

All India Data Poll Analysis

Group 6

Bhairavi Aiyer, Harikrishnan Devaraj, Radhika Khandelwal,
Rashmi Nagpal, Shubham Saboo, Tushar Khattar

**Our focus: Impact of religion and caste on voting,
influenced by age and education level**

Content

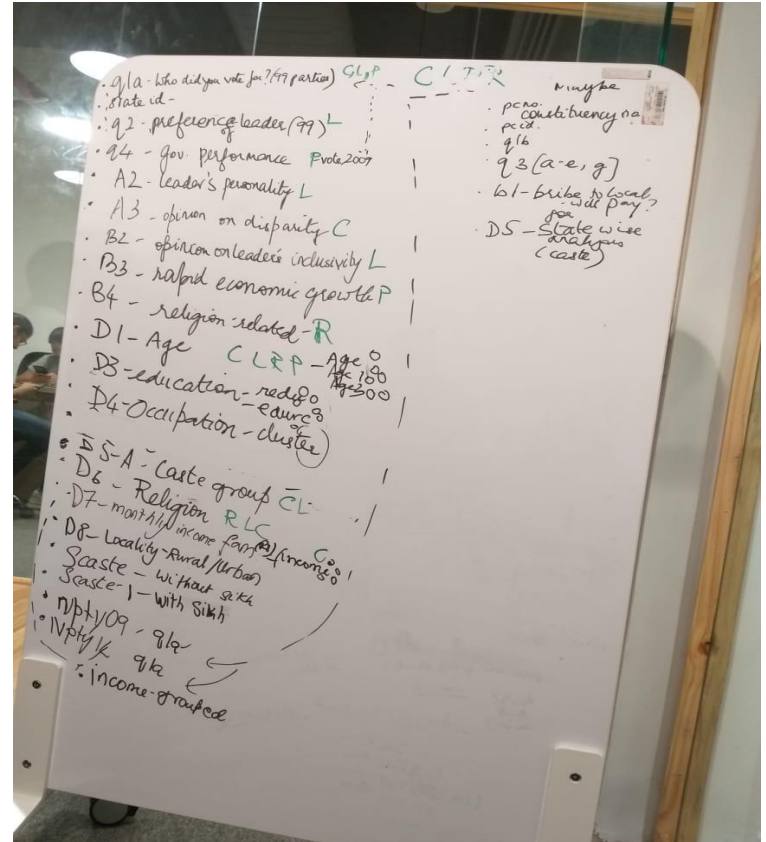
1. Initial analysis & categorization of data
2. Exploratory Data Analysis (EDA) of the data
 - a. Voter Turnout 2009 & 2014
 - b. Religion vs Votes
 - c. Caste vs Votes
 - d. Time of decision making vs Votes



INITIAL ANALYSIS AND CATEGORIZATION OF DATA

The initial steps taken were as follows:

1. All the seemingly relevant column names were shortlisted based on the questions asked and the ultimate objective as depicted in this image.
2. Each of the columns/ questions were categorized based on whether they helped answer the question about Caste, Religion, Leadership, or Performance.
3. Once all these were written down, we went through the data and decided to cluster categories under some of these columns, say if there were relatively too few of a certain category, etc.

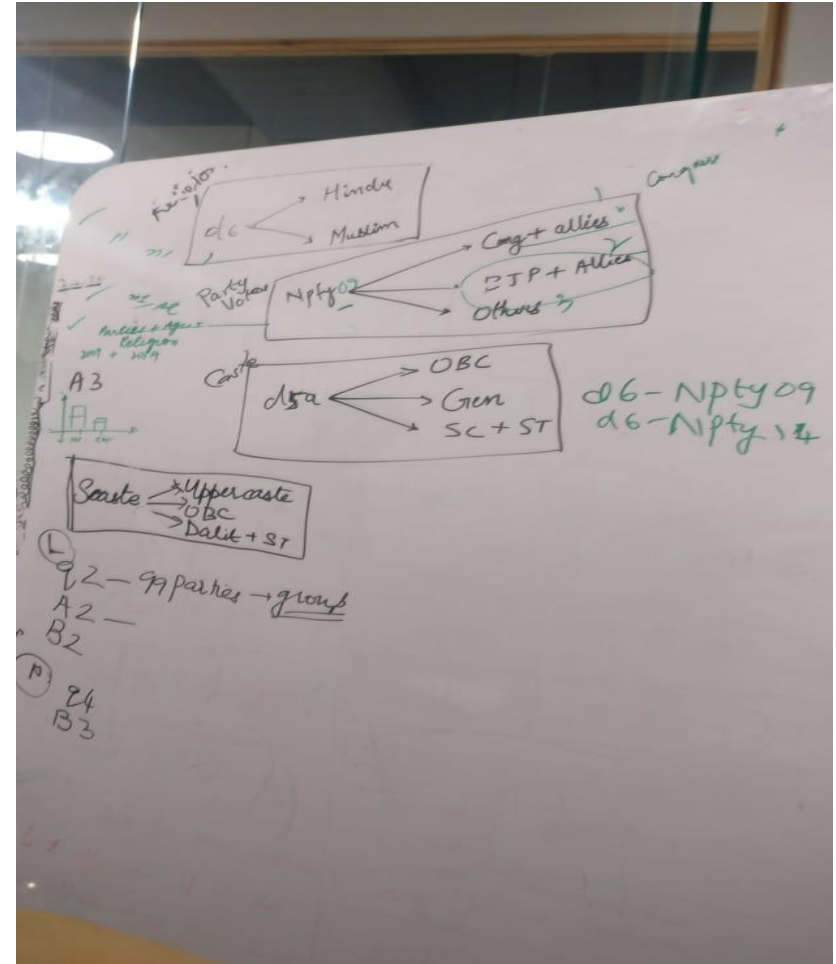


4. Thus, we tried to understand which parameters to choose to understand the relationships. We also went through the categories. The number of votes in each, and clubbed certain categories together, for example:

Instead of looking at distribution of votes for every single party (BJP, Congress, Allies of each), we decided to club BJP and its allies, Congress and its allies as 2 groups, with the 3rd being the remaining.

