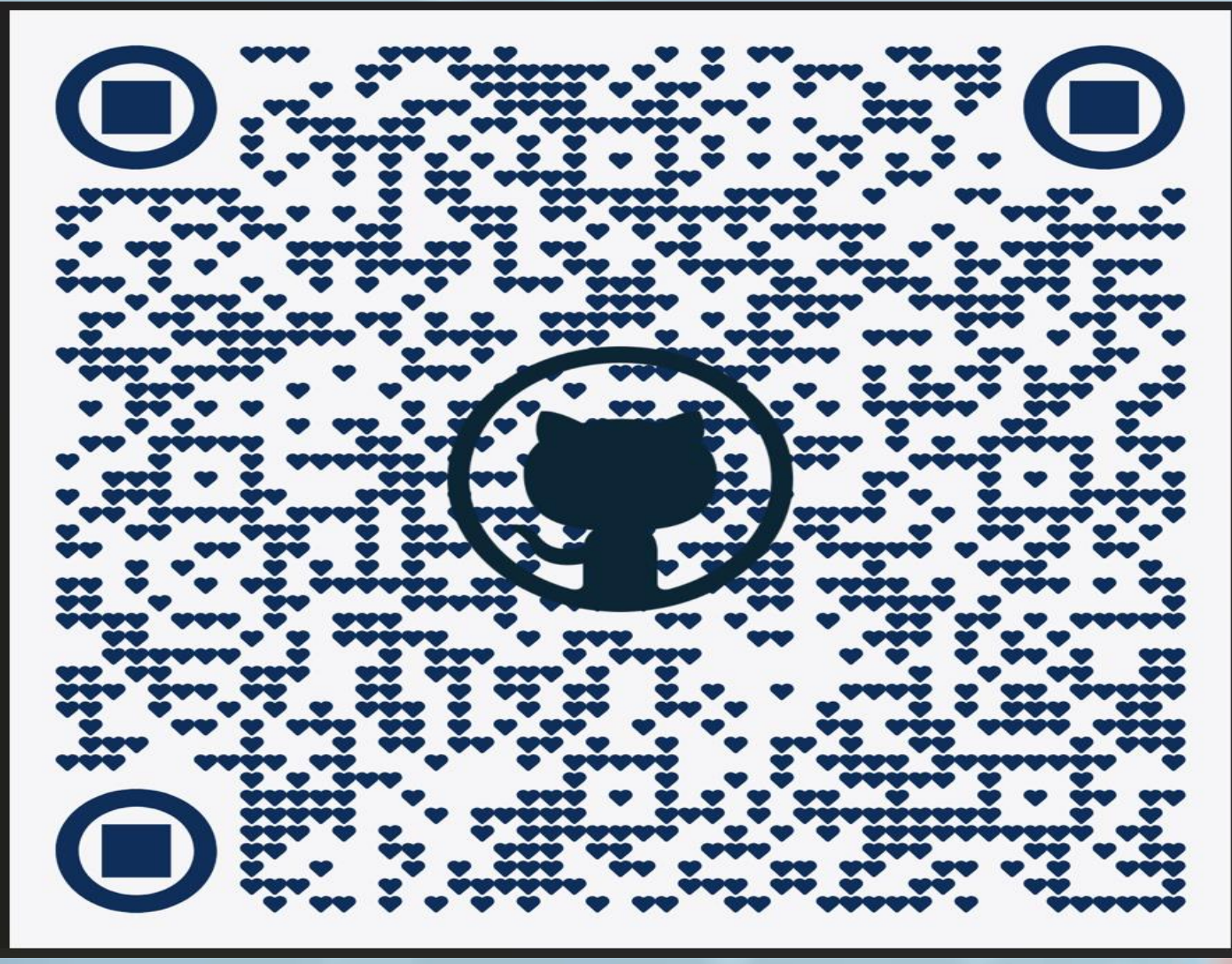


MASK USING TREND & PUBLIC REACTION DURING THE PANDEMIC

Group 16
Authors

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BACKGROUND OF THE STUDY

The COVID-19 pandemic significantly impacted global health behaviors, with mask usage becoming a key preventive measure. However, public sentiment toward mask-wearing varied across regions and time. This study analyses mask usage trends and public sentiment using data from social media and global reports.

