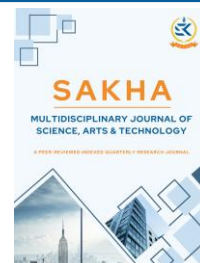




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The Intersection of Demographics and Voting Behaviour: Patterns in Manipur

Dr. Chongtham Khogendra Singh¹, and Kangjam Dijita Devi^{2a}

¹Assistant Professor, M. College of Teacher Education, Imphal.

²Research Scholar, Department of Education, Manipur University, Canchipur.

Abstract

This study investigates the voting behavior of electors across six valley districts in Manipur, focusing on demographic factors such as age, gender, education level, and income. Using a descriptive survey method and a purposive random sampling technique, data were gathered from 808 participants to capture a representative sample of the electorate in the region. Analysis using ANOVA and post-hoc tests revealed significant differences in voting behavior across age groups, education levels, and income categories, while gender differences were non-significant. Higher voting behavior scores were associated with older age, higher education levels, and greater income, indicating these demographics' potential influence on political engagement and decision-making patterns. These findings provide valuable insights into how demographic factors shape political preferences in Manipur and underscore the importance of tailored political strategies that address the specific needs and characteristics of different population segments.

Keywords: Voting Behavior, Manipur, Demographic Factors, Political Engagement, Electorate.

^a Corresponding Author: dijita.kangjam@gmail.com

Introduction

1.1 Background to the Study

Voting behavior, as a complex and multifaceted aspect of political participation, plays a pivotal role in shaping democratic societies. It encompasses the patterns, preferences, and choices that individuals make at the ballot box, influenced by a myriad of demographic, socio-economic, and psychological factors. In democratic regions, understanding voting behavior provides critical insights into how different segments of the population interact with the political system and respond to policies and candidates. Scholars have highlighted the significant influence of factors such as age, gender, education, and income on voting patterns, suggesting that these demographics often align with particular political inclinations or levels of electoral engagement. Research on voting behavior in regions like Manipur is particularly valuable, as it allows for an examination of how socio-cultural factors and regional dynamics intersect with the broader determinants of voting behavior. This study thus seeks to contribute to this understanding by examining how variations in age, gender, education, and income shape the voting behavior of individuals across the valley districts of Manipur, offering insights into the unique patterns and influences present within this diverse population.

1.2 Statement of the Research Problem

This study investigates how demographic factors such as age, gender, education level, and income influence voting behavior in the valley districts of Manipur. It seeks to address the following research questions:

- 1) How does voting behavior vary across different age groups?
- 2) Are there significant differences in voting behavior between male and female electorates?
- 3) What is the relationship between education level and voting behavior?
- 4) How does income level impact voting behavior?

The research aims to provide a nuanced understanding of the interplay between demographics and political engagement, contributing to tailored strategies for enhancing democratic participation.

1.3 Objectives

- 1) To compare the voting behavior of electorates across different age groups in the valley districts of Manipur.
- 2) To analyze the differences in voting behavior between male and female electorates in the valley districts of Manipur.
- 3) To explore the relationship between education level and voting behavior among electorates in the valley districts of Manipur.
- 4) To analyze the impact of income group on the voting behavior of electorates in the valley districts of Manipur.

1.4 Null Hypotheses

- **H₀₁:** There is no significant difference in voting behavior among electorates across different age groups in the valley districts of Manipur.
- **H₀₂:** There is no significant difference in voting behavior between male and female electorates in the valley districts of Manipur.
- **H₀₃:** There is no significant difference in voting behavior among electorates with different education levels in the valley districts of Manipur.
- **H₀₄:** There is no significant difference in voting behavior among electorates from different income groups in the valley districts of Manipur.

1.5 Significance of the Research

Understanding the demographic influences on voting behavior is vital for fostering inclusive democratic processes. This research highlights how factors such as age, gender, education level, and income shape political engagement in the valley districts of Manipur. The findings have both theoretical and practical significance:

- 1) *Theoretical Contribution:* The study enriches the academic discourse on voting behavior by providing region-specific insights, particularly from a socio-culturally unique area like Manipur. It bridges gaps in existing

literature by exploring voting patterns in a less-researched geographical context.