5. Once we mapped out the relationships we could analyze, we decided to stick to the following two questions so they could be studied with nuances:

1. Effect of religion on voting (with the influence of age)
2. Effect of age on voting (with the influence of caste and education level)
3. Time of decision making vs the vote

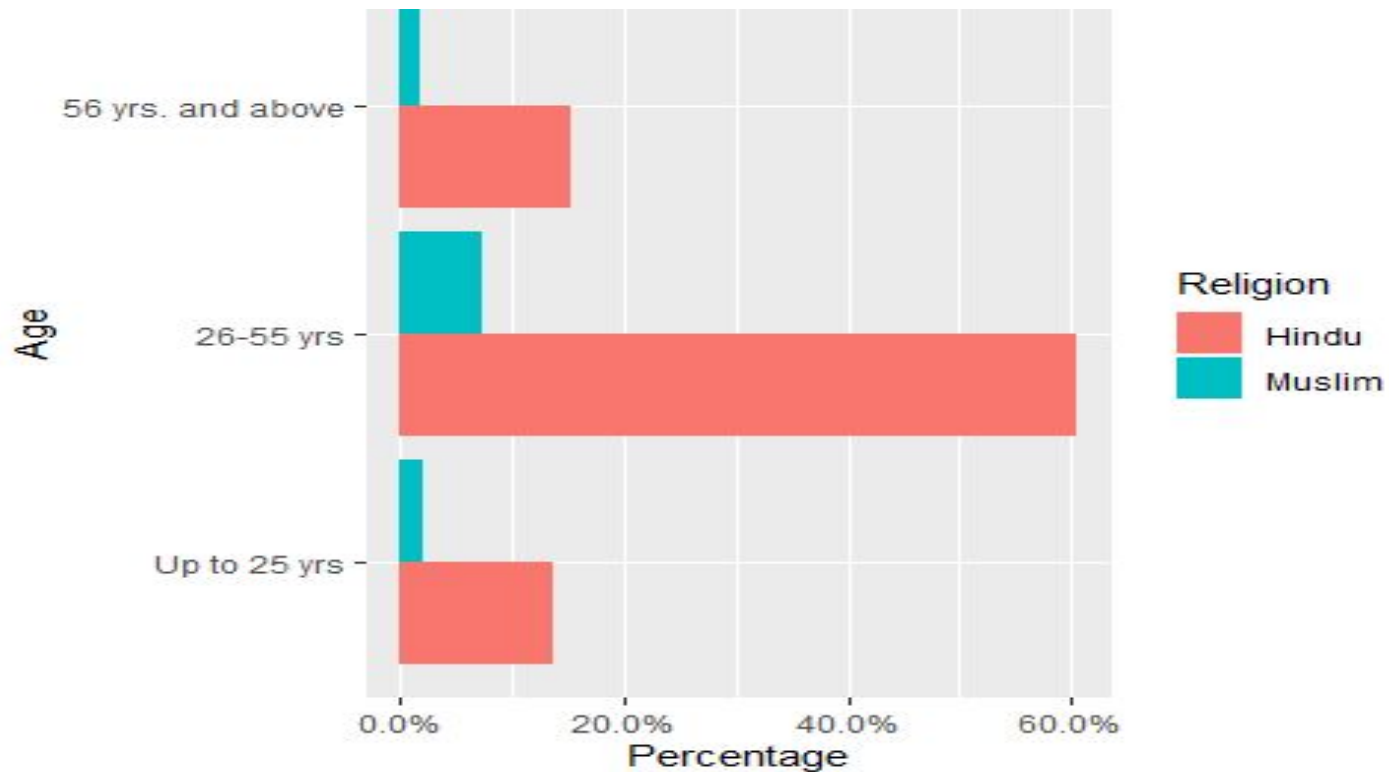


VOTERS TURNOUT (2009 AND 2014)



Distribution of people who participated during elections		
0	Able to vote	915
1	Not able to vote	25960
3	Didn't answer	296

