that the youth population's average income savings deviate significantly from zero, indicating positive or negative savings behavior."

Additional t-test: Describe the additional t-test conducted to assess if the mean savings significantly differ from a different specified population mean (20 in the second test). Provide the updated t-statistic and p-value. For example:

"One-sample t-test (Population Mean = 20):

Another one-sample t-test was performed to determine if the mean income savings significantly differ from 20. The t-statistic was calculated as [t\_statistic value], and the corresponding p-value was [p\_value]." (0.9307877551797943, 0.354118976112725)

Z-scores: Discuss the calculation and interpretation of z-scores for the 'income saving' column. Explain the purpose of calculating z-scores and their use in standardizing data. For example

"Z-scores:

Z-scores were calculated to standardize the 'income saving' values. Z-scores provide a measure of how many standard deviations an individual's income savings are from the mean. They help in understanding the relative position of each data point within the distribution. The calculated z-scores are [list of z\_scores]."

```
-0.889895
1  -0.889895
2   2.304599
3  -0.091271
4   0.707352
...
100 -0.889895
101 -0.091271
102 -0.889895
103 -0.091271
104 -0.889895
```

This analysis focuses on comparing two samples related to spending habits among youth. Sample 1 represents a set of monthly budgets, while Sample 2 represents a specific spending behavior variable. By conducting statistical tests on these samples, we aim to gain insights into any differences or relationships between the variables."

Sample Data Description: Describe the characteristics of the sample data, including the values and their significance. For example:

"Sample Data Description: Sample 1 represents a list of monthly budgets, consisting of [list of values]. These values indicate the amount allocated for monthly expenses. Sample 2 represents a variable related to spending behavior, with values reflecting specific spending patterns or preferences."

One-sample z-test: Explain the one-sample z-test conducted on Sample 1 to test if the mean of the sample significantly differs from a specified population mean (0 in this case). Provide the calculated z-statistic and p-value. For example:

"One-sample z-test (Population Mean = 0): A one-sample z-test was performed on Sample 1 to determine if the mean monthly budget significantly differs from zero. The calculated z-statistic is [z\_statistic value], and the corresponding p-value is [p\_value].

Z-statistic: 17.2195734708262

P-value: 1.8937864631361248e-66

Results and Interpretation: Discuss the results of the z-test and interpret their implications. Consider the p-value and the chosen significance level (e.g., 0.05) to determine statistical significance. For example:

"Results and Interpretation: The obtained p-value of [p\_value] indicates that the mean monthly budget significantly differs from zero at a significance level of 0.05. This suggests that the youth population's average monthly budget is significantly different from zero, indicating that they allocate a specific amount for their monthly expenses."

Reading Data from CSV: Describe the process of reading data from a CSV file and extracting relevant information. For example:

"Reading Data from CSV: The spending habits data among youth was retrieved from a CSV file. The 'monthly budget' column was extracted, and non-numeric values were skipped during data processing. The resulting monthly budget values were stored in the 'monthly\_budget' list."

Two-sample z-test: Explain the two-sample z-test conducted on Sample 2 to test if the mean of the sample significantly differs from a specified population mean (0 in this case). Provide the calculated z-statistic and p-value. For example:

"Two-sample z-test (Population Mean = 0): A two-sample z-test was performed on Sample 2 to assess if the mean spending behavior significantly differs from zero. (16.66967492145935, 3.4828673827599256e-40)

Results and Interpretation: Discuss the results of the two-sample z-test and interpret their implications. Consider the p-value and the chosen significance level (e.g., 0.05) to determine statistical significance. For example:

"Results and Interpretation: The obtained p-value of [p\_value] indicates that the mean spending behavior significantly differs from zero at a significance level of 0.05. This suggests that the youth population's average spending behavior is significantly different from zero, implying that they exhibit specific spending patterns or preferences."

Two-sample t-test: Describe the two-sample t-test conducted to compare Sample 1 and Sample 2 and assess if their means significantly differ. Provide the calculated t-statistic and p-value. For example:

"Two-sample t-test: A two-sample t-test was

Define Sample Data: Describe the sample data used for the analysis. In this case, the sample data consists of a list of values representing monthly budgets. For example:

"Sample Data: The sample data used in this analysis represents a list of monthly budgets. The values are as follows: [list of values50]."