- 2) *Practical Implications:* The results can inform policymakers, political strategists, and civil society organizations in designing initiatives and campaigns that are tailored to the specific needs of various demographic segments. By identifying barriers to participation, such as income-related disparities, the study offers actionable recommendations to promote greater electoral engagement.
- 3) *Societal Impact:* Enhancing awareness of voting behavior and addressing demographic disparities contribute to a more equitable and representative democratic process, empowering underrepresented groups and fostering stronger civic participation.

1.6 Brief Overview of the Paper Structure

- 1) *Introduction:* Provides background on voting behavior and its importance in democratic systems, outlines the research objectives, and frames the study's relevance within the context of Manipur's valley districts.
- 2) *Literature Review:* Discusses existing research on demographic influences on voting behavior, including the roles of age, gender, education, and income. Highlights gaps that this study aims to address.
- 3) *Methods:* Describes the descriptive survey design, participant selection, data collection process, and the reliability and validity of the Voting Behavior Scale (VBS).
- 4) *Results:* Presents findings on voting behavior across demographic categories using descriptive statistics, ANOVA, and post-hoc tests. It explores differences by age, gender, education, and income.
- 5) *Discussion:* Interprets the findings in the context of existing literature, identifies potential barriers to voting, and discusses their implications for policy and practice.
- 6) *Limitations:* Acknowledges constraints such as the exclusion of certain groups, reliance on self-reported data, and the cross-sectional design, suggesting areas for future research.

- 7) *Conclusion:* Summarizes the key findings, emphasizes their significance, and offers recommendations for addressing demographic disparities in voting behavior.
- 8) *References:* Lists all cited works, providing a comprehensive resource base for further exploration of the topic.

Review of Literature

Voting behavior is a multifaceted phenomenon shaped by various demographic and socio-economic factors. Scholars have long examined the impact of age on political participation, often finding that older adults exhibit higher voter turnout and more stable political preferences compared to younger cohorts (Bhatti & Hansen, 2012). This increased political engagement among older voters has been attributed to life cycle effects, where political interest and engagement grow with age and life experience (Franklin, 2004). Conversely, younger individuals, particularly those in early adulthood, are generally found to have lower levels of political participation, often influenced by transitional life phases, such as education or early career demands (Highton & Wolfinger, 2001).

Gender is another factor influencing voting behavior, with studies indicating that while men and women vote at similar rates in many societies, their voting patterns and political preferences may differ. Research suggests that women, on average, show more progressive social views, which can influence their voting choices (Inglehart & Norris, 2003). However, cultural and regional contexts play a significant role, as gender gaps in political participation may vary across societies (Burns, Schlozman, & Verba, 2001).

Education level also has a substantial impact on voting behavior. Higher educational attainment is consistently associated with increased political participation and awareness, likely due to greater access to political information and critical thinking skills fostered through education (Nie, Junn, & Stehlik-Barry, 1996). Individuals with advanced education levels tend to have higher political efficacy, which positively correlates with voting frequency and engagement in civic activities (Verba, Schlozman, & Brady, 1995).

Income is another influential variable, with research indicating that higher income groups generally exhibit higher voter turnout and political involvement. Income provides access to resources and social networks that facilitate political engagement, which helps explain higher participation among economically advantaged individuals (Brady, Verba, & Schlozman, 1995). Conversely, those from lower-income backgrounds may face barriers to participation, such as time constraints or limited access to information, affecting their ability to engage in voting (Rosenstone & Hansen, 1993).

This study builds upon these findings by analyzing the influence of age, gender, education level, and income on voting behavior within the unique cultural and socio-economic context of Manipur's valley districts.

Methods

3.1 Research Design

This study employs a descriptive survey design to examine awareness and voting behavior among individuals in the six valley districts of Manipur. By analyzing factors such as age, gender, education level, and income, the research aims to provide a comprehensive understanding of voting behavior in this region.

3.2 Participants

The study used purposive random sampling to select 808 participants from the six valley districts of Manipur. This sample size was determined to ensure adequate representation across districts, facilitating a robust analysis of voting behavior. Participants were distributed strategically across Imphal East, Imphal West, Thoubal, Bishnupur, Kakching, and Jiribam districts to capture diverse demographic and social characteristics within the electorate. This distribution supports comparisons across districts and ensures the findings represent the broader population in these valley districts.