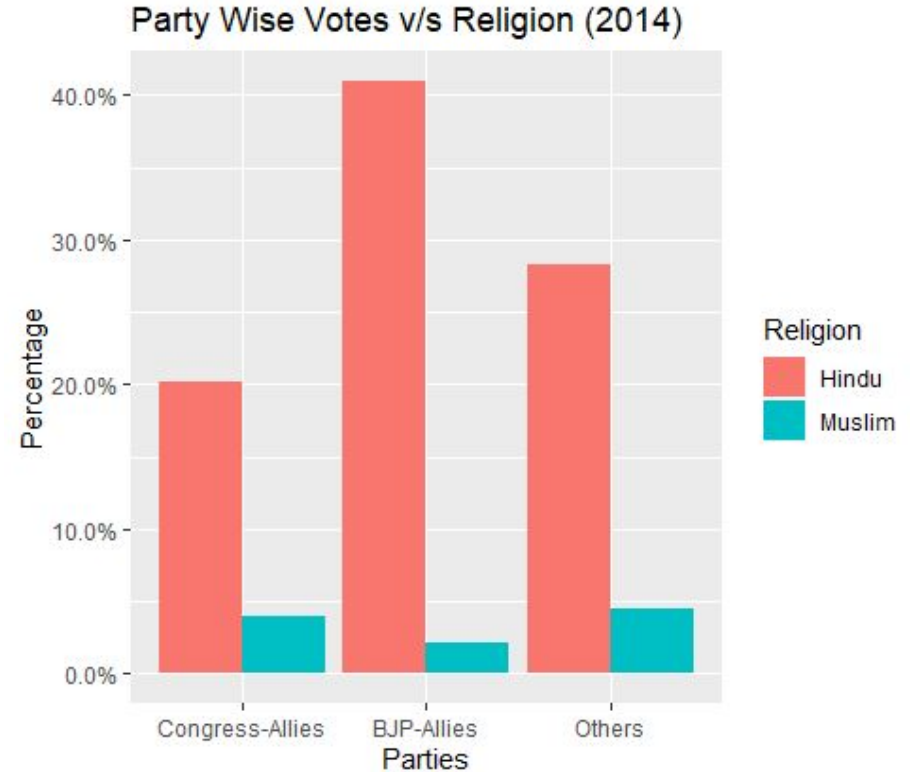
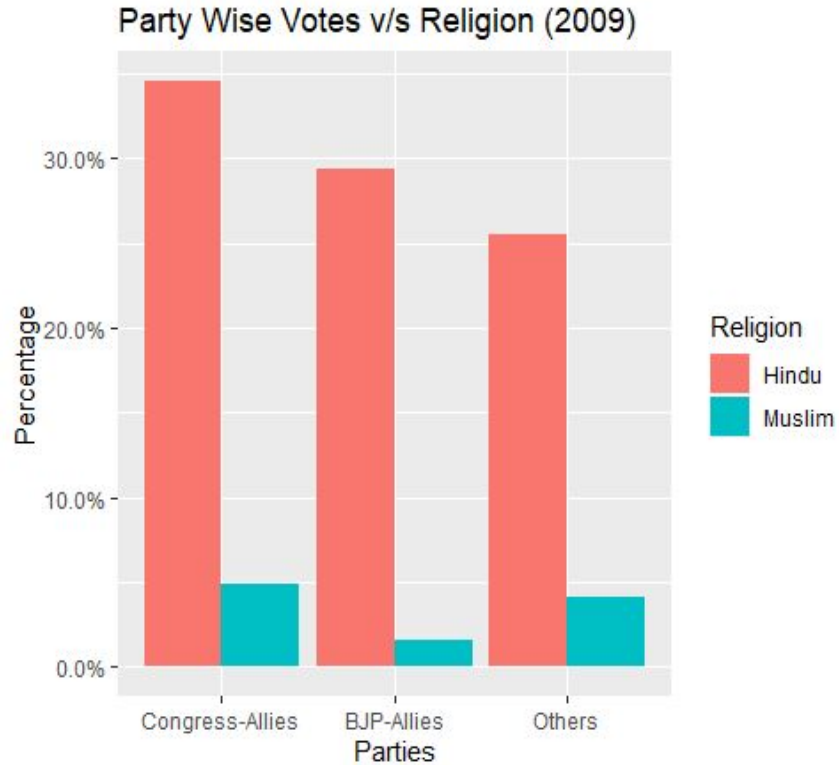
RELIGIOUS AFFILIATION FOR EACH AGE GROUP (AGGREGATE ANALYSIS)



