A SURVEY OF HOW POLITICAL MISINFORMATION GUIDEDWRONGLY INTO PEOPLE

Smriti Sharma (202124600029)

ABSTRACT

This study examined the relationship between the quality of information, literacy skills, socialmedia use, and belief in false news. The findings suggest that high-quality information and literacy skills are associated with a lower belief in false news. The study also found that social media use is not a significant predictor of belief in false news. The results suggest that misinformation can be a threat to democracy and that factors such as the quality of information and literacy skills are important for countering it. The study did not find a significant difference in coordination maintenance between groups. The factors affecting the difficulty in tackling false news were not explored in this study. The study did not assess the level of corruption on a topic or discuss the reasons for creating fake news. Overall, the studyhighlights the importance of high-quality information and literacy skills in countering political misinformation.

The survey investigates the relationship between various factors and the spread of political misinformation. The study analyses 199 observations using several statistical methods, including Spearman rank correlation, paired t-test, multiple regression, and one-way ANOVA. The results suggest that there is a positive but weak correlation between high- quality information and the threat to democracy. The study also reveals that individuals with higher literacy skills and those who consume high-quality information may be less likely to believe false news. The findings further suggest that social media platforms may contribute tothe difficulty in judging the quality of information. Additionally, the study reveals that corruption level varies depending on the topic. The study provides insights into the mechanics of political misinformation and the factors that contribute to its spread.

Keywords: Spearman rank correlation, paired t-test, multiple regression, one-way ANOVA, high quality information, social media, literacy skills, falsenews, democracy, misinformation, public opinion formation, financial gain, corruption, coordination maintenance.

OBJECTIVES

- To examine the perceptions of individuals on the criticality of high-qualityinformation for the functioning of democracy.
- To investigate the extent to which social media platforms have made it difficult tojudge the quality of information.
- To assess the level of literacy of information that has penetrated the public on a scaleof 1 to 10.
- To determine how the mechanics of political misinformation and disconnection withpublic opinion formation present a significant challenge.
- To investigate whether misinformation poses a threat to democracy.
- To identify the factors that contribute to the difficulty of tackling the large volume offalse news.
- To assess the level of ignorance and acceptance of any information on a scale of 1 to5.
- To understand the reasons for creating fake news and the financial gain derived fromgetting the public trapped in it.
- To determine how people differentiate between spot facts and opinions.
- To examine whether the coordination maintenance between the states and the federalgovernment on health issues has affected relations or grown disputes between them.
- To assess the level of corruption in politics on a scale of 1 to 10.

LITERATURE REVIEW

- To understand the causes and consequences of fake news and misinformation.
- To identify the factors that make individuals vulnerable to fake news andmisinformation.
- To develop effective strategies for combatting fake news and misinformation.
- To analyze the role of technology, social media, and other communication channels inthe spread of fake news and misinformation.
- To investigate the impact of fake news and misinformation on public opinion,political behavior, and social dynamics.
- To explore the ethical and legal implications of fake news and misinformation.
- To examine the potential solutions and policy recommendations to address theproblem of fake news and misinformation.
- To compare the prevalence and effects of fake news and misinformation in differentcontexts and countries.
- To assess the effectiveness of interventions and communication campaigns aimed atreducing the spread of fake news and misinformation.
- To promote media and information literacy as a tool to prevent and combat fake newsand misinformation.

ALSO THERE ARE SOME KEY TAKE AWAYS :

- Identifying gaps in the literature: The literature review has highlighted some gaps inthe existing research. You could focus on filling in these gaps and providing new insights.
- Importance of the research topic: The review has emphasized the importance of theresearch topic. You could use this to justify the significance of your study and its potential impact.
- Methodologies used: The review has discussed the methodologies used in previousstudies. You could consider using similar or different methodologies, depending onyour research question and objectives.
- Key findings: The review has highlighted some key findings from previous studies.You could use these findings to inform your own research and build upon existing knowledge.
- Limitations: The review has also identified some limitations of previous studies. Youcould take these into account when designing your own study and try to address themin your research.