3.3 Inclusion and Exclusion Criteria

To ensure that participants were able to engage with the survey format and provide reliable data, specific inclusion and exclusion criteria were applied:

- *Inclusion Criteria:*
 - *Age 18 and older:* Only registered voters aged 18 and above were eligible.
 - *Residents of the six valley districts:* Participants were exclusively from Imphal East, Imphal West, Thoubal, Bishnupur, Kakching, and Jiribam.
- *Exclusion Criteria:*
 - *Lack of an Email Address:* Since the survey was administered online via Google Forms, participants without an email address were excluded.
 - *Illiteracy:* Individuals unable to read or write were excluded to ensure comprehension of written survey questions.
 - *Physical and Mental Challenges:* Electors with significant physical or mental challenges were excluded due to potential difficulties in completing an online survey independently.
 - *Third Gender Electors:* Third-gender individuals were excluded due to limited representation in the region, which may impact data reliability for this study's scope.

These criteria ensured that participants were capable of completing an online survey, supporting the data's validity and reliability. However, these exclusions may limit the generalizability of findings to other populations.

3.4 Data Collection Tool

The self-developed Voting Behavior Scale (VBS) was used for data collection. This scale consists of 30 items rated on a five-point Likert scale (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree), capturing quantitative data on various aspects of voting behavior.

3.5 Validity and Reliability of the Tool

The item generation process began with a comprehensive literature review, resulting in an initial pool of 60 items. For content validity, the items were reviewed by a panel of experts, including the research supervisor, a language

expert, and a subject matter specialist. This review led to the removal of items with grammatical issues, double-barreled questions, false premises, or excessive complexity, narrowing the list to 30 items.

To further validate the scale, a pilot study was conducted with 50 participants sharing characteristics with those in the main study. Held from January to February 2024, the pilot study allowed participants to identify any clarity issues or ambiguities, which were subsequently addressed through group discussions with 5 to 8 respondents. Based on feedback, language edits were made to ensure clarity and appropriateness for the target population. The finalized 30-item VBS was then implemented in the main study.

The reliability of the tool was assessed through various measures:

- *Cronbach's Alpha*: Part 1 (items 1–15) yielded an alpha of 0.718, indicating acceptable internal consistency, while Part 2 (items 16–30) had an alpha of 0.790, reflecting good internal consistency.
- *Split-Half Reliability*: A correlation of 0.702 between the two halves of the instrument suggests moderate to high reliability. The Spearman-Brown Coefficient (0.769 for both equal and unequal lengths) and Guttman Split-Half Coefficient (0.765) further confirmed the instrument's consistency.
- Overall, these reliability metrics indicate that the VBS has good internal consistency and is well-suited to measure the intended construct.

3.6 Data Collection and Analysis Protocols

Informed consent and email addresses were obtained from participants. Data collection was conducted from January to May 2023 via a Google Forms questionnaire. Out of the 1,500 questionnaires distributed, 808 responses were received, yielding a response rate of 53.87%.

Data was initially entered into Microsoft Excel before being imported into IBM SPSS Statistics Version 22 for analysis. *Inferential statistics*, including ANOVA and t-tests, were used, with a significance level set at $\alpha = 0.05$, to examine patterns and differences in voting behavior across demographic groups.

Results and Discussion

4.1 Voting Behaviour by Age

Table 1

Descriptive statistics for age and voting behaviour

Age Group	N	Mean	Std. Dev.	Std. Error
Elderly (65 years and over)	77	130.77	4.27	0.49
Mature working age (55-64 years)	134	121.62	1.89	0.16
Prime working age (24-54 years)	408	110.91	4.57	0.23
Early working age (18-24 years)	189	95.19	5.92	0.43
Total	808	110.90	11.64	0.41

A descriptive analysis was conducted to examine voting behavior across different age groups, as shown in Table 1. The elderly group (65 years and over) reported the highest mean voting behavior score ($M = 130.77$, $SD = 4.27$), followed by mature working age (55–64 years, $M = 121.62$, $SD = 1.89$), prime working age (24–54 years, $M = 110.91$, $SD = 4.57$), and early working age (18–24 years, $M = 95.19$, $SD = 5.92$). These results suggest that voting behavior scores tend to decrease with younger age groups.