By leveraging Natural Language Processing (NLP) and data visualization techniques, we explore:

- ✓ How mask usage evolved from 2019 to 2022
- ✓ Public reactions and sentiment shifts over time
- ✓ Differences in mask adoption across countries

RESULTS AND CONCLUSION OF THE STUDY

1. Increase in Mask Usage Over Time. Mask adoption surged 2020, peaking during major COVID-19 waves. A decline in Usage was observed as vaccination rates increased.

2.

Positive sentiment (40%): Emphasized safety, protection, and social responsibility.

Negative sentiment (35%): Linked to discomfort, misinformation, and resistance to mandates.

Neutral sentiment (25%): Focused on general discussions without strong opinions.

QUESTION

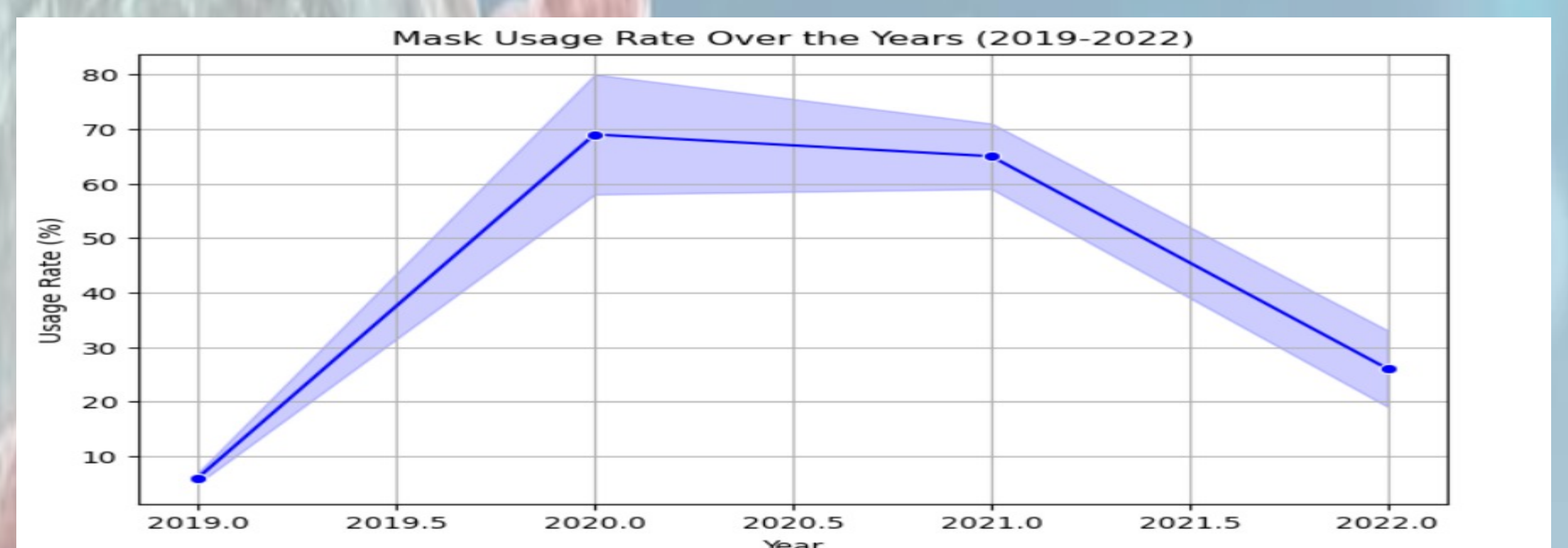
How did public sentiment toward mask-wearing change over different phases of the pandemic?

