Leisure Expenditure in Mumbai: Income and Household Influence

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Abstract

This study looks at the social and economic factors that affect how much money urban families in Mumbai spend on leisure activities in 2025. Leisure spending includes money spent on restaurants, fun activities, and other things that aren't necessary. This definition comes from data from 777 urban households. We use descriptive statistics to show what the households are like, and then we use an Ordinary Least Squares (OLS) regression model to find the most important factors that affect how much people spend on leisure. The results show that adjusted total income, type of job, and larger household size all have a statistically significant and positive effect on how much people spend on leisure. On the other hand, age, gender, and level of education don't seem to have a big effect. These results indicate that in a major metropolitan area such as Mumbai, discretionary spending is primarily influenced by income levels and household composition rather than demographic factors. The research provides empirical evidence to the body of work on urban consumption behavior and offers valuable insights for policymakers focused on urban planning, welfare design, and enhancements in urban quality of life. This study looks at the social and economic factors that will affect how much people in Mumbai's cities spend on leisure activities in 2025. It looks at data from 777 households to see how family size, income, and type of job affect how much people spend on eating out, going out, and traveling. They use basic statistical methods and regression analysis. The results show that people with higher incomes, certain jobs, and bigger families spend more on leisure time. Age, gender, and education don't matter as much. Future studies can look at how spending on leisure activities has changed over time and compare urban and rural areas.

Keywords: Leisure Expenditure, Urban Consumption, Household Expenditure, Post-COVID Economic Behaviour, Mumbai

Introduction

People living in cities like Mumbai have very different incomes, jobs, and household sizes, which have a big impact on how they spend their money. In cities where living costs are high, job security and income stability have a bigger impact on what people buy than demographic factors do. Families spend their money on needs and wants in different ways because of these differences.

People in cities spend a lot of their money on things other than food on things like going out to eat, traveling, and going to the movies. Stable income, type of job, and family structure all have a big effect on how much people spend on leisure activities. It also shows how people live, how they work, and how easy it is to get to city amenities. If people have a steady job and income, they are more likely to spend money on fun things to do.

Mumbai is the main business and service hub in India. The COVID-19 pandemic hurt the economy there a lot, but things have slowly gotten better since then. We can get an idea of how people will spend their money after the pandemic and how city living is changing by looking at leisure spending in 2025.

This study adds up all the money spent on travel, eating out, and fun activities to get a total for leisure spending. This lets you get a full and stable picture of how much people spend on things they don't have to.

The study looks at the income, job, and size of households in Mumbai to show that these are the main things that affect how much they spend on leisure activities. It also adds to what we know about how people in cities spend their money and how they recover after the pandemic.

Research Questions

What social and economic factors affect how much money people in Mumbai spend on leisure activities in 2025?

How do the size of a household, the type of work someone does, and their income affect how much they spend on leisure?

What does spending on leisure activities tell us about how people spend their money in cities after the pandemic?

Objectives of the Study

1. To understand the socio-economic background of households in urban Mumbai.
2. To study the relationship between household income and leisure expenditure.
3. To examine how age, gender, education, occupation, and household size affect leisure spending.
4. To identify the most important factors influencing leisure expenditure.

Hypotheses Tested

- Household income has a significant impact on leisure expenditure.
- Occupation type affects leisure expenditure.
- Household size influences leisure expenditure.
- Age, gender, and education affect leisure expenditure.

Review of Literature

Deaton and Dreze (2002) Using NSSO data, this work analysed patterns in consumption and poverty. The study showed that as income increases, non-food expenditure (including discretionary categories) also increases, especially in urban areas, supporting the hypothesis that income is a key driver of leisure and non-food expenditure.

Himanshu (2010) used NSSO data on consumption to show that people in cities in India are now eating less food and more non-food items. The research indicated that income and occupation are substantial factors influencing non-food expenditure, whereas the impact of education yields inconclusive results.

Deaton and Kozel (2005) This study used NSSO data to show how unequal consumption is. It discovered that households with greater income and more secure employment allocate a larger proportion of their expenditures to non-essential goods. This shows that income is an important factor in discretionary spending.

Chakrabarti, Kishore, and Roy (2016) Using NSSO unit data, the authors analysed non-food consumption determinants. They found that income and household size significantly influence non-food expenditure, while the effects of age and gender are limited.