Table 2

ANOVA Summary for age and voting behaviour

	Sum of Sq.	df	Mean Sq.	F	Sig.
Between Groups	92461.38	3	30820.46	1461.07	.000
Within Groups	16959.90	804	21.09		
Total	109421.28	807			

A one-way analysis of variance (ANOVA) was conducted to assess whether there were statistically significant differences in voting behavior across the four age groups. The results, as shown in Table 2, indicated a significant effect of age on voting behavior, $F(3, 804) = 1461.07$, $p < .001$, $\eta^2 = .84$. This large effect size ($\eta^2 = .84$) suggests that age group explains a substantial proportion of the variance in voting behavior scores.

Table 3**Multiple Comparisons (Tukey HSD) for voting behaviour by age group**

(I) Age Group	(J) Age Group	Mean Diff. (I-J)	Std. Error	Sig.
Elderly (65 years and over)	Mature working age (55-64 years)	9.14683*	.65679	.000
	Prime working age (24-54 years)	19.85202*	.57066	.000
	Early working age (18-24 years)	35.58105*	.62094	.000
Mature working age (55-64 years)	Elderly (65 years and over)	-9.14683*	.65679	.000
	Prime working age (24-54 years)	10.70519*	.45730	.000
	Early working age (18-24 years)	26.43422*	.51868	.000
Prime working age (24-54 years)	Elderly (65 years and over)	-19.85202*	.57066	.000
	Mature working age (55-64 years)	-10.70519*	.45730	.000
	Early working age (18-24 years)	15.72903*	.40412	.000
Early working age (18-24 years)	Elderly (65 years and over)	-35.58105*	.62094	.000
	Mature working age (55-64 years)	-26.43422*	.51868	.000
	Prime working age (24-54 years)	-15.72903*	.40412	.000

*. The mean difference is significant at the 0.05 level.

Post-hoc comparisons using Tukey's HSD test were conducted to identify specific differences between age groups, as summarized in Table 3:

- *Elderly (65 years and over)* scored significantly higher than all other age groups: mature working age (55–64 years, $p < .001$), prime working age (24–54 years, $p < .001$), and early working age (18–24 years, $p < .001$).
- *Mature working age (55–64 years)* also scored significantly higher than prime working age (24–54 years, $p < .001$) and early working age (18–24 years, $p < .001$).
- *Prime working age (24–54 years)* had significantly higher scores than early working age (18–24 years, $p < .001$).

Each mean difference was statistically significant at the 0.05 level, suggesting meaningful differences in voting behavior across age groups. Elderly participants exhibited the highest voting behavior scores, with scores decreasing in younger groups. This trend indicates that older electorates may exhibit stronger voting engagement or different attitudes compared to younger electorates.

4.2 Voting Behaviour by Gender

Table 4

The gender differences in voting behaviour

Gender	N	Mean	SD	SEM	t	p-value
Male	401	110.928	11.684	0.584	0.062	.951
Female	407	110.877	11.620	0.576		

An independent samples t-test was conducted to compare the voting behavior scores between male and female electorates (*see* Table 4). The results indicated no significant difference in voting behavior between males ($M = 110.93$, $SD = 11.68$) and females ($M = 110.88$, $SD = 11.62$), $t(806) = 0.062$, $p = .951$.

Given that the p-value was greater than the conventional threshold of .05, we fail to reject the null hypothesis, suggesting that gender does not significantly impact voting behavior in this sample. The effect size is minimal, as reflected in the near-

identical mean scores, implying that both male and female electorates exhibit similar voting behavior patterns within the six valley districts of Manipur.