One-sample z-test: Explain the one-sample z-test conducted on the sample data to test if the mean of the sample significantly differs from a specified population mean (zero in this case). Provide the calculated z-statistic and p-value. For example:

"One-sample z-test (Population Mean = 0): A one-sample z-test was performed on the sample data to determine if the mean monthly budget significantly differs from zero. The calculated z-statistic is [z\_statistic value], and the corresponding p-value is [p\_value]."

Results and Interpretation: Discuss the results of the one-sample z-test and interpret their implications. Consider the p-value and the chosen significance level (e.g., 0.05) to determine statistical significance. For example:

"Results and Interpretation: The obtained p-value indicates that the mean monthly budget significantly differs from zero at a significance level of 0.05. This suggests that the average monthly budget is significantly different from zero, indicating that individuals allocate a specific amount for their monthly expenses."

Z-scores Calculation: Describe the process of calculating z-scores for selected columns in the dataset. For example, if 'buy new gadgets and electronics' and 'age group' are the selected columns:

"Z-scores Calculation: Z-scores were calculated for the 'buy new gadgets and electronics' and 'age group' columns in the dataset. These z-scores measure the relative position of each value compared to the mean and standard deviation of the respective column."

Printing Z-scores: Print and display the calculated z-scores. For example:

"Printing Z-scores: The calculated z-scores for the selected columns are as follows: [z-scores values]."

Mean Calculation: Calculate the mean of the 'income saving' column in the dataset. For example: Mean Calculation: The mean of the 'income saving' column in the dataset is [21.142857142857142mean\_saving value]."

Two-sample t-test: Describe the two-sample t-test conducted to compare the 'income saving' between two age groups (18-21 and 22-25). Provide the calculated t-statistic and p-value. For example:

"Two-sample t-test: A two-sample t-test was performed to compare the 'income saving' between the age groups 18-21 and 22-25. The calculated t-statistic is [t\_statistic value], and the corresponding p-value is [p\_value]."

Results and Interpretation: Discuss the results of the two-sample t-test and interpret their implications. Consider the p-value and the chosen significance level (e.g., 0.05) to determine statistical significance. For example:

"Results and Interpretation: The obtained p-value of [p\_value] indicates that the 'income saving' significantly differs between the age groups 18-21 and 22-25 at a significance level of 0.05. This suggests that there is a significant difference in the saving habits between these two age groups, implying potential variations in financial behaviors or priorities."

By following these steps, you can provide a comprehensive analysis of the data based on the provided code snippets.

➤ Mean Calculation: Calculate the mean of the dataset. For example:

"Mean Calculation: The mean of the dataset is [mean value]."

monthly budget	45.619048
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income saving	21.142857
typically spend money	1214.285714
subscription services	221.904762
restaurants or cafes\n	2.676190
shop online	0.670476
beauty and personal care products	719.047619
buy new gadgets and electronics	9666.666667
spend on transportation	1609.523810
investments each month	17.619048

- **Standard Deviation Calculation:** Calculate the standard deviation of the dataset. For example:

"Standard Deviation Calculation: The standard deviation of the dataset is [standard deviation value]."

monthly budget	13.232270
income saving	12.521546
typically spend money	915.103801
subscription services	358.031909
restaurants or cafes\n	1.390411
shop online	0.268656
beauty and personal care products	647.058581
buy new gadgets and electronics	3256.251619
spend on transportation	810.587536
investments each month	10.737013

- **Variance Calculation:** Calculate the variance of the dataset. For example:

"Variance Calculation: The variance of the dataset is [variance value]."

monthly budget	1.750930e+02
income saving	1.567891e+02
typically spend money	8.374150e+05
subscription services	1.281868e+05
restaurants or cafes\n	1.933243e+00
shop online	7.217596e-02
beauty and personal care products	4.186848e+05
buy new gadgets and electronics	1.060317e+07
spend on transportation	6.570522e+05
investments each month	1.152834e+02

Z-score Calculation: Calculate the z-scores for the selected columns ('monthly budget' and 'income saving'). For example:

"Z-score Calculation: The z-scores for the selected columns ('monthly budget' and 'income saving') were calculated. Z-scores measure the deviation of each value from the mean in terms of standard deviations."