RESEARCH METHODOLOGY :

Aspect	Type
Sample type	Convenience
Research design	Survey
Sample size	199
Sample unit	Individuals
Target population	Not Specified in this case
Method of data collection	Online (Google Form)
Hypothesis testing	Non parametric

High Quality

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	142	71.4	71.4	71.4
	2	49	24.6	24.6	96.0
	3	8	4.0	4.0	100.0
	Total	199	100.0	100.0	

social media platform

	Frequency	Percent	Valid Percent	Cumulative Percent
1	117	58.8	58.8	58.8
2	42	21.1	21.1	79.9
Valid				
3	40	20.1	20.1	100.0
Total	199	100.0	100.0	

Literacy scale

	Frequency	Percent	Valid Percent	Cumulative Percent
1	20	10.1	10.1	10.1
2	31	15.6	15.6	25.6
3	23	11.6	11.6	37.2
4	30	15.1	15.1	52.3
5	43	21.6	21.6	73.9
Valid				
6	20	10.1	10.1	83.9
7	25	12.6	12.6	96.5
8	5	2.5	2.5	99.0
9	2	1.0	1.0	100.0
Total	199	100.0	100.0	

vital challenge

	Frequency	Percent	Valid Percent	Cumulative Percent
1	78	39.2	39.2	39.2
2	64	32.2	32.2	71.4
Valid				
3	57	28.6	28.6	100.0
Total	199	100.0	100.0	

threat to democracy

	Frequency	Percent	Valid Percent	Cumulative Percent
1	135	67.8	67.8	67.8
2	58	29.1	29.1	97.0
Valid				
3	6	3.0	3.0	100.0

	Frequency	Percent	Valid Percent	Cumulative Percent
Total	199	100.0	100.0	

large volume of false news

		Frequency	Percent	Valid Percent	Cumulative Percent
	1	179	89.9	89.9	89.9
Valid	2	20	10.1	10.1	100.0
	Total	199	100.0	100.0	

I&A of any information on the scale of 5

		Frequency	Percent	Valid Percent	Cumulative Percent
	1	23	11.6	11.6	11.6
	2	43	21.6	21.6	33.2
	3	39	19.6	19.6	52.8
Valid					
	4	39	19.6	19.6	72.4
	5	55	27.6	27.6	100.0
	Total	199	100.0	100.0	

trapped

		Frequency	Percent	Valid Percent	Cumulative Percent
	1	53	26.6	26.6	26.6
	2	57	28.6	28.6	55.3
Valid	3	88	44.2	44.2	99.5
	4	1	.5	.5	100.0
	Total	199	100.0	100.0	

spot facts or opinion

		Frequency	Percent	Valid Percent	Cumulative Percent
	1	68	34.2	34.2	34.2
	2	79	39.7	39.7	73.9
Valid					
	3	52	26.1	26.1	100.0
	Total	199	100.0	100.0	

coordination maintenance

		Frequency	Percent	Valid Percent	Cumulative Percent
	1	149	74.9	74.9	74.9
Valid	2	50	25.1	25.1	100.0
	Total	199	100.0	100.0	

Corruption level

	Frequency	Percent	Valid Percent	Cumulative Percent
1	12	6.0	6.0	6.0
2	17	8.5	8.5	14.6
3	25	12.6	12.6	27.1
4	22	11.1	11.1	38.2
5	29	14.6	14.6	52.8
6	21	10.6	10.6	63.3
Valid				
7	21	10.6	10.6	73.9
8	22	11.1	11.1	84.9
9	19	9.5	9.5	94.5
10	10	5.0	5.0	99.5
88	1	.5	.5	100.0
Total	199	100.0	100.0	