Vyas and Garikipati (2018) Analysing urban consumption patterns, this study showed that discretionary expenditure is highly responsive to income changes. Occupation mattered more than demographic attributes like gender and education.

CMIE (2020) CPHS data revealed that economic shocks reduce non-essential and leisure expenditure sharply. Income loss and job instability were identified as key drivers of reduced spending on leisure categories.

In "Gender (Women-Led Households) as a Determinant of Consumption Expenditure on Food during March 2020 – A Case Study of Maharashtra," Nandini and Asha (2024) utilised CPHS data to analyse the impact of socio-economic characteristics on food expenditure patterns during the pandemic. The study revealed that household composition and income substantially influenced expenditure patterns, underscoring the impact of gender and economic capacity on consumption behaviour.

In "Post-COVID Household Expenditure in Maharashtra: Socioeconomic Influences on Food, Health, and Leisure," Nandini (2025) utilised regression analysis on CPHS data to ascertain the

determinants of expenditure categories. Results validated that income and occupational status are significant determinants of leisure (non-food) expenditure, whereas demographic factors such as age and education demonstrate minimal influence.

Review of existing studies shows consistent evidence that income is the strongest determinant of non-food and leisure expenditure in Indian households. Occupation and employment status also significantly influence consumption behaviour. Household size is found to increase total leisure and non-food expenditure. Demographic factors such as age, gender, and education generally show weak or mixed effects.

Research using CPHS data shows that spending on leisure activities is very sensitive to changes in income and job stability, especially during times of economic stress like the COVID-19 pandemic. When people lose their jobs or their income is uncertain, they tend to spend less on leisure activities. The research by Jagannarayan and others adds to this body of work by showing that household traits are also important. Their research shows that gender and the makeup of a household affect how people spend their money. It also confirms that income and job still have the biggest effect on how people spend their free time after the pandemic.

Research Gap

The NSSO and CPHS studies give us a lot of information about how people spend their money on a national and regional level. However, there isn't much information about how people in metropolitan cities like Mumbai spend their money on leisure activities. This study fills in the gaps by looking at the social and economic factors that affect how much people in urban Mumbai spend on leisure activities in 2025.

Rationale for the Study

This study looks at the things that affect how much money people in urban India spend on leisure activities, using Mumbai as a case study. Leisure spending is an important way to measure living standards and discretionary spending, but not enough research has been done on it in cities. After COVID, the economy has changed how stable people's incomes are, how they work, and what they buy. This means that we need to look at how people spend money in cities again. By focusing on 2025, the study captures post-pandemic adjustments rather than crisis-period responses. The research fills a gap in city-specific empirical evidence and provides insights into how income, occupation, and household structure shape leisure consumption in metropolitan settings.

Mumbai was chosen for this study because it is India's largest metropolitan city with diverse income levels, occupations, and household structures, making it ideal for analysing urban consumption behaviour. The year 2025 represents a post-pandemic phase marked by income recovery, employment adjustment, and changing lifestyles. Leisure spending, which includes money spent on eating out and other activities, shows how much people are willing to spend on things they don't need and how good life is in the city. In a city like Mumbai where living costs are high, how much people spend on leisure activities depends a lot on their income and job situation. Examining leisure spending in Mumbai in 2025 elucidates post-COVID urban consumption trends and offers city-specific data for policy formulation and urban planning.

Data and Methodology
Data Source

The study is based on household-level data for urban Mumbai for the year 2025, covering 777 households. The dataset includes information on demographic composition, socio-economic characteristics, and adjusted household expenditure.

Variables
- Dependent Variable: Leisure Expenditure – Vacation, Restaurant eating and recreation – aggregated
- Independent Variables: Total Income, Age Group, Gender Group, Occupation Group Education Group, Household Size Group

Analytical Framework

The study discusses urban households using basic statistics, such as their income, number of cohabitants, occupation, and level of education.