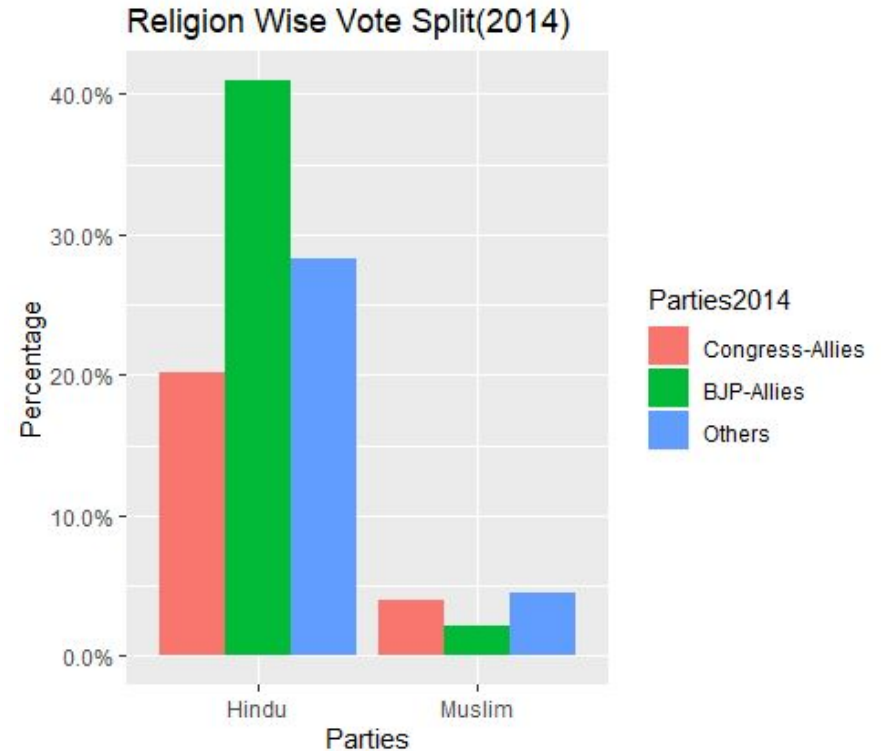
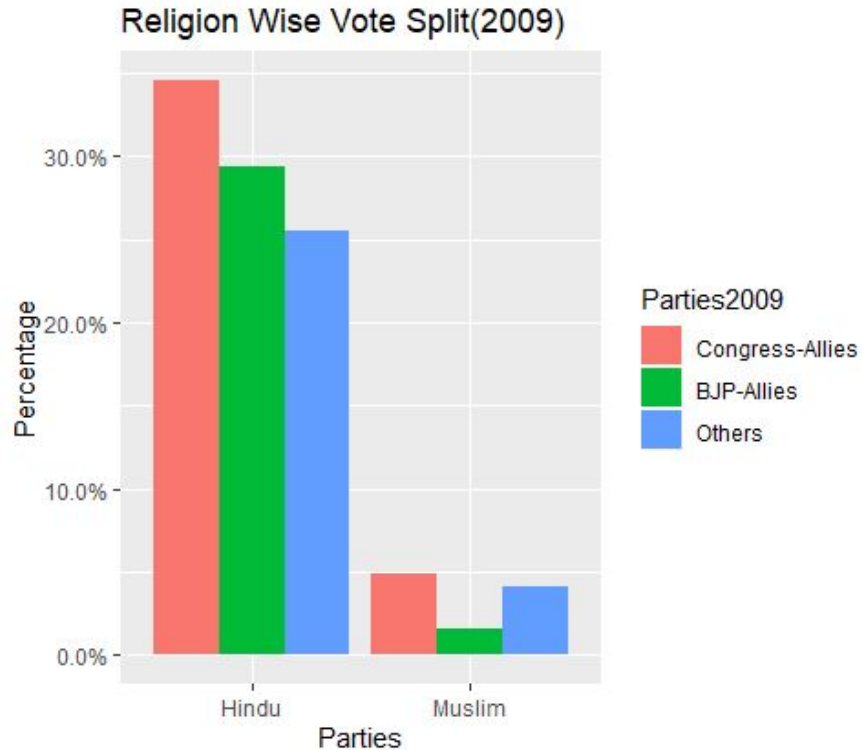
Religion v/s Votes



PART WISE VOTE SPLIT AMONG DIFFERENT RELIGIONS (FOR 2009 AND 2014)



RELIGION WISE VOTE SPLIT AMONG DIFFERENT PARTIES (2009 AND 2014)



**CONTINGENCY TABLE (AGE + PARTY + RELIGION)
BASED ON THE TOTAL VALUE (2009)**

		Parties2009	Congress-Allies	BJP-Allies	Others	Sum
Age	Religion					
Up to 25 yrs	Hindu		3.14	2.89	3.18	9.21
	Muslim		0.47	0.17	0.52	1.16
	Sum		3.61	3.06	3.70	10.37
26-55 yrs	Hindu		25.21	21.29	17.76	64.26
	Muslim		3.70	1.08	2.88	7.66
	Sum		28.91	22.37	20.64	71.92
56 yrs. and above	Hindu		6.22	5.18	4.54	15.95
	Muslim		0.75	0.33	0.69	1.77
	Sum		6.97	5.51	5.23	17.72
Sum	Hindu		34.57	29.36	25.48	89.41
	Muslim		4.92	1.57	4.10	10.59
	Sum		39.49	30.93	29.58	100.00

**CONTINGENCY TABLE (AGE + PARTY + RELIGION)
BASED ON THE TOTAL VALUE (2014)**

		Parties2014	Congress-Allies	BJP-Allies	Others	Sum
Age	Religion					
Up to 25 yrs	Hindu	1.96	4.56	2.69	9.21	
	Muslim	0.42	0.25	0.50	1.16	
	Sum	2.38	4.81	3.18	10.37	
26-55 yrs	Hindu	14.17	29.56	20.53	64.26	
	Muslim	2.96	1.52	3.18	7.66	
	Sum	17.13	31.07	23.71	71.92	
56 yrs. and above	Hindu	4.01	6.89	5.05	15.95	
	Muslim	0.60	0.40	0.77	1.77	
	Sum	4.61	7.28	5.82	17.72	
Sum	Hindu	20.14	41.00	28.27	89.41	
	Muslim	3.97	2.17	4.45	10.59	
	Sum	24.11	43.17	32.72	100.00	