4.3 Voting Behavior by Education Level

Table 5

Descriptive statistics for voting behaviour by education level

Education level	N	Mean	Std. Deviation	Std. Error	Maximum
Post Graduate	373	120.8820	6.25678	.32396	142.00
Graduate	247	107.8219	2.96330	.18855	113.00
Under Graduate	52	101.1154	1.02237	.14178	102.00
Matriculation	70	96.9143	1.61284	.19277	99.00
Under Matriculation	66	88.5758	4.63452	.57047	94.00
Total	808	110.9022	11.64432	.40965	142.00

Table 5 presents the descriptive statistics for voting behavior scores across different education levels among electorates. Participants with a post-graduate education exhibited the highest mean voting behavior score ($M = 120.88$, $SD = 6.26$), indicating greater engagement in voting behavior compared to those with lower educational attainment. Graduates followed with a mean score of $M = 107.82$ ($SD = 2.96$), while undergraduates scored $M = 101.12$ ($SD = 1.02$). Those with matriculation education had a mean score of $M = 96.91$ ($SD = 1.61$), and individuals with under-matriculation education scored the lowest ($M = 88.58$, $SD = 4.63$).

These results indicate a clear trend: higher education levels are associated with higher voting behavior scores. The observed differences suggest that individuals with more advanced education may be more knowledgeable, motivated, or otherwise inclined to participate actively in the voting process.

The range of maximum scores in each group also reflects this pattern, with post-graduates scoring up to 142, the highest possible score in this dataset, while those in the under-matriculation category had a maximum score of 94.

Table 6
ANOVA Summary for voting behaviour by education level

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	91069.390	4	22767.347	996.202	.000
Within Groups	18351.886	803	22.854		
Total	109421.276	807			

An ANOVA was conducted to assess the differences in voting behavior among electorates with varying education levels: post-graduate, graduate, undergraduate, matriculation, and under-matriculation (*see* Tables 5 and 6). Results showed a significant effect of education level on voting behavior, $F(4, 803) = 996.20, p < .001$, indicating that voting behavior scores significantly varied across the different education groups.

Table 7
Multiple Comparisons (Tukey HSD) for voting behaviour by education level

(I) Education	(J) Education	Mean Difference (I-J)	Std. Error	Sig.
Post Graduate	Graduate	13.06018*	.39217	.000
	Under Graduate	19.76665*	.70765	.000
	Matriculation	23.96775*	.62270	.000
	Under Matriculation	32.30628*	.63839	.000
Graduate	Post Graduate	-13.06018*	.39217	.000
	Under Graduate	6.70648*	.72940	.000
	Matriculation	10.90758*	.64731	.000
	Under Matriculation	19.24610*	.66242	.000
Under Graduate	Post Graduate	-19.76665*	.70765	.000
	Graduate	-6.70648*	.72940	.000
	Matriculation	4.20110*	.87521	.000
	Under Matriculation	12.53963*	.88644	.000
Matriculation	Post Graduate	-23.96775*	.62270	.000
	Graduate	-10.90758*	.64731	.000
	Under Graduate	-4.20110*	.87521	.000
	Under Matriculation	8.33853*	.82022	.000

Under Matriculation	Post Graduate	-32.30628*	.63839	.000
	Graduate	-19.24610*	.66242	.000
	Under Graduate	-12.53963*	.88644	.000
	Matriculation	-8.33853*	.82022	.000

*. The mean difference is significant at the 0.05 level.

Post hoc comparisons using the Tukey HSD test (Table 7) revealed that electorates with a post-graduate education ($M = 120.88$, $SD = 6.26$) had significantly higher voting behavior scores than those with lower education levels, with a mean difference of 13.06 (post-graduate vs. graduate, $p < .001$), 19.77 (post-graduate vs. undergraduate, $p < .001$), 23.97 (post-graduate vs. matriculation, $p < .001$), and 32.31 (post-graduate vs. under-matriculation, $p < .001$).

Similarly, graduates ($M = 107.82$, $SD = 2.96$) scored significantly higher than undergraduates ($M = 101.12$, $SD = 1.02$), those with matriculation ($M = 96.91$, $SD = 1.61$), and those with under-matriculation ($M = 88.58$, $SD = 4.63$) (all $p < .001$). Furthermore, undergraduates scored significantly higher than individuals with matriculation (mean difference = 4.20, $p < .001$) and under-matriculation (mean difference = 12.54, $p < .001$). Those with matriculation education scored higher than under-matriculation (mean difference = 8.34, $p < .001$).