An OLS regression model is used in the study to determine the factors that influence people's spending on leisure activities. Age, education, and occupation are examples of categorical factors that are used to create dummy variables. After that, one category serves as the foundation for comparison. R-square, ANOVA, and Adjusted R-square values are used to assess the model's accuracy and utility. This approach assists in identifying the key factors influencing how much people spend on leisure, dining out, and travel. OLS was used because leisure spending is a continuous value that can be measured in money. The primary objective of the study is to comprehend the influence of income, occupation, and household size on the average leisure expenditure. OLS yields clear and comprehensible results, rendering it valuable for policy and academic evaluation. It works well with cross-sectional household data and lets you use dummy variables for things like age, gender, education, and job. Other

methods are better for censored or long-term data, which this study does not use.

Results and Discussion

To study the socio-economic status of the households, data on the age group, gender group, occupation group, education group, household size and region type are considered. The frequency tables are obtained and are presented as follows.
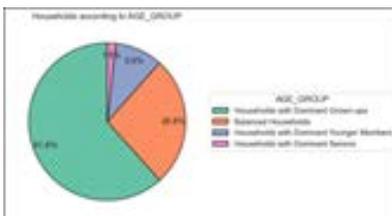
1. Age Group: The information about the age of respondents of the households is collected and divided into four categories and presented as follows.

The Table 1 above indicates that out of a total of 777 households, there are 479 (61.65%) households with Dominant Grown-ups, 208 (26.77%) Balanced households, 76 (9.78%) households with Dominant Younger Members, and 14 (1.80%) households with Dominant Seniors. This information is represented as a pie chart shown below.

Table 1 Age_Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Dominant Grown-ups	479	61.65	61.65	61.65
	Balanced Households	208	26.77	26.77	88.42
	Dominant Younger Members	76	9.78	9.78	98.20
	Dominant Seniors	14	1.80	1.80	100.00
	Total	777	100.0	100.0	

Source: Data compiled and analysed by the authors using CMIE Consumer Pyramid data.

Source: Data compiled and visualized by the authors computed using CMIE Consumer Pyramid data.
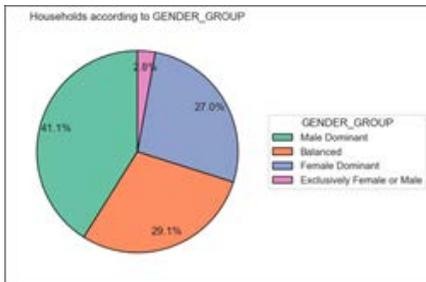**Figure 1 Age group Distribution of the households**

Gender Group: The information about the gender of respondents of the households is collected and divided into four categories and presented as follows.

The table above indicates that out of a total of 777 households, there are 319 (41.06%) households where males are dominant, 226 (29.09%) households that are balanced in terms of gender composition, 210 (27.03%) households where females are dominant, and 22 (2.83%) households that consist exclusively of either female or male members. This information is represented as a pie chart, Figure 2 shown below.

Gender_Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male Dominant	319	41.06	41.06	41.06
	Balanced	226	29.09	29.09	70.15
	Female Dominant	210	27.03	27.03	97.18
	Exclusively Female or Male	22	2.83	2.83	100
	Total	777	100	100	

Source: Data compiled and analysed by the authors using CMIE Consumer Pyramid data.

Source: Data compiled and visualized by the authors computed using CMIE Consumer Pyramid data.

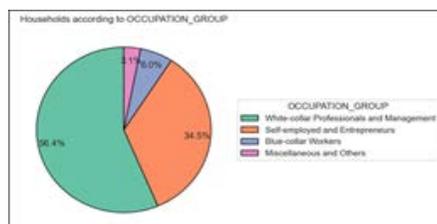**Figure 2 Gender group Distribution of the households**

Occupation Group: The information about the occupation of respondents of the households is collected and divided into four categories and presented as follows.

The table above indicates that out of a total of 777 households, there are 438 (56.37%) belonging to White–collar Professionals and Management, 268 (34.49%) belonging to Self–employed and Entrepreneurs, 47 (6.05%) belonging to Blue–collar Workers, and 24 (3.09%) belongs to Miscellaneous and Others. This information is represented as pie chart shown below.

Table 3 Occupation_Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	White–collar Professionals and Management	438	56.37	56.37	56.37
	Self–employed and Entrepreneurs	268	34.49	34.49	90.86
	Blue–collar Workers	47	6.05	6.05	96.91
	Miscellaneous and Others	24	3.09	3.09	100
	Total	777	100	100	

Source: Data compiled and analysed by the authors using CMIE Consumer Pyramid data.