Observations

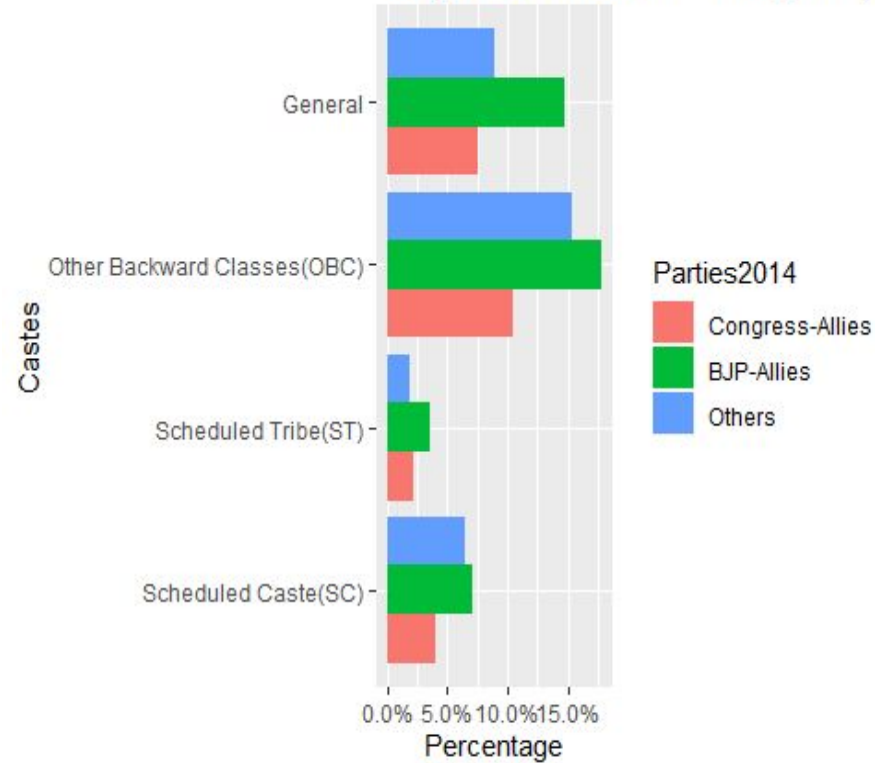
1. In 2009 , Congress party was able to establish trust in the hindu community and received more votes than BJP from the hindu community.
2. In 2014 surprisingly, for the very first time in years a decline in muslim vote bank is observed for the congress party, as muslims were always being the loyal voters for the congress party.
3. In 2014, some percentage of others vote bank also shifted towards the BJP resulting in its massive win.

Caste v/s Votes

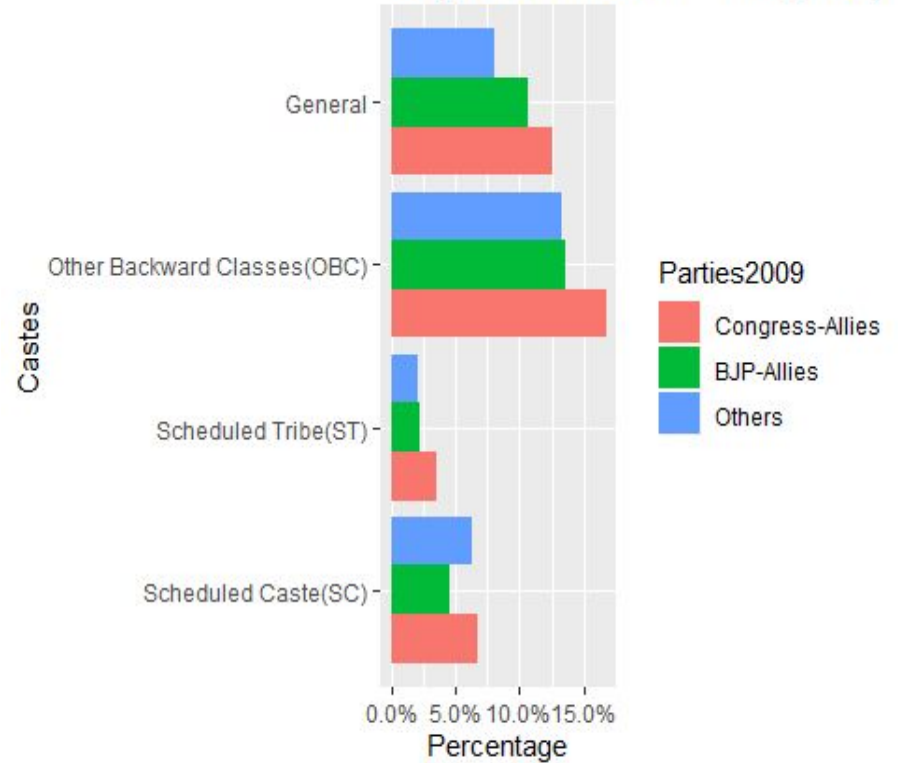


CASTE WISE VOTE SPLIT AMONG DIFFERENT PARTIES (2009 AND 2014)

Party Wise Votes v/s Caste(2014)



Party Wise Votes v/s Caste(2009)