These findings suggest that as education level increases, voting behavior scores also tend to increase significantly, with post-graduates displaying the highest levels of voting behavior. This trend indicates a positive relationship between higher educational attainment and more engaged voting behavior among electorates in the valley districts of Manipur.

4.4 Voting behavior by income

Table 8

Descriptive Statistics for voting behaviour by income

Income	N	Mean	Std. Deviation	Std. Error
High	98	129.4286	4.57695	.46234
Upper Middle	160	120.1063	2.01128	.15901
Lower Middle	241	112.3817	2.60038	.16751
Low	309	99.1068	6.84083	.38916
Total	808	110.9022	11.64432	.40965

Table 8 shows descriptive statistics for voting behavior scores across income groups among participants. Individuals in the high-income group demonstrated the highest mean voting behavior score ($M = 129.43$, $SD = 4.58$), suggesting a stronger engagement in voting behavior than those in lower income brackets. The upper-middle-income group followed with a mean score of $M = 120.11$ ($SD = 2.01$), while the lower-middle-income group scored $M = 112.38$ ($SD = 2.60$). Participants in the low-income group had the lowest mean score ($M = 99.11$, $SD = 6.84$).

Table 9
ANOVA summary for voting behaviour by income

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	90709.727	3	30236.576	1299.209	.000
Within Groups	18711.549	804	23.273		
Total	109421.276	807			

An ANOVA analysis (Table 9) indicated that there was a statistically significant difference in voting behavior across income groups, $F(3, 804) = 1299.21$, $p < .001$. This finding suggests that income level significantly influences voting behavior, with higher-income individuals displaying greater voting engagement.

Table 10
Multiple Comparisons (Tukey HSD) for voting behaviour by income

(I) Income	(J) Income	Mean Difference (I-J)	Std. Error	Sig.
High	Upper Middle	9.32232*	.61882	.000
	Lower Middle	17.04683*	.57797	.000
	Low	30.32178*	.55928	.000
Upper Middle	High	-9.32232*	.61882	.000
	Lower Middle	7.72451*	.49196	.000
	Low	20.99945*	.46987	.000

Lower Middle	High	-17.04683*	.57797	.000
	Upper Middle	-7.72451*	.49196	.000
	Low	13.27495*	.41459	.000
Low	High	-30.32178*	.55928	.000
	Upper Middle	-20.99945*	.46987	.000
	Lower Middle	-13.27495*	.41459	.000

*. The mean difference is significant at the 0.05 level.

To explore specific group differences, post-hoc comparisons using Tukey's HSD test were conducted (Table 10). These comparisons revealed significant differences between all income groups, with each pairwise mean difference reaching statistical significance (all $p < .001$). Specifically:

- *High-income* participants scored significantly higher than those in the upper-middle, lower-middle, and low-income groups.
- *The upper-middle-income* group scored significantly higher than the lower-middle and low-income groups.
- *The lower-middle-income* group scored significantly higher than the low-income group.

These results indicate a clear trend: as income level increases, so does the level of engagement in voting behavior. This pattern may suggest that higher-income individuals have greater access to resources or information that facilitate political participation, or that they perceive higher stakes in election outcomes.

Discussion

The findings from this study reveal a significant relationship between income level and voting behavior, suggesting that higher-income individuals tend to show greater engagement in voting activities. This relationship aligns with broader research indicating that socio-economic status, particularly income, plays a critical role in political participation (Verba, Schlozman, & Brady, 1995; Leighley & Nagler, 2014). Higher-income individuals may have increased access to political information and resources that facilitate voting (Brady, Verba, & Schlozman, 1995), which can enhance both their capacity and inclination to participate in political processes.

One potential explanation for this finding is that higher-income individuals may perceive themselves as having a greater stake in political outcomes. Political scientists have long noted that individuals in higher socio-economic groups are more likely to feel efficacious and to believe that their participation can make a meaningful difference (Campbell, Converse, Miller, & Stokes, 1960). These individuals are often more embedded in social networks where political discussion and engagement are common, further encouraging voting behavior (Putnam, 2000). Additionally, they may view voting as a means to protect their economic interests, which they perceive as being more directly impacted by governmental policy decisions (Gilens, 2012).