Source: Data compiled and visualized by the authors computed using CMIE Consumer Pyramid data.

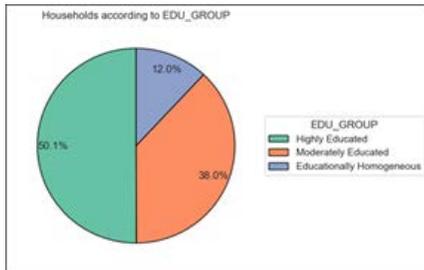**Figure 3 Occupation group distribution of the households**

Education Group: The information about the education qualification of respondents of the households is collected and divided into three categories and presented as follows.

The table above indicates that out of a total of 777 households, there are 389 (50.06%) households that are Highly Educated, 295 (37.97%) households that are Moderately Educated, and 93 (11.97%) households that are Educationally Homogeneous in nature. This information is represented as a pie chart shown below.

Table 4 Education Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Highly Educated	389	50.06	50.06	50.06
	Moderately Educated	295	37.97	37.97	88.03
	Educationally Homogeneous	93	11.97	11.97	100
	Total	777	100	100	

Source: Data compiled and analysed by the authors computed using CMIE Consumer Pyramid data.

Source: Data compiled and visualized by the authors computed using CMIE Consumer Pyramid data.

**Figure 4 Education Group Distribution of the households**

Household Size: The information about the household size of the respondents is collected and divided into three categories and presented as follows.

The table above indicates that out of a total of 777 households, there are 387 (49.81%) Medium–Sized Households, 327 (42.08%) Small Households, and 63 (8.11%) Large Households. This information is represented as a pie chart shown below.

Table 5 Household Size_Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Medium–Sized Households	387	49.81	49.81	49.81
	Small Households	327	42.08	42.08	91.89
	Large Households	63	8.11	8.11	100
	Total	777	100	100	

Source: Data compiled and analysed by the authors using CMIE Consumer Pyramid data.
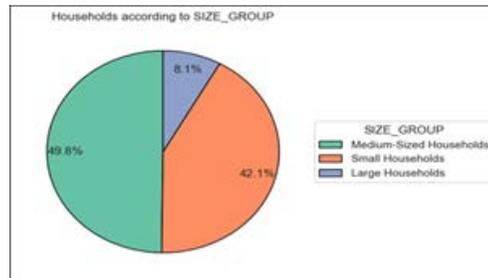
Source: Data compiled and visualised by the authors computed using CMIE Consumer Pyramid data.

Figure 5 Household Size Group

Regression Analysis (Part-1C: Urban) (Mumbai 2025)

Dependent Variable: Adjusted Expenditure Non-Food. Independent Variables: Adjusted Total Income, Age Group (dummy), Gender Group (dummy), Occupation Group (dummy), Education Group (dummy), Size Group (dummy)

Table 6 ANOVA

Model		Sum of Squares	df	Mean Square	F	p-value
1	Regression	299939092.4	14	21424220.89	9.675	.000b
	Residual	1687317448	762	2214327.36		
	Total	1987256541	776			

a. Dependent Variable: Leisure Expenditure

b. Method: OLS Regression, categorical variables coded as dummies.

Source: Data compiled and analysed by the authors computed using CMIE Consumer Pyramid data.

The above table indicates the p-value for the regression model is 0.000, which is less than the standard p-value of 0.05. Hence, the regression model is applicable.

Table 7 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.389	.151	.135	1487.72

Source: Data compiled and analysed by the authors using CMIE Consumer Pyramid data.

The model indicates moderate positive association (R = 0.389) between the independent variables and the dependent variable. The model explains 15.1% of the variance in the dependent variable (R Squared = 0.151), with Adjusted R Squared of 0.135.