Observations

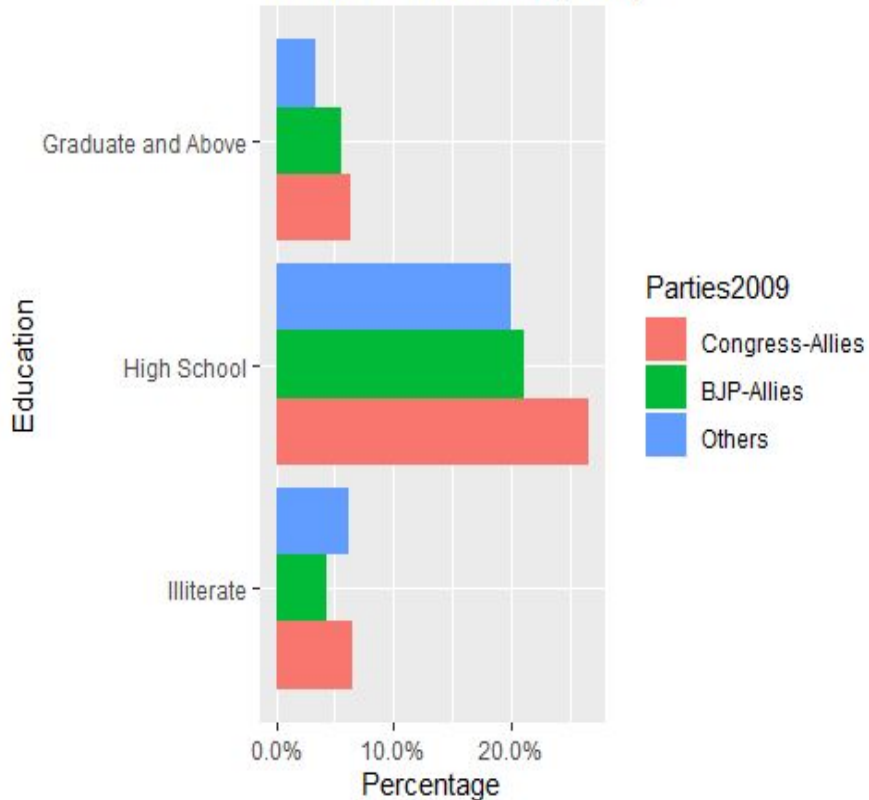
1. In 2009 , Congress party was largely supported by General Caste, OBC, and SC.
2. In 2014, the Other Backward Classes showed their support to BJP, which was very unusual because BJP in general is known as party for General Caste.
3. In 2014, even Scheduled Caste and Scheduled Tribe turned their votes towards the BJP, which was majorly occupied by others in the form of regional parties.

Education v/s Votes

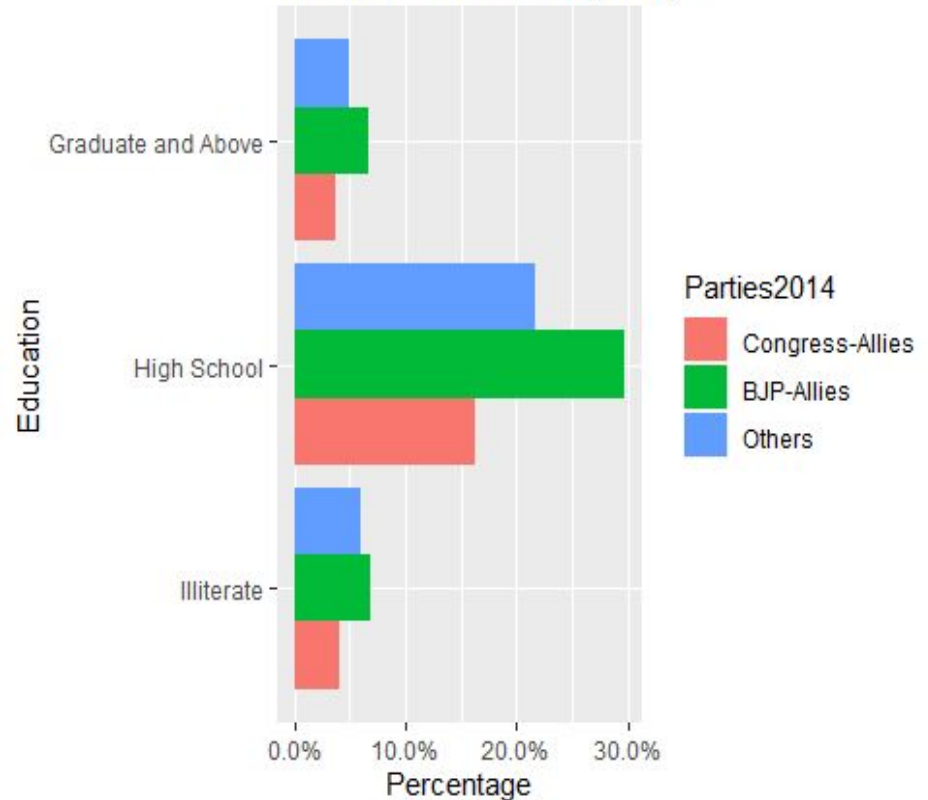


EFFECT OF EDUCATION ON PARTY WISE VOTES (2009 AND 2014)

Education v/s Votes(2009)



Education v/s Votes(2014)





Observations

1. In the given data, the highest percentage of people present have education level till high school.
2. It is observed in both 2009 and 2014 elections that people with education level till high school has higher tendency to go with the trend.
3. From the data it is observed that people with educational qualification of graduate and above have almost equal vote split among the major parties.