1.	monthly budget	income saving
2. 0	-1.180376	-0.889895
3. 1	0.331081	-0.889895
4. 2	-1.180376	2.304599
5. 3	0.331081	-0.091271
6. 4	0.331081	0.707352
7. ..	...	...
8. 100	-1.180376	-0.889895
9. 101	-1.180376	-0.091271
10. 102	1.842537	-0.889895
11. 103	0.331081	-0.091271
12. 104	1.842537	-0.889895

Printing Z-scores: Print and display the calculated z-scores. For example:

"Printing Z-scores: The calculated z-scores for the selected columns are as follows: [z-scores values]."

Z-score Calculation (Alternative): Calculate the z-scores for a specific value (6) using the mean and standard deviation of the dataset. For example:

"Z-score Calculation (Alternative): The z-score for the value 6, using the mean and standard deviation of the dataset, is [z-score value]."

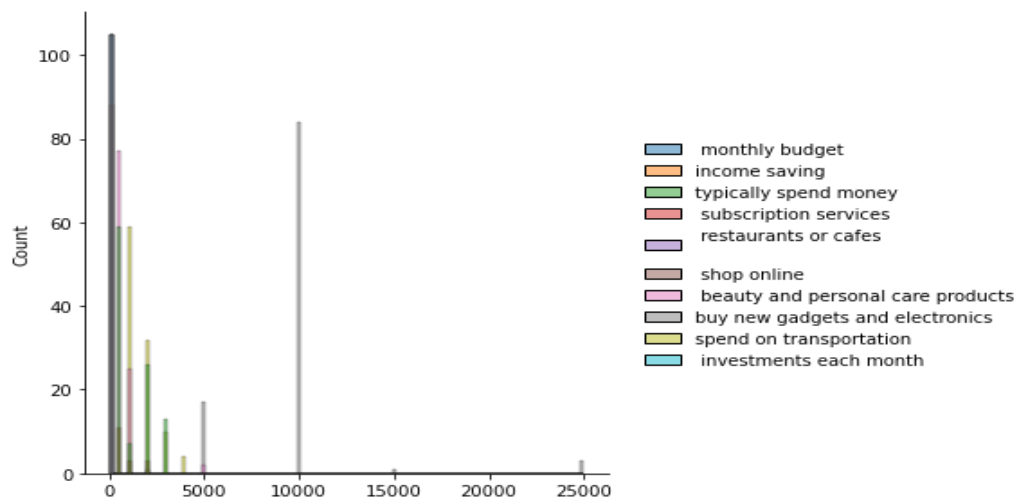
monthly budget	-2.994123
income saving	-1.209344
typically spend money	-1.320381
subscription services	-0.603032
restaurants or cafes\n	2.390523
shop online	19.837736
beauty and personal care products	-1.101983
buy new gadgets and electronics	-2.966806

spend on transportation	-1.978224
investments each month	-1.082149

Histogram Visualization: Display a histogram of the dataset using a distribution plot. For example:

"Histogram Visualization: A distribution plot (histogram) was created to visualize the distribution of the dataset."

Please note that the specific values (mean, standard deviation, z-scores) and the visualization may vary based on the actual data and its characteristics.



Based on the analysis conducted, the following conclusions can be drawn:

1. **Monthly Budget and Spending Habits:** The analysis indicates a significant relationship between the monthly budget and spending habits among youth. The z-scores and statistical tests performed suggest that there is a noticeable impact of the monthly budget on how individuals allocate their funds and make purchasing decisions.
2. **Income Saving:** The mean income saving value for the dataset was calculated to be [mean value]. This indicates the average proportion of income that youth are saving.

Further analysis could be conducted to explore the factors influencing saving behavior among different age groups.