- This data appears to be the results of a survey or study that collected responses from 199 participants on various topics related to information and media. Each section includes a frequency count, percent, valid percent, and cumulative percent for the responses given.
- The first section refers to the perceived quality of information available, with 71.4% of respondents indicating a score of 1 (presumably the highest quality) and 24.6% indicating a score of 2.
- The second section relates to social media platforms, with 58.8% of respondents indicating a score of 1 (presumably the most popular or widely used platform).
- The third section refers to a literacy scale, with respondents ranking their own literacy on a scale of 1 to 9, with 5 being the most common score.
- The fourth section relates to the most vital challenge facing the world, with respondents split fairly evenly across three options.
- The fifth section refers to the perceived threat to democracy, with 67.8% of respondents indicating a high level of threat.
- The sixth section relates to the volume of false news, with 89.9% of respondents indicating a large volume of false news.
- The seventh section asks respondents to rate their ability to identify and analyze information on a scale of 1 to 5, with the most common score being 5.
- The eighth section refers to feeling trapped in a specific situation or circumstance, with respondents fairly evenly split across three options.
- The ninth section relates to the ability to spot facts versus opinions, with the majority of respondents indicating a score of 2 or 3.
- The tenth section refers to coordination maintenance, with 74.9% of respondents indicating a need for coordination.
- The final section refers to corruption level, with respondents rating corruption on a scale of 1 to 10, with 5 being the most common score.

SPEARMAN RANK CORRELATION :

Spearman rank correlation	
Number of obs	199
Spearman's rho	0.0945
Test of Ho	

Highquality and	
threattodemocracy are	
Spearman rank correlation	
independent	
Prob >	t

The Spearman's rank correlation coefficient between the variables "highquality" and "threattodemocracy" is 0.0945. The p-value for the test of independence between these two variables is 0.1843, which is greater than the conventional significance level of 0.05. Therefore,we cannot reject the null hypothesis that there is no significant relationship between the perceived importance of high-quality information and the threat of political misinformation todemocracy. This means that there is insufficient evidence to conclude that the two variables are related.

The results of your Spearman's rank correlation analysis in your research report. In your report,you can state that you found a weak positive correlation between the perceived importance of high-quality information and the perceived threat of political misinformation to democracy, asindicated by a Spearman's rho of 0.0945. You should also report the p-value, which is 0.1843,indicating that there is no statistically significant relationship between these variables at the

0.05   level of significance. Finally, you can interpret this result and discuss its implications foryour research question and hypotheses

Paired t test:

ttest socialmediaplatform == literacyscale

	Observations	Mean	Std. Err.	Std. Dev.	95% Conf. Interval
Social Media	199	1.613065	0.0568191	0.8015327	1.501017 to 1.725114
Literacy Scale	199	4.21608	0.1421078	2.004677	3.935841 to 4.496319
Difference	199	-2.603015	0.1495843	2.110146	-2.897998 to -2.308032
	t-value	Degrees of Freedom	One-tailed p-value	Two-tailed p-value
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mean(diff) = 0 (Ho)	-17.4017	198	0.0000	0.0000
mean(diff) < 0 (Ha)			0.0000	0.0000
mean(diff) != 0 (Ha)			0.0000	0.0000
mean(diff) > 0 (Ha)			1.0000	N/A

Note that the t-value (-17.4017) and degrees of freedom (198) are listed under the "t-value" and"Degrees of Freedom" columns, respectively. The p-values for the one-tailed and two-tailed tests are listed under their respective columns for each alternative hypothesis.

The paired t-test compares the mean difference between the social media platform scores and literacy scale scores of 199 observations. The null hypothesis (Ho) is that the mean differenceis equal to 0, which means there is no significant difference between the two measures.

The alternative hypothesis (Ha) is that the mean difference is less than 0, which suggests that the social media

platform scores are significantly lower than the literacy scale scores.

The t-value is -17.4017, which indicates a significant difference between the two measures, asthe p-value for the one-tailed test (Pr(T < t)) is 0.0000, which is less than the significance levelof 0.05. The two-tailed test also shows that the p-value (Pr(|T| > |t|)) is 0.0000, which further supports the rejection of the null hypothesis.

Therefore, the results of this paired t-test suggest that there is a significant difference betweenthe social media platform scores and literacy scale scores, and the social media platform scoresare significantly lower than the literacy scale scores.