CONTINGENCY TABLE FOR AGE + CASTE + EDUCATION COMBINATION (2009)



Age	Caste	edu_rc	Parties2009	Congress-Allies	BJP-Allies	Others	Sum
Up to 25 yrs	Scheduled Caste(SC)	Illiterate		43.48	8.70	47.83	100.00
		High School		33.92	25.09	40.99	100.00
		Graduate and Above		42.86	25.00	32.14	100.00
	Scheduled Tribe(ST)	Illiterate		29.41	17.65	52.94	100.00
		High School		43.15	26.03	30.82	100.00
		Graduate and Above		40.00	25.71	34.29	100.00
	Other Backward Classes(OBC)	Illiterate		34.21	26.32	39.47	100.00
		High School		31.77	29.44	38.79	100.00
		Graduate and Above		38.68	36.24	25.09	100.00
	General	Illiterate		40.74	29.63	29.63	100.00
		High School		31.57	29.24	39.19	100.00
		Graduate and Above		37.10	34.68	28.23	100.00
26-55 yrs	Scheduled Caste(SC)	Illiterate		38.10	17.47	44.42	100.00
		High School		38.41	25.93	35.67	100.00
		Graduate and Above		38.38	36.97	24.65	100.00
	Scheduled Tribe(ST)	Illiterate		44.28	25.83	29.89	100.00
		High School		47.89	28.38	23.73	100.00
		Graduate and Above		41.12	38.32	20.56	100.00
	Other Backward Classes(OBC)	Illiterate		36.87	25.06	38.07	100.00
		High School		38.27	31.43	30.29	100.00
		Graduate and Above		44.92	35.01	20.07	100.00
	General	Illiterate		37.92	26.58	35.50	100.00
		High School		41.66	34.21	24.14	100.00
		Graduate and Above		40.35	39.96	19.69	100.00
56 yrs. and above	Scheduled Caste(SC)	Illiterate		37.74	22.91	39.35	100.00
		High School		39.89	32.08	28.03	100.00
		Graduate and Above		31.25	37.50	31.25	100.00
	Scheduled Tribe(ST)	Illiterate		37.41	29.93	32.65	100.00
		High School		48.44	26.56	25.00	100.00
		Graduate and Above		62.50	25.00	12.50	100.00
	Other Backward Classes(OBC)	Illiterate		38.09	28.53	33.38	100.00
		High School		38.05	31.18	30.77	100.00
		Graduate and Above		41.98	37.40	20.61	100.00
	General	Illiterate		40.00	28.14	31.86	100.00
		High School		40.59	38.47	20.93	100.00
		Graduate and Above		41.18	31.93	26.89	100.00

CONTINGENCY TABLE FOR AGE + CASTE + EDUCATION COMBINATION (2014)



Age	Caste	edu_rc	Parties2014	Congress-Allies	BJP-Allies	Others	Sum
Up to 25 yrs	Scheduled Caste(SC)	Illiterate	30.43	34.78	34.78	100.00	
		High School	24.03	44.52	31.45	100.00	
		Graduate and Above	20.24	46.43	33.33	100.00	
	Scheduled Tribe(ST)	Illiterate	35.29	64.71	0.00	100.00	
		High School	33.56	49.32	17.12	100.00	
		Graduate and Above	17.14	42.86	40.00	100.00	
	Other Backward Classes(OBC)	Illiterate	18.42	44.74	36.84	100.00	
		High School	22.83	43.60	33.56	100.00	
		Graduate and Above	20.56	47.39	32.06	100.00	
	General	Illiterate	22.22	37.04	40.74	100.00	
		High School	22.67	49.79	27.54	100.00	
		Graduate and Above	19.76	48.79	31.45	100.00	
26-55 yrs	Scheduled Caste(SC)	Illiterate	18.22	39.41	42.38	100.00	
		High School	22.95	39.29	37.77	100.00	
		Graduate and Above	22.54	44.01	33.45	100.00	
	Scheduled Tribe(ST)	Illiterate	31.00	44.65	24.35	100.00	
		High School	27.27	46.78	25.94	100.00	
		Graduate and Above	30.84	35.51	33.64	100.00	
	Other Backward Classes(OBC)	Illiterate	22.41	39.64	37.95	100.00	
		High School	22.88	41.76	35.36	100.00	
		Graduate and Above	27.20	38.54	34.26	100.00	
	General	Illiterate	26.58	40.89	32.53	100.00	
		High School	23.86	48.86	27.28	100.00	
		Graduate and Above	23.55	46.91	29.54	100.00	
56 yrs. and above	Scheduled Caste(SC)	Illiterate	23.72	36.12	40.16	100.00	
		High School	25.07	42.05	32.88	100.00	
		Graduate and Above	21.88	50.00	28.12	100.00	
	Scheduled Tribe(ST)	Illiterate	27.21	44.90	27.89	100.00	
		High School	28.91	51.56	19.53	100.00	
		Graduate and Above	50.00	12.50	37.50	100.00	
	Other Backward Classes(OBC)	Illiterate	25.04	39.30	35.66	100.00	
		High School	26.56	37.03	36.41	100.00	
		Graduate and Above	28.24	38.17	33.59	100.00	
	General	Illiterate	25.35	41.16	33.49	100.00	
		High School	26.87	47.95	25.18	100.00	
		Graduate and Above	26.89	43.70	29.41	100.00	



