**1 Introduction**

**1.1 Introduction**

The recent lockdown in Shanghai, prompted by stringent COVID-19 policies, catalyzed a plethora of concerns, sparking noticeable distrust and aversion towards governmental measures among the city's residents. This unforeseen turmoil highlighted the pressing need for authorities to grasp the public's emotional pulse and address their apprehensions in a manner that aligns with the collective sentiment of the community. In response to this need, my final project was conceived with a twofold purpose: to analyze large-scale textual data for sentiment assessment and to provide actionable insights that could inform dynamic policy adjustments by the Shanghai municipal government.

**1.2 Project Overview**

My project embarked on an ambitious journey to tap into the rich vein of social media narratives—specifically, nearly 290,000 Weibo posts related to the lockdown period. Leveraging the robust capabilities of the BERT model, an advanced natural language processing algorithm, each post was carefully evaluated to determine the underlying emotional tendencies.

The analysis unearthed a predominance of negative sentiments, primarily 'Disgust' and 'Sadness', indicative of the populace's general state of discontent and despair during the lockdown. Simultaneously, the presence of 'Neutral', 'Anticipation', and 'Trust' sentiments, though less prevalent, pointed towards a nuanced emotional landscape that begged for careful consideration.

In synthesizing these findings, the project aims to equip the Shanghai government with a granular understanding of its citizens' mood swings and concerns. By doing so, it advocates for a more empathetic and informed approach to policy-making—one that is not just reactive but is also predictive and proactive, harnessing the power of sentiment analysis to steer the community through crisis with greater sensitivity and precision.

In conclusion, this final project stands as a testament to the potential of combining big data analytics with empathetic governance. It illustrates how technology can bridge the gap between rulers and the ruled, fostering a more connected and responsive administrative ethos.

**2 model training and predicting**

The methodology for the final project revolves around the implementation of a BERT-based model for sentiment analysis on social media posts from Shanghai during the COVID-19 lockdown period. This section delineates the steps taken from data preprocessing to model training and evaluation.

**2.1 Data Preparation**

The dataset comprises social media posts collected during the lockdown period in Shanghai, meticulously annotated with sentiment labels. Given the nature of the dataset, the first step involved preprocessing the text data to make it suitable for model input. This process included:

Tokenization: Utilizing the BertTokenizer from the Hugging Face library, the text data was tokenized, converting each post into a series of tokens understood by the BERT model.

Data Splitting: The dataset was divided into training and testing sets, ensuring a diverse representation of sentiments in both sets. This split facilitates model evaluation on unseen data.

**2.2Model Selection and Training**

For the sentiment analysis task, the chinese-macbert-base model was chosen. This selection was driven by the model's proficiency in understanding the nuances of Chinese text, making it ideal for analyzing social media posts in Mandarin. The training process involved:

Hyperparameter Tuning: A range of hyperparameters, including learning rate, batch size, and number of epochs, were experimented with to find the optimal combination for the highest accuracy. The initial phase utilized a subset of the dataset to expedite the tuning process.

Model Training: Post hyperparameter optimization, the model was trained on the entire dataset using the best-found parameters. This comprehensive training aimed to generalize well across the dataset, capturing the sentiment accurately.