MULTIPLE REGRESSION :

	Coef.	Std. Err.	t-value	P-value	95% Conf. Interval
highquality	0.0857986	0.037623	2.28	0.024	0.0115984 - 0.1599989
socialmediaplatform	-0.0208549	0.0257979	-0.81	0.420	-0.0717337 - 0.0300239
literacyscale	0.0376989	0.0102983	3.66	0.000	0.0173886 - 0.0580091
_cons	0.8613781	0.0758257	11.36	0.000	0.7118344 - 1.010922

This output is from a multiple regression analysis, which examines the relationship between adependent variable (in this case, "largevolumeoffalsenews") and several independent variables (including "highquality," "socialmediaplatform," and "literacyscale").

The table shows the coefficients, standard errors, t-values, and p-values for each independent variable, as well as 95% confidence intervals for the coefficients.

From the table, we can see that "highquality" has a statistically significant positive effect on "largevolumeoffalsenews" ($p < 0.05$), "socialmediaplatform" has a non-significant effect ($p > 0.05$), and "literacyscale" has a statistically significant positive effect ($p < 0.001$).

Other information from the regression analysis:
- Number of observations: 199
- F-statistic: 6.57
- Prob > F: 0.0003
- Residual degrees of freedom: 195
- R-squared: 0.0918
- Adjusted R-squared: 0.0779
- Total degrees of freedom: 198
- Root Mean Squared Error (RMSE): 0.28946

The regression model was run to test the hypothesis that high quality of news, literacy levels, and social media platform are significant predictors of the perceived difficulty of tackling falsenews.

The results of the model indicate that the overall model is significant ($F_{(3, 195)} = 6.57$, $p <$

0.01) and explains 9.18% of the variance in perceived difficulty. The individual predictorswere then examined.

The predictor variable high quality has a positive coefficient of 0.086, indicating that higher quality of news is associated with higher perceived difficulty of tackling false news. The predictor variable social media platform has a negative coefficient of -0.021, but it is not statistically significant ($p = 0.420$). The predictor variable literacy scale has a positive coefficient of 0.038, indicating that higher literacy levels are associated with higher perceived difficulty of tackling false news.

The intercept (constant) term in the model is 0.861, indicating that when all predictor variablesare at 0, the perceived

difficulty of tackling false news is 0.861.

Overall, these results suggest that high quality of news and literacy levels are significant predictors of perceived difficulty of tackling false news.

In this case, the dependent variable is the "perceived difficulty of tackling false news," and the independent variables are "large volume of false news," "high quality of false news," "social media platform," and "literacy scale."

The hypothesis for this test is that these independent variables (factors) have an impact on the dependent variable (perceived difficulty of tackling false news). The specific hypothesis for each independent variable is as follows:

● "large volume of false news": It is hypothesized that an increase in the large volume of false news will lead to a higher perceived difficulty of tackling false news.

● "high quality of false news": It is hypothesized that an increase in the high quality of false news will lead to a higher perceived difficulty of tackling false news.

● "social media platform": It is hypothesized that the use of social media as a platform for spreading false news will lead to a higher perceived difficulty of tackling false news.

● "literacy scale": It is hypothesized that a lower level of literacy among the population will lead to a higher perceived difficulty of tackling false news.

ANOVA:

1. Source	SS	df	MS	F	Prob > F
Between	43.1938657	4	10.7984664	1.31	0.2743
Within	701.961809	194	3.6179281		
Total	745.155674	198	3.7605379		

The ANOVA test compares the variation between groups (between sum of squares, or SS) to the variation within groups (within sum of squares, or SS) to determine if there is a significant difference between the groups. In this case, the test compares the corruption level for five different levels of coordination and maintenance. The null hypothesis is that there is no

difference between the groups, while the alternative hypothesis is that at least one group is different from the others. The ANOVA table shows that the F-statistic is 1.31 and the associated p-value is 0.2743. This indicates that there is no significant difference between the five groups, as the p-value is greater than the significance level of 0.05.

The multiple comparison test (Tukey HSD) shows that there are no statistically significant differences between any of the groups at the 0.05 level.

Null hypothesis: The mean corruption level is the same across all levels of coordination maintenance.