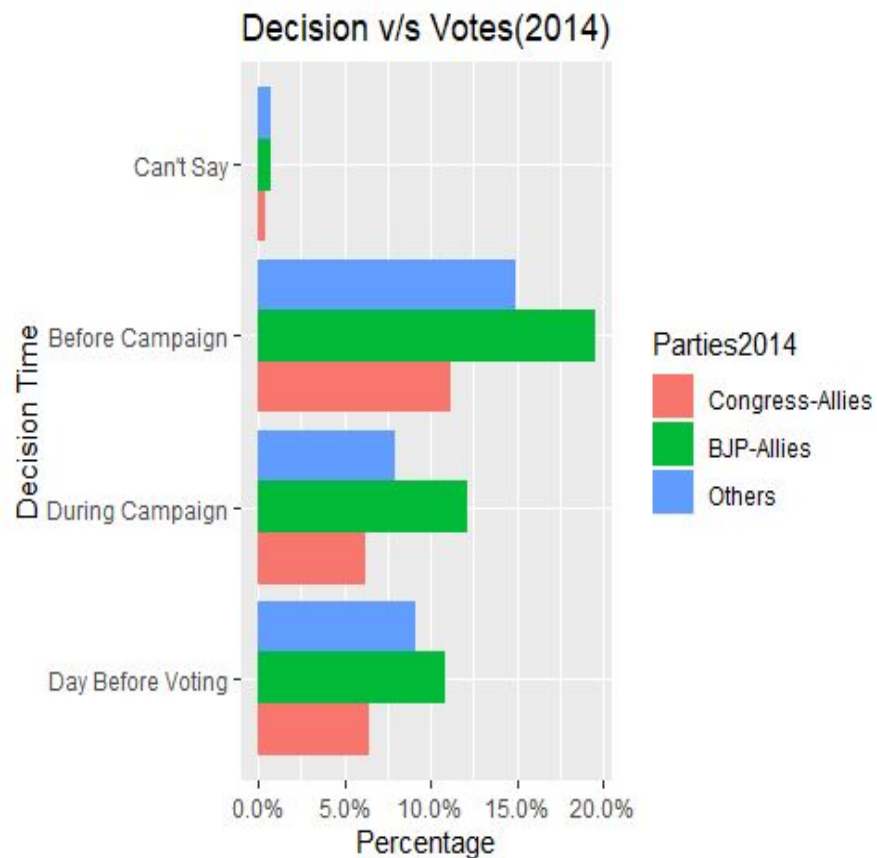
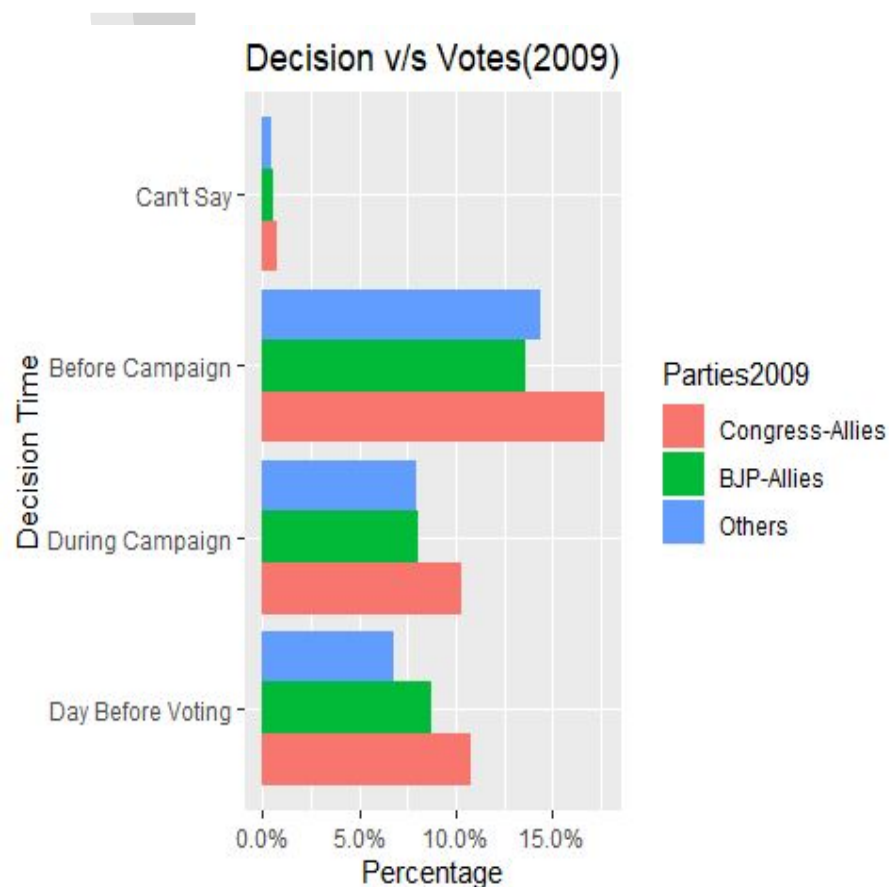
Observations

1. In both 2009 and 2014, Illiterate people from every age group/class preferred to go with the winning party.
2. Among graduates in 2009, the highest difference was seen in the ST caste of age 56+ (with nearly congress supporters being almost 2.5 times that of BJP supporters, followed by SC & ST in youngsters <25 yrs, where congress supporters were almost 1.5 times as many as BJP supporters. In the remaining categories of age and caste, the difference in congress and BJP was only of 2-3%.

Time of decision making v/s Votes



EFFECT OF DECISION TIME ON PARTY WISE VOTES (2009 AND 2014)





Observations

1. In both elections of 2009 and 2014, a large chunk (around 40-50%) of people made their mind on which party to vote even before the start of the campaign. These people play an important role in forming the government.
2. According to the data, and to our very surprise the party which is preferred by the people who made their mind well in advance came up as the winning party in both the elections.
3. In 2014, BJP campaign was successful in turning the voters from congress and other parties towards them.
4. The ruling party was able to rope in more people during and after the campaign in 2014 than in 2009.