Table 8 Coefficients

Model		B	Std. Error	t	P-value
1	(Constant)	570.19	298.369	1.911	0.056
	ADJ_TOT_INC	0.0109	0.001	7.869	0.000
	AGE_GROUP_2	-1.918	217.415	-0.009	0.993
	AGE_GROUP_3	217.844	156.757	1.39	0.165
	AGE_GROUP_4	183.014	453.758	0.403	0.687
	OCCUPATION_GROUP_2	200.671	234.194	0.857	0.392
	OCCUPATION_GROUP_3	11.104	240.195	0.046	0.963
	OCCUPATION_GROUP_4	866.837	395.761	2.19	0.029
	GENDER_GROUP_2	228.754	150.53	1.52	0.129
	GENDER_GROUP_3	-149.577	137.455	-1.088	0.277
	GENDER_GROUP_4	-336.573	339.424	-0.992	0.322
	SIZE_GROUP_2	213.214	136.333	1.564	0.118
	SIZE_GROUP_3	697.518	217.063	3.213	0.001
	EDU_GROUP_2	-184.502	126.019	-1.464	0.144
	EDU_GROUP_3	-160.728	198.474	-0.81	0.418

a. Dependent Variable: Leisure Expenditure

Source: Data compiled and analysed by the authors computed using CMIE Consumer Pyramid data.

Conclusion

In the above results, p-values for Adjusted Total Income, Occupation Group 4, and Size Group 3 are all less than the standard p-value of 0.05. This indicates these variables are significant predictors of Leisure Expenditure.

But the p-values for all of the Age Group dummies, Occupation Group 2, Occupation Group 3, all of the Gender Group dummies, Size Group 2, and all of the Education Group dummies are higher than 0.05. This means that these specific categories are not statistically different from their base categories when it comes to predicting how much money Mumbai households will spend on Leisure.

Regression Results and Discussion

The ANOVA results confirm that the regression model is statistically significant (F = 9.675, p < 0.05), indicating that the selected socio-economic variables jointly explain variations in leisure expenditure. The model accounts for 15.1% of the variation in leisure expenditure (R^2 = 0.151), and the Adjusted R^2 is 0.135, which means it has moderate explanatory power.

Adjusted Total Income is a strong and statistically significant factor that affects how much people spend on leisure, which means that households with higher incomes spend more on leisure activities. This finding aligns with standard consumption theory, where discretionary spending rises with income.

Among occupation categories, households belonging to the "Miscellaneous and Others" occupation group show a significant positive association with leisure expenditure, suggesting heterogeneity in consumption behaviour across occupational structures. Large households also exhibit significantly higher leisure expenditure compared to the base household size category, indicating that household scale and composition influence non-essential spending decisions.

In contrast, age group, gender group, and education group variables do not show statistically significant effects. This suggests that in a metropolitan setting like Mumbai, leisure consumption is driven more by economic capacity and household structure than by demographic attributes such as age or gender composition.

Key Findings

In urban Mumbai, the most important factor in predicting how much people spend on leisure activities is their adjusted total income.

The type of job and the size of the household have a big effect on how much people spend on leisure activities.

There are no statistically significant differences in leisure spending based on age, gender, or education level.

The results show that people in big cities spend money on leisure activities based on their income and the structure of their homes.

Conclusion and Limitations

The study finds that economic factors, not demographic factors, have the biggest impact on how much people in Mumbai spend on leisure activities. Increasing income and having a wider range of jobs are two important factors that affect how people spend their free time in cities. The irrelevance of age, gender, and education indicates a convergence in leisure preferences among demographic groups in urban environments.

The study only looks at data from one year, so it can't look at how things have changed over time. Some things that aren't included are personal preferences, the availability of leisure facilities, and cultural factors. The analysis relies on secondary data, which constrains more profound qualitative insights.

Suggestions

From a policy point of view, the results show how important it is to have stable income and a variety of jobs to support a good quality of life in cities. Planners and policymakers in cities should think about how leisure infrastructure and services can improve people's health and happiness, especially for larger families and groups of people who work.

Scope for further research

Future studies could explore how leisure spending differs between urban and rural households, reflecting variations in income security, access to services, and ways of living. Researchers may also follow households over time to see how spending habits change after events like the COVID-19 pandemic. Looking separately at travel, dining, and recreational

spending could offer clearer insights. Future work could also examine how digital platforms and rising living costs affect leisure choices. Finally, policy-focused research may study how jobs, welfare support, and work–life balance policies shape leisure spending and quality of life in cities.

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