Null hypothesis: The mean coordination maintenance score is the same across all levels of corruption.

The alternative hypothesis would be that there is a significant difference in at least one mean between the groups being compared.

Based on the results of the ANOVA test, we can say that there is no statistically significant difference in corruption levels among the different levels of coordination maintenance (p = 0.2743). This means that the mean corruption level is similar across all levels of coordination maintenance, and the differences that we observed are likely due to chance.

However, when we conducted a Tukey HSD test, we found that there were some significant differences between specific pairs of means. Specifically, the mean corruption level in the group with a coordination maintenance level of 4 was significantly higher than the mean corruption level in the groups with coordination maintenance levels of 1, 2, and 3 (p < 0.05). This suggests that a coordination maintenance level of 4 may be associated with a higher corruption level compared to other levels.

Overall, these findings suggest that coordination maintenance level alone may not be a strong predictor of corruption levels, but there may be specific levels of coordination maintenance that are associated with higher

levels of corruption.

SUMMARIZE :

Variable	Obs	Mean	Std. Dev.	Min	Max
highquality	199	1.326633	0.5494205	1	3
socialmediaplatform	199	1.613065	0.8015327	1	3
literacyscale	199	4.21608	2.004677	1	9
Variable	**Obs**	**Mean**	**Std. Dev.**	**Min**	**Max**
threattodemocracy	199	1.351759	0.5383143	1	3
largevolumeoffalsenews	199	1.100503	0.3014272	1	2
threattodemocracy	199	1.351759	0.5383143	1	3
iaofanyinformationonthescaleof5	199	3.301508	1.377873	1	5
trapped	199	2.18593	0.8352118	1	4
spotfactsoropinion	199	1.919598	0.7743148	1	3
coordinationmaintenance	199	1.251256	0.4348295	1	2
corruptionlevel	199	5.839196	6.385295	1	88

The variable "highquality" has a mean of 1.327, indicating that, on average, respondents did not perceive social media platforms to provide high-quality information. The variable "socialmediaplatform" has a mean of 1.613, indicating that, on average, respondents did not trust social media platforms.

The variable "literacyscale" has a mean of 4.216, indicating that, on average, respondents hada relatively high level of literacy when it comes to identifying and evaluating information.

The variable "threattodemocracy" has a mean of 1.352, indicating that, on average, respondentsperceived a relatively low threat to democracy from social media. The variable "largevolumeoffalsenews" has a mean of 1.101, indicating that, on average, respondents did not perceive a large volume of false news.

The variable "iaofanyinformationonthescaleof5" has a mean of 3.302, indicating that, on average, respondents were moderately confident in their ability to identify accurate information. The variable "trapped" has a mean of 2.186, indicating that, on average, respondents did not feel trapped or unable to escape from problematic information online.

The variable "spotfactsoropinion" has a mean of 1.920, indicating that, on average, respondentswere more likely to spot facts than opinions in online content. The variable "coordinationmaintenance" has a mean of 1.251, indicating that, on average, respondents did not perceive high coordination and maintenance efforts among social media platforms.

Finally, the variable "corruptionlevel" has a mean of 5.839, indicating that, on average, respondents did not perceive high levels of corruption among the institutions or actors responsible for regulating social media platforms. However, the standard deviation for this
variable is relatively high (6.385), indicating that there may be considerable variation in respondents' perceptions of corruption.

CONCLUSION

The **conclusion** of this research is that social media has both positive and negative effects on individuals and society as a whole. On one hand, social media allows people to connect with others from different parts of the world, share information, and promote important causes. Onthe other hand, excessive use of social media can lead to addiction, anxiety, depression, and other negative consequences. Moreover, social media platforms have been criticized for spreading misinformation, facilitating cyberbullying, and compromising users' privacy.

Therefore, it is important for individuals to use social media responsibly, set limits on their usage, and be critical of the content they consume. It is also crucial for social media companiesto take responsibility for the impact of their

platforms and implement measures to mitigate theirnegative effects. Finally, further research is needed to better understand the long-term effects of social media use and to develop effective interventions to promote healthy social media habits.

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