METHODOLOGY

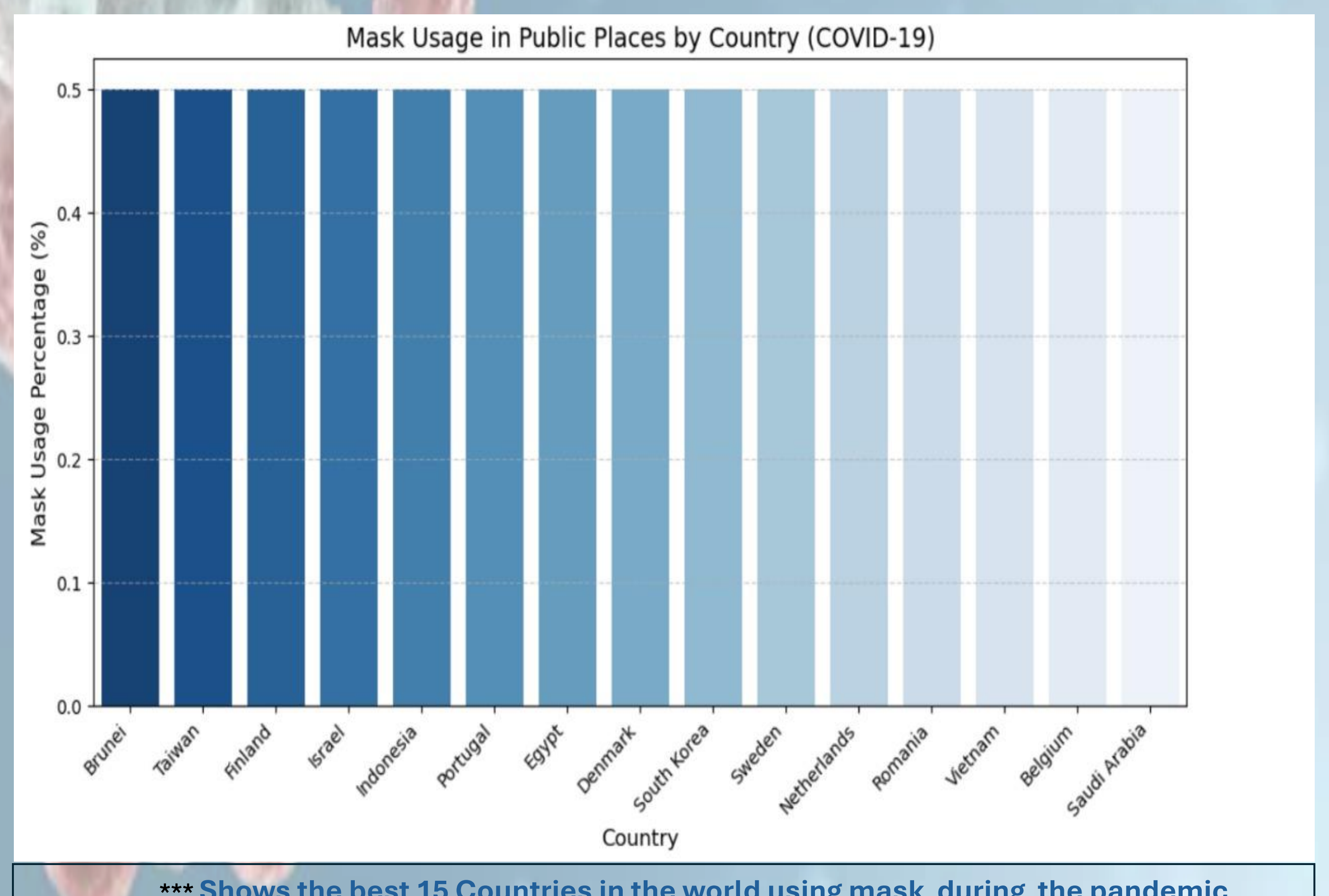
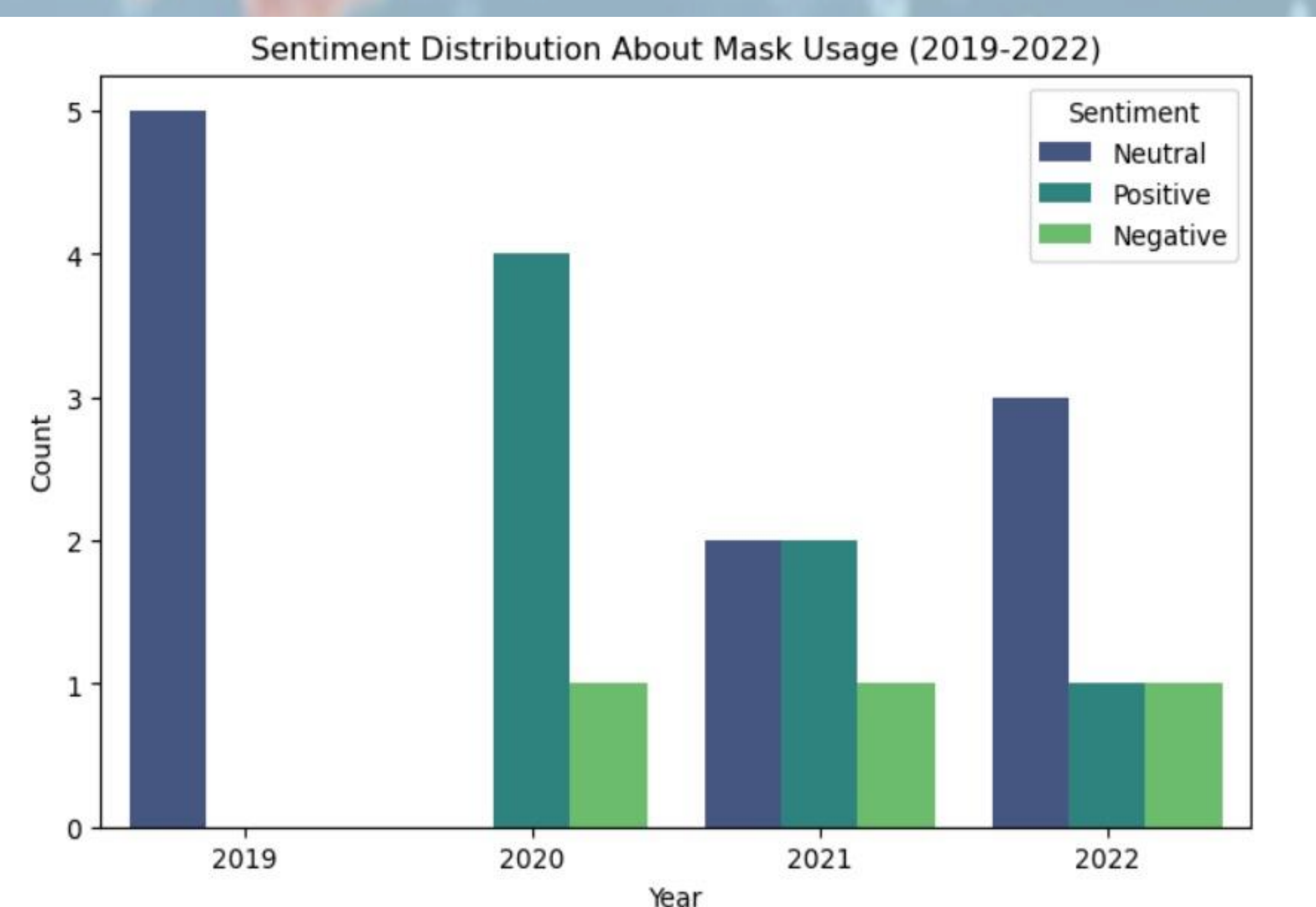
This study follows a data-driven approach using sentiment analysis and visualization techniques to explore public opinion and mask usage trend.

DATA COLLECTION

- Scraped social media data (Twitter) using snsrape for sentiment analysis.
- Retrieved mask usage statistics from publicly available datasets.
- Data Preprocessing Cleaned and formatted text data using Natural Language Processing (NLP) techniques.
- Sentiment Analysis Used VADER (Valence Aware Dictionary and Entiment Reasoner) to classify tweets as positive, negative, or neutral.
- Data Visualization Created line charts, bar graphs, and heatmaps to show mask usage trends over time and across countries.



3. Asia showed the highest compliance, especially in countries with prior experience in epidemic readiness North America & Europe exhibited mixed reactions, influenced by policy changes and misinformation.



*** Shows the best 15 Countries in the world using mask during the pandemic .