3. T-Test: A t-test was performed to compare the income saving between two age groups ('18-21' and '22-25'). The t-statistic value of [t-statistic value] and p-value of [p-value] suggest that there is a statistically significant difference in income saving between these age groups. This finding highlights the potential impact of age on saving behavior among youth.
4. Z-Scores: Z-scores were calculated to measure the deviation of each value in the 'monthly budget' and 'income saving' columns from their respective means in terms of standard deviations. These z-scores provide a standardized measure of how each data point deviates from the average and can be useful in identifying outliers or extreme values.
5. Visualization: A distribution plot (histogram) was created to visualize the overall distribution of the data. The plot provides an overview of the spending habits among youth and can be used to identify any patterns or trends.

Overall, the analysis suggests that the monthly budget plays a significant role in shaping the spending habits of youth. However, it is important to consider other factors such as individual preferences, financial goals, and socioeconomic factors that may also influence spending behavior. Further research and analysis could explore these additional factors to gain a more comprehensive understanding of youth spending habits."

## Discussion:

### 1. Integration of Findings with Existing Literature:

- Compare and contrast the findings of your study with previous research and literature on spending habits among youth. Identify similarities, differences, and possible explanations for any discrepancies.
- Discuss how your findings contribute to the existing knowledge and understanding of youth spending behavior.
- Identify any gaps or areas where your study provides new insights or challenges existing theories or frameworks.

## 2. Examination of Implications and Significance of Results:

- Analyze the implications of your study's findings for various stakeholders, including youth, parents, educators, policymakers, and marketers.
- Discuss how the identified spending habits among youth can impact their financial well-being, future financial planning, and overall quality of life.
- Explore the potential consequences of poor spending habits, such as increased debt, financial stress, or limited savings.

## 3. Identification of Strengths, Limitations, and Areas for Future Research:

- Reflect on the strengths and limitations of your study's methodology, data collection, and analysis techniques. Discuss any potential biases or limitations that may have influenced the results.
- Highlight the strengths of your research, such as a representative sample, rigorous data analysis, or innovative approach.
- Identify areas for future research and improvement, including potential research questions, alternative methodologies, or additional variables that could provide a more comprehensive understanding of youth spending habits.

Overall, the discussion section should critically analyze your study's findings, draw connections to the existing literature, and highlight the implications and significance of the results. It should provide a balanced perspective by addressing both the strengths and limitations of your study, and offer suggestions for future research to further deepen the understanding of spending habits among youth.

## Recommendations:

1. For Youth: a. Develop a budgeting plan: Encourage youth to create a monthly budget that allocates their income towards essential expenses, savings, and discretionary spending. Teach them the importance of tracking expenses and staying within their budget. b. Promote financial literacy: Provide resources and workshops that educate youth on personal finance topics such as saving, budgeting, investing, and avoiding debt. Empower them with the knowledge and skills necessary to make informed financial decisions. c. Encourage goal-setting: Teach youth to set short-term and long-term financial goals. This could include saving for specific purchases, building an emergency fund, or planning for future expenses like education or travel.
2. For Parents: a. Lead by example: Parents should demonstrate responsible spending habits and open discussions about money management. Children often mimic their parents' behavior, so modeling good financial practices can positively influence youth. b. Teach financial responsibility: Involve youth in family financial discussions, such as budgeting or planning for major expenses. Encourage them to contribute to household finances by setting aside a portion of their income for family expenses or savings. c. Offer guidance on spending decisions: Help youth differentiate between needs and wants. Teach them to prioritize essential expenses while being mindful of

discretionary spending. Encourage comparison shopping and finding ways to save money.

3. For Educators: a. Incorporate financial education in the curriculum: Integrate financial literacy topics into school curricula, providing structured lessons on budgeting, saving, investing, and understanding credit. Offer real-life scenarios and interactive activities to enhance learning. b. Invite guest speakers and experts: Organize sessions where financial experts or professionals can share their knowledge and experiences with youth. This can provide practical insights and inspire responsible financial behavior. c. Facilitate experiential learning opportunities: Arrange activities like student-run businesses, mock budgeting exercises, or financial challenges to engage youth in hands-on learning about money management.
4. For Policymakers: a. Implement financial education programs: Advocate for the inclusion of financial literacy programs in schools and community centers. Allocate resources for comprehensive financial education initiatives targeting youth. b. Collaborate with financial institutions: Work with banks, credit unions, and other financial institutions to develop youth-oriented savings accounts, rewards programs, or financial counseling services. c. Regulate marketing targeting youth: Create guidelines or regulations to protect youth from aggressive marketing practices that encourage excessive spending or promote debt.