Moreover, the significant differences in voting behavior across income levels may reflect disparities in education and political knowledge, which frequently correlate with income. Higher-income individuals are more likely to have higher education levels, which contributes to a stronger understanding of political issues, voting procedures, and civic responsibilities (Nie, Junn, & Stehlik-Barry, 1996). Studies have shown that political knowledge, facilitated by higher education, is a strong predictor of voting behavior, as it increases awareness of the impact of policies and fosters a sense of civic duty (Delli Carpini & Keeter, 1996).

However, the low engagement levels observed among low-income individuals are concerning, as they suggest that financial hardship may act as a barrier to political participation. For individuals with limited resources, the costs associated with voting—such as taking time off work, arranging transportation, and navigating complex registration requirements—may outweigh the perceived benefits (Berinsky, 2005). This situation can create a "participation gap," wherein certain voices, especially those from lower socio-economic backgrounds, are underrepresented in the democratic process, potentially leading to policies that fail to address the needs of these populations (Soss & Jacobs, 2009).

The clear stratification in voting behavior across income groups underscores the need for policies and interventions aimed at reducing barriers to voting for low-income populations. Possible solutions include implementing early voting, reducing wait times, and offering more flexible registration options (Avery &

Peffley, 2005). Such measures could alleviate some of the logistical challenges faced by lower-income individuals, encouraging broader electoral participation and helping ensure that the democratic process more accurately reflects the interests of all socio-economic groups.

In summary, the results of this study align with existing literature that links income and voting behavior. Higher-income individuals are more likely to participate in voting, possibly due to greater resources, education, and perceived personal stakes in political outcomes. Meanwhile, lower-income individuals may face structural and logistical barriers that deter their participation. Addressing these barriers could promote a more inclusive and representative democratic process.

5.1 Limitations

Despite its contributions, this study has limitations. The reliance on self-reported data may introduce bias due to social desirability. Additionally, the exclusion of certain groups, such as individuals without email access and third-gender individuals, may limit the generalizability of the findings. The study's cross-sectional design restricts causal inferences, and future research could benefit from longitudinal methods to explore changes in voting behavior over time.

Conclusion

6.1 Summary of the Key Findings

This study provides valuable insights into the voting behavior of electorates in Manipur's valley districts, revealing significant associations between demographic factors—age, gender, education level, and income—and voting patterns. Results indicate that older age groups, higher educational attainment, and increased income levels are associated with higher levels of political engagement, while gender differences in voting behavior were found to be minimal. These findings suggest that targeted strategies may be beneficial in addressing the varying political engagement levels across demographic segments within the region.

6.2 Suggestions for Future Research

- *Inclusion of Diverse Groups:* Future studies should include underrepresented groups, such as third-gender individuals and electorates without internet access, to ensure a more inclusive understanding of voting behavior.
- *Longitudinal Research:* Conducting longitudinal studies could provide insights into how voting behavior evolves over time and under varying political or socio-economic conditions.
- *Expanded Geographic Scope:* Comparative studies across other districts or states could reveal broader regional patterns and differences in voting behavior.
- *Exploration of Additional Variables:* Incorporating psychological, cultural, and media influence factors could provide a more comprehensive analysis of voting behavior determinants.
- *Experimental Designs:* Utilizing experimental methods to test interventions, such as voter education campaigns or financial incentives, could assess their effectiveness in boosting participation among low-engagement groups.

6.3 Practical Applications

- *Policy Design:* Insights from this study can inform policies aimed at reducing barriers to voting, such as simplifying voter registration processes and providing better access to polling stations for lower-income groups.
- *Targeted Campaigns:* Political parties and advocacy organizations can use these findings to tailor campaigns to specific demographic groups, such as older voters or those with higher education levels.
- *Civic Education:* Educational initiatives that emphasize the importance of voting and equip citizens with knowledge about the electoral process could boost participation, especially among young and less-educated individuals.

- *Reducing Income Disparities:* Programs addressing socio-economic challenges, such as offering paid leave for voting or financial assistance for transportation, could encourage greater participation among low-income voters.
- *Digital Outreach:* Leveraging online platforms and mobile technology to reach younger voters could enhance their political engagement and overall turnout rates.

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Conflict of Interest Statement

The authors declare no conflict of interest regarding the publication of this study.

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