**2.3Evaluation and Results**

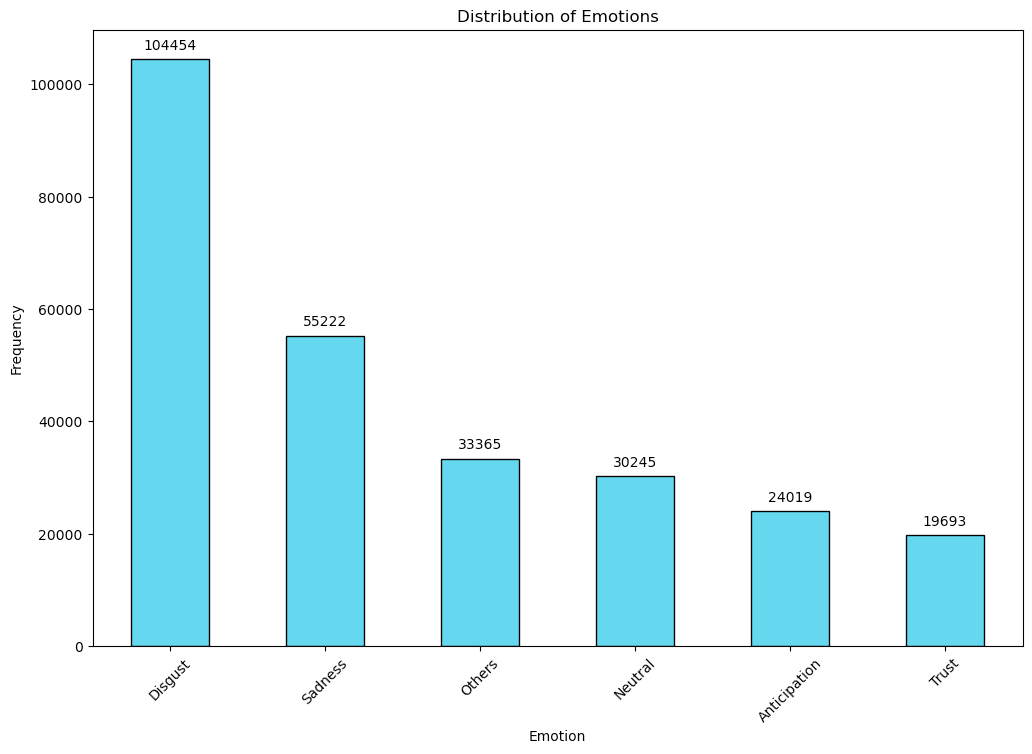
The model's performance was assessed based on accuracy, precision, recall, and F1 score, ensuring a holistic view of its predictive capabilities. The evaluation on the test dataset yielded promising results:

Accuracy: 0.939, indicating a high level of consistency between the model's predictions and the actual sentiment labels.

Precision, Recall, and F1 Score: These metrics further validated the model's effectiveness, with scores around 0.938 to 0.941, showcasing its ability to balance false positives and negatives adeptly.

**2.4Conclusion**

The successful application of the BERT model for sentiment analysis in this project underscores the model's versatility and effectiveness in processing natural language data, particularly in a nuanced context like social media posts during a lockdown. The high accuracy and other metric scores attest to the model's capability to understand and predict sentiments accurately, offering valuable insights into public sentiment during unprecedented times.



The bar chart presented depicts the emotional distribution of approximately 290,000 posts from Weibo, a prominent Chinese social media platform, during the Shanghai lockdown due to the COVID-19 pandemic. This data has been meticulously analyzed using a BERT (Bidirectional Encoder Representations from Transformers) model to predict the sentiment orientation expressed in each post.

The histogram serves as an insightful supplement to the description of the database, showcasing that the most prevalent emotion identified is 'Disgust', with over 100,000 posts. This could reflect the public's strong negative sentiment towards the circumstances of the lockdown. The emotion 'Sadness' follows, represented in approximately 55,000 posts, likely mirroring the challenges and distress faced by the citizens of Shanghai during this period.

The category 'Others', accounting for around 33,000 posts, may encompass a range of complex, less easily classified emotions or possibly a mix of various sentiments not falling into the predefined categories. 'Neutral' emotions appear in about 30,000 posts, indicating a considerable portion of the population opting for a more reserved or balanced expression. Meanwhile, 'Anticipation' and 'Trust' are emotions with lower frequencies, at approximately 24,000 and 19,000 posts, respectively. These emotions could signify hope or confidence in the measures taken, or the eventual lifting of the lockdown, albeit being less dominant sentiments.

This distribution is critical for understanding the general public's response to the lockdown and gauges the overall emotional climate on social media during a significant event. The use of advanced NLP (Natural Language Processing) techniques like the BERT model allows for a nuanced interpretation of large-scale textual data, providing valuable insights into public sentiment during unprecedented times.

**3 Comparison of prediction accuracy between bert and openai**   
The methodology section of this project demonstrates a comparative analysis between a custom-trained BERT model and OpenAI's pre-trained Large Language Models (LLMs) for sentiment analysis on a dataset of social media posts related to the COVID-19 lockdown in Shanghai. This analysis aims to highlight the effectiveness of task-specific model tuning and the importance of high-quality, well-annotated datasets in achieving superior model performance.

**3.1 Data Preparation and Sampling**

Initially, the project utilized a comprehensive dataset of social media posts collected during the Shanghai COVID-19 lockdown period. The dataset was prepared by loading it into a pandas DataFrame and ensuring that the date column was correctly formatted to datetime. To simplify the analysis and focus on key data points, the dataset was grouped by date, and a single post was sampled from each date. This approach allowed for a manageable yet representative subset of data to be analyzed, ensuring diversity in the sentiment and topics covered by the posts.

**3.2 Sentiment Analysis Models**

Two approaches were adopted for sentiment analysis:

1. Custom-Trained BERT Model: The project leveraged the BERT (Bidirectional Encoder Representations from Transformers) model, specifically the `chinese-macbert-base` variant optimized for Chinese language text. The model was fine-tuned on the Shanghai lockdown dataset, with the training process meticulously adjusting hyperparameters such as learning rate, batch size, and number of epochs to maximize accuracy. The sentiment categories included emotions such as disgust, sadness, trust, anticipation, and neutrality, among others.

2. OpenAI LLMs: For comparison, OpenAI's pre-trained Large Language Models were also employed to classify sentiments of the same social media posts. The sentiment analysis task was formulated as a chat completion request to the model, specifying the possible sentiment labels and providing the text for classification.

**3.3 Comparative Analysis and Evaluation**

The performance of both models was evaluated based on their accuracy in classifying the correct sentiment of each post. The accuracies were then compared to assess the effectiveness of a custom-trained model against a general-purpose LLM in a specialized sentiment analysis task.

**3.4 Insights and Conclusion**

The comparative analysis revealed a significantly higher accuracy for the BERT model, underlining the model's ability to better capture the nuances of sentiment in the context of the Shanghai lockdown, thanks to its targeted training. This outcome emphasizes the importance of task-specific model tuning and the value of high-quality, accurately annotated datasets in enhancing model performance.

In conclusion, while LLMs like those provided by OpenAI offer a broad understanding of language and context, their performance in specialized tasks can be outmatched by models like BERT when the latter are finely tuned and trained on well-curated datasets. This project showcases the critical role of model customization and quality data in achieving superior outcomes in machine learning applications.

**4 Simulated dialogue between citizens and mayor**

In this final project, I embarked on an innovative journey to simulate conversations between Shanghai's citizens and the city's mayor during the critical period of COVID-19 lockdowns. The project aimed to capture the dynamic dialogue that could have occurred, based on the evolving sentiments and concerns of the public as the city navigated through the pandemic's challenges. Utilizing OpenAI's GPT-3.5 turbo model, I sought to generate realistic conversations that reflected the complexities of policy-making and public sentiment during unprecedented times.

**4.1Methodological Approach**

**4.1.1 Setting the Stage with Scenario Description**

The foundation of this simulation began with crafting a detailed scenario description. This narrative set the context for the entire project, outlining the emergence of COVID-19 in March 2022, the subsequent city-wide lockdown measures, and the pivotal role of a citizen representative. This preface was crucial for aligning the AI model's responses with the specific historical and social context of Shanghai during the pandemic.

**4.1.2Crafting Conversations**

The core of the project involved simulating dialogues between the citizen representative and the mayor. This was achieved through a series of steps:

- Articulating Concerns and Responses: Initial inputs included expressing citizens' pre-existing concerns and the mayor's policy proposals, reflecting the collective sentiment and governmental actions at various lockdown stages.

- Utilizing OpenAI for Real-time Simulation: Calls to OpenAI's API with carefully formulated prompts generated the mayor's policy proposals and subsequent discussions. This involved adaptive responses based on the evolving situation, aiming to mirror a realistic exchange between government and citizens.

- Iterative Feedback Loop: The conversation simulation was designed to iterate through concerns, policy proposals, and feedback, mimicking a dynamic exchange aiming for resolution or policy adjustments.

**4.2 Evaluating Public Sentiment and Policy Impact**

An integral part of this project was evaluating how well the simulated conversations aligned with the actual sentiments of Shanghai's citizens and the effectiveness of the policies. This required a deep dive into the specifics of each dialogue, analyzing the nuances of concerns expressed by the citizens and the responsiveness of the policy adjustments proposed by the mayor.

**4.3 Key Insights and Outcomes**

The project revealed the potential of AI in understanding and simulating complex human interactions, particularly in the context of crisis management and public governance. The conversations generated through the OpenAI API provided insightful reflections on the balance between public health priorities and societal needs during lockdowns.

Moreover, this project underscored the importance of empathetic and informed policy-making, highlighting how a deep understanding of citizens' concerns can lead to more effective and accepted measures. It also demonstrated the potential of AI as a tool for exploring hypothetical dialogues and scenarios, offering valuable perspectives on governance and public sentiment.

**4.4 Conclusion**

This final project not only shed light on the potential applications of AI in simulating realistic conversations but also offered a unique lens through which to view the complex interplay between government actions and public sentiment during a global health crisis. By leveraging the power of OpenAI's GPT-3.5 turbo model, I was able to create a dialogue that not only resonates with the historical context but also explores the possibilities of enhancing public governance through technology. This endeavor serves as a testament to the evolving role of AI in understanding and navigating the intricacies of human emotions and societal dynamics.

**5 Annotation consistency check**

The methodology section of this study, focusing on the analysis of sentiment annotations, is a detailed statistical examination of inter-rater reliability for emotion coding in a dataset. Below is a clear and structured presentation of the methodology:

**5.1 Methodology Overview**

This study involved quantitatively assessing the consistency between two independent coders’ classifications of emotional content in a text dataset. The emotional states were categorized into eight discrete classes: anger, anticipation, fear, joy, trust, surprise, sadness, and disgust.

**5.2 Data Collection and Preparation**

A dataset containing sentiments expressed in text was collected and prepared for analysis. The sentiments were initially classified by two independent coders into one of the eight predefined emotional states, forming the basis for our reliability analysis.

**5.3 Annotations Container Creation**

Using the PyAnno library, we created an `AnnotationsContainer` from the array of annotations. During this step, we handled missing values by marking them with a designated code (-1 in this case) and including them as a missing value category in the container.

**5.4 Agreement Measures Computation**

To assess the inter-rater reliability, we computed several agreement statistics:

- Labels Frequency: The frequency of each label provided an overview of the distribution of sentiments across the categories.

- Confusion Matrix：: The matrix visualized the extent to which the two coders agreed or disagreed on the classification of each emotion category.

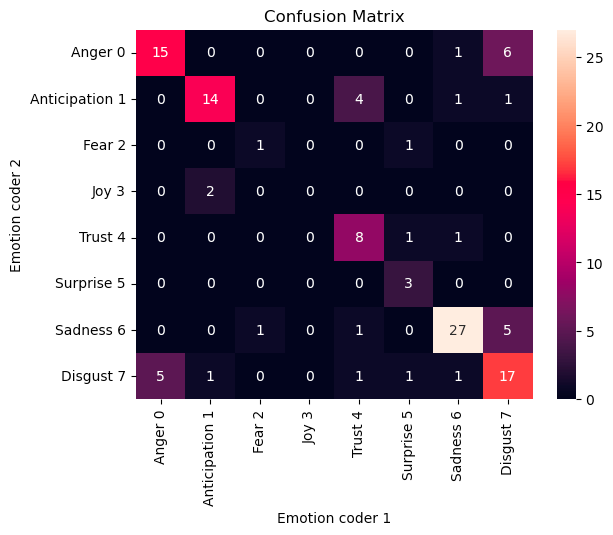
- Scott's Pi: A measure of agreement that accounts for the possibility of the agreement occurring by chance.

- Fleiss' Kappa: An extension of Scott's Pi for more than two raters, but here adapted for two raters, which assesses the reliability of agreement.

- Krippendorff's Alpha: A reliability coefficient that accommodates any number of raters, levels of measurement, sample sizes, and missing data.

- Cohen's Kappa: Specifically measures the agreement between two coders.

**5.3 Visualization**

A confusion matrix was generated using Seaborn and Matplotlib libraries to graphically represent the agreements and disagreements between the two coders. The matrix was annotated for clarity, with axis labels translating numerical codes to emotional states for readability.

**5.4 Results Interpretation**

The computed agreement measures indicated a moderate to substantial agreement between the coders, suggesting reliable sentiment coding within the dataset. However, the heatmap of the confusion matrix revealed some areas where disagreements were more frequent, warranting further investigation into potential causes such as ambiguity in text sentiment or coder bias.

The provided confusion matrix and subsequent agreement metrics from my analysis reflect the consistency between two annotators tasked with classifying emotions in text data. The agreement on emotions like sadness and disgust was particularly high, indicating clear guidelines or shared understanding in these categories. Metrics such as Scott's Pi and Cohen's Kappa showed values above 0.6, suggesting a substantial agreement that surpassed chance, affirming the reliability of our annotations for these emotions.

Discrepancies in categories such as anger highlight areas for potential refinement in our annotation process. The moderate agreement indicated by Krippendorff's Alpha suggests room for improvement in our training or guidelines. Such detailed analytics are crucial to ensure the data quality for training robust sentiment analysis models and provide a basis for enhancing the precision of our emotion classification methodologies.

**5.5 Conclusion**

The high level of agreement overall suggests that the emotion coding process was robust. However, identified areas of discordance indicate opportunities for improving coding guidelines or training to achieve even higher reliability in future sentiment annotation tasks.

**6 Analysis of changes in each emotion over time**

In the provided methodology, we seek to analyze and visualize the trends of expressed emotions over time in the context of significant events. Here is an interpretation and explanation of the process:

1. Data Processing:

- The dataset is first read from a CSV file, ensuring that the date column is correctly parsed as a datetime object.

- Each emotion in the dataset is sorted based on their frequency on a specific date (e.g., June 26, 2022) to understand the prominence of each emotion on that day.

- The sorted emotions serve as a guide for visualizing the data, ensuring that the most frequent emotions are easily identifiable.

2. Visualization:

- A line plot is generated using Matplotlib, a powerful plotting library in Python. This approach is chosen for its simplicity and effectiveness in showing trends over time.

- For each emotion, a trend line is plotted to depict its proportional representation over the time period analyzed.

- Key dates are annotated to correlate significant events with changes in emotion trends, aiding in the interpretability of how events might have influenced public sentiment.

3. Annotations and Event Correlation:

- The methodology emphasizes the importance of annotating key dates with corresponding events, such as the start of lockdowns or the announcement of zero case growth. This allows for a narrative to be built around the data, providing context for fluctuations in public sentiment.

- Dashed vertical lines are drawn on the dates of these events to act as visual markers that align with spikes or drops in emotion proportions, offering insights into the temporal relationship between events and public emotion.

4. Statistical Interpretation:

- The emotion proportions are calculated and visualized as a function of time. This is not just a snapshot of sentiment at a given moment but a continuous observation of how sentiment evolves in the face of unfolding events.

- By arranging the emotions in descending order of their values on a significant date, the visualization highlights the dominant sentiments of that particular moment in the context of the ongoing situation.

5. Plot Customization:

- To enhance readability and interpretation, the trend lines are colored differently, and a legend is provided for reference.

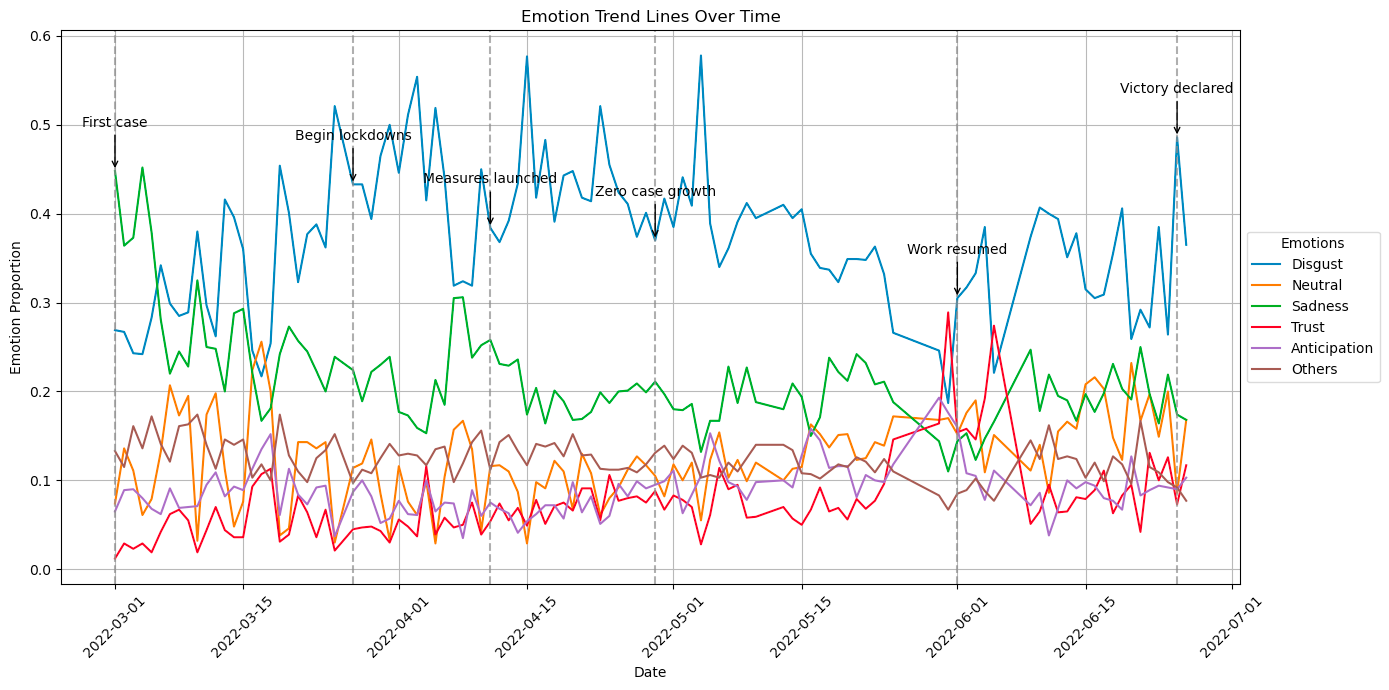
- The x-axis is formatted to displ· ···············································ay dates in a 'Year-Month-Day' format, and tick labels are rotated for better legibility.

6. Interpretation of Results:

- The methodology ensures that the visualization not only represents data but tells a story, providing a clear link between what the data signifies and the real-world implications of the studied period.

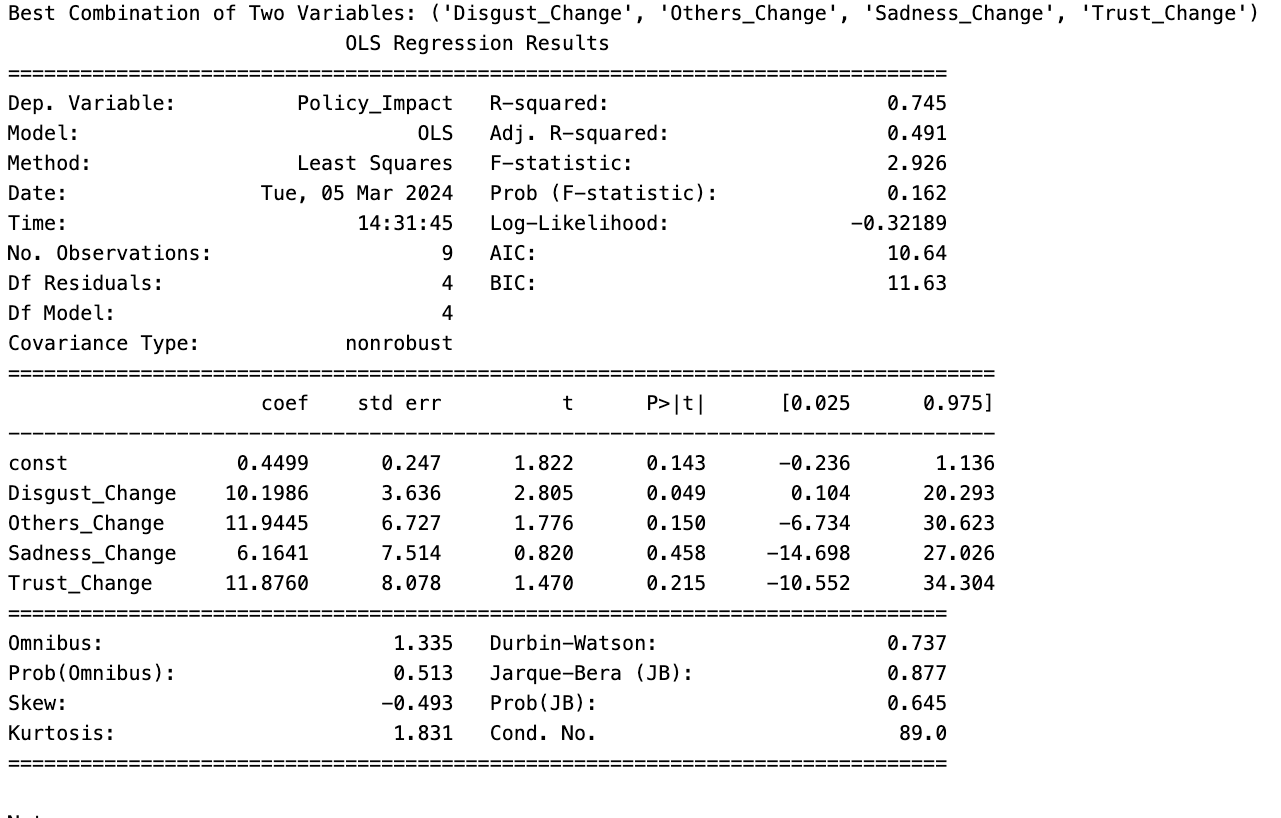
- This visualization becomes a powerful tool for understanding public sentiment, potentially guiding policymakers, researchers, or social scientists in decision-making or further study.

The result is a comprehensive, narrative-driven graph that contextualizes the emotional response of a population over time, juxtaposed with key events, which can be invaluable for understanding the impact of such events on public sentiment.



**6 Casual inference**

In the methodology of our study, we applied an Ordinary Least Squares (OLS) regression analysis to investigate the relationship between changes in emotion proportions (specifically changes in disgust, other unspecified emotions, sadness, and trust) and the impact of policies. The OLS model aimed to quantify the extent to which these emotional shifts could predict the perceived impact of various policies.



The regression model produced an R-squared value of 0.745, indicating that approximately 74.5% of the variance in policy impact could be explained by the model. This is considered a strong fit in the context of social science research. However, it's important to note that the Adjusted R-squared value, which accounts for the number of predictors in the model, was significantly lower at 0.491. This suggests that when the number of variables is taken into consideration, the model's explanatory power diminishes.

The F-statistic of 2.926 with a corresponding p-value of 0.162 suggested that the model, when considering all the predictors together, was not statistically significant at the conventional alpha level of 0.05. In other words, there wasn't enough evidence to assert that the emotional changes as a group had a significant impact on policy impact.

Looking at individual predictors, the coefficient for Disgust\_Change was significant (p < 0.05), indicating a substantial increase in policy impact with each unit increase in the disgust emotion measure. The other variables did not reach statistical significance, which suggests that they might not independently predict the policy impact as effectively as the change in disgust.

It is important to highlight the small sample size (N=9) in our analysis, which imposes limitations on the generalizability of these results. The adjusted R-squared value serves as a reminder of this limitation, as it penalizes the model for the number of predictors relative to the number of observations.

Residual diagnostics indicated that the model's assumptions were reasonably met. The Omnibus test for normality of residuals was not significant (p > 0.05), suggesting that the residuals were normally distributed. The Durbin-Watson statistic was 0.737, close to the value of 2, which implies there was no significant autocorrelation. Additionally, the Jarque-Bera test also supported the normality of residuals.

In conclusion, our regression analysis provided insights into the emotional responses to policy changes. However, due to the model's limitations, particularly the sample size and non-significant overall model fit, these findings should be interpreted with caution. Future research with a larger sample size and additional variables may be necessary to draw more definitive conclusions.

Appendix：

1:openai simulation text

Text：  
Event Date: 2022-03-27

Due to the COVID-19 outbreak starting in March 2022, the Shanghai Municipal Government gradually began to implement city-wide lockdown measures. Every citizen was required to stay within their homes, undergoing regular testing for the COVID-19 infection. Throughout the initiation and gradual easing of these lockdown measures, there exists a representative of Shanghai's citizens, who communicates the public's sentiment to the mayor following the announcement of policies, aiming to better align them with the community's needs.

Citizen: On 2022-03-27, I, as a representative of Shanghai's citizens, am particularly concerned about: Residents are anxious about the precision of lockdown measures and are already experiencing delays in the reporting of test results..

Mayor: 1. Increase funding for mental health services: We will allocate more resources to mental health services in our community to provide support and resources for individuals struggling with mental health issues. This could include hiring more mental health professionals, expanding existing programs, and creating new initiatives to address specific needs.

2. Implement mental health training for city employees: We will provide training for city employees, including police officers, to identify and respond to individuals experiencing mental health crises. This will ensure that appropriate support and resources are provided to those in need and reduce the risk of harm to both individuals and law enforcement.

3. Partner with community organizations: We will collaborate with community organizations that specialize in mental health to create a network of support for individuals in need. This could include partnering

Citizen: Having heard the proposed policy, we still have concerns regarding: Displeasure with the lack of food delivery for workers and dissatisfaction with the management of the lockdown, as people have started to feel the strain of the new restrictions..

Citizen: 1. Food delivery for workers: Many workers rely on food delivery services to provide them with meals during their shifts. With the new policy, it seems that this option will no longer be available, leaving workers with limited choices for their meals. This can lead to increased expenses for workers and may also affect their productivity if they are not able to have a proper meal during their break.

2. Management of the lockdown: The management of the lockdown has been a source of frustration for many people. The lack of clear guidelines and inconsistent enforcement has caused confusion and inconvenience. People have also expressed concerns about the impact on their mental health, as they feel isolated and restricted in their daily lives. It is important for the policy to address these issues and provide better

Mayor: We will take your feedback into account and make the necessary adjustments. Thank you for your constructive dialogue.

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Event Date: 2022-04-11

Due to the COVID-19 outbreak starting in March 2022, the Shanghai Municipal Government gradually began to implement city-wide lockdown measures. Every citizen was required to stay within their homes, undergoing regular testing for the COVID-19 infection. Throughout the initiation and gradual easing of these lockdown measures, there exists a representative of Shanghai's citizens, who communicates the public's sentiment to the mayor following the announcement of policies, aiming to better align them with the community's needs.

Citizen: On 2022-04-11, I, as a representative of Shanghai's citizens, am particularly concerned about: There is a mix of anticipation and skepticism as citizens await the government’s additional measures to support them during the prolonged lockdown..

Mayor: to implement stricter guidelines for public gatherings and events. This includes limiting the number of attendees, requiring face masks and social distancing, and increasing sanitation measures.

We also encourage businesses to continue offering remote work options and to limit in-person meetings. Schools will remain open with safety protocols in place, but virtual learning options will also be available.

Additionally, we will be increasing testing and contact tracing efforts to better track and contain any potential outbreaks. We ask that everyone continue to follow recommended hygiene practices such as frequent hand washing, avoiding large gatherings, and staying home if feeling unwell.

These measures may seem inconvenient, but they are necessary to protect the health and well-being of our community. We will continue to monitor the situation and adjust our policies as needed.

Citizen: Having heard the proposed policy, we still have concerns regarding: Citizens are hopeful yet cautious as they start to see the implementation of new support measures, but some are concerned about their effectiveness and coverage..

Citizen: 1. Effectiveness: Many citizens are worried about the effectiveness of the new support measures. They are concerned that the measures may not be enough to address the current economic challenges and may not have a significant impact on their lives.

2. Coverage: There are concerns about the coverage of the support measures. Some citizens feel that the measures may not reach those who need them the most, such as low-income households and small businesses.

3. Implementation: While the policy sounds promising, citizens are worried about its implementation. They are concerned about bureaucratic delays and inefficiencies that could hinder the timely and effective delivery of the support measures.

4. Sustainability: Some citizens are concerned about the long-term sustainability of the support measures. They worry that once the initial excitement

Mayor: We will take your feedback into account and make the necessary adjustments. Thank you for your constructive dialogue.

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Event Date: 2022-04-29

Due to the COVID-19 outbreak starting in March 2022, the Shanghai Municipal Government gradually began to implement city-wide lockdown measures. Every citizen was required to stay within their homes, undergoing regular testing for the COVID-19 infection. Throughout the initiation and gradual easing of these lockdown measures, there exists a representative of Shanghai's citizens, who communicates the public's sentiment to the mayor following the announcement of policies, aiming to better align them with the community's needs.

Citizen: On 2