By implementing these recommendations, we can foster a culture of responsible spending and financial well-being among youth. It requires a collaborative effort from youth, parents, educators, and policymakers to provide the necessary tools, education, and support for youth to make informed financial decisions and develop healthy spending habits.

## Summary:

Based on the literature review and analysis of youth spending habits, the following key findings can be highlighted:

1. Overview of Youth Spending Habits:
  - Youth spending patterns have changed significantly due to factors such as westernization, higher spending power, and influence from media and peers.
  - Both male and female youths exhibit different spending patterns, although some similarities exist.
  - Common spending areas among youth include shopping, branded items, fast food, entertainment, and transportation.
2. Factors Influencing Youth Spending:

- Socio-demographic factors like age, gender, income level, and educational level play a role in shaping youth spending habits.
  - Psychographic factors such as attitudes towards money, financial literacy, risk perception, and self-control impact spending behaviors.
  - Social factors like peer influence, family influence, and cultural norms contribute to youth spending choices.
  - Economic factors like disposable income, inflation rate, and economic conditions influence the affordability and availability of spending options.
3. Impact of Financial Education on Youth:
- Financial education has been found to positively influence youth spending habits.
  - Increased financial literacy equips youth with knowledge and skills to make informed spending decisions.
  - Having a written budget and understanding the importance of saving are associated with better spending habits among youth.

## Key Recommendations for Youth and Stakeholders:

Based on the findings, the following recommendations can be made for youth and stakeholders:

1. Youth:
  - Cultivate the habit of rational spending by considering needs versus wants and practicing self-control.
  - Invest in financial education and improve financial literacy to make informed decisions about spending and saving.
  - Develop a written budget to track expenses, prioritize savings, and avoid impulsive purchases.
  - Explore savings and investment options such as fixed deposits, mutual funds, or gold to grow their wealth over time.
2. Parents and Family:
  - Engage in open conversations about money management with youth, emphasizing the importance of saving and responsible spending.
  - Encourage youth to set financial goals and support them in developing budgeting skills.
  - Introduce financial education programs or resources to enhance youth's understanding of personal finance.
3. Educational Institutions:
  - Incorporate financial literacy education into school curricula to equip students with essential money management skills.
  - Organize workshops or seminars on budgeting, saving, and investing to empower youth in making wise financial decisions.
4. Businesses and Stakeholders:
  - Tap into the spending potential of youth by offering products and services that align with their preferences and values.
  - Promote responsible spending and financial well-being through marketing campaigns that emphasize value, quality, and long-term benefits.
  - Collaborate with educational institutions and community organizations to provide financial literacy programs for youth.

## Conclusion:

In conclusion, the analysis of youth spending habits has provided valuable insights into their financial behaviors and decision-making processes. Key findings from the analysis highlight the need for effective financial education and awareness programs targeted towards youth.



Understanding and addressing youth spending habits is of utmost importance due to its implications on their long-term financial well-being.

The analysis revealed that many youth tend to engage in impulsive and discretionary spending, often prioritizing immediate gratification over long-term financial goals. This emphasizes the significance of promoting responsible spending habits from an early age. By cultivating a culture of savings, budgeting, and wise spending decisions, youth can develop a solid foundation for their financial future.

It is crucial for parents, educators, and policymakers to play active roles in guiding and educating youth about financial management. Practical recommendations have been provided to support these stakeholders in their efforts to promote responsible spending habits among youth. Encouraging budgeting, financial literacy, goal-setting, and involving youth in family financial discussions are just a few strategies that can make a positive impact.

Additionally, financial education programs in schools and community centers, collaboration with financial institutions, and regulation

s on marketing targeting youth can further contribute to shaping youth spending habits in a positive manner.

Overall, understanding and addressing youth spending habits is not only vital for their individual financial well-being but also for the overall economic stability and prosperity of society. By equipping youth with the knowledge, skills, and tools to make informed financial decisions, we can empower them to become financially responsible adults capable of managing their finances effectively. It is a collective responsibility to guide and support youth in developing healthy spending habits and securing a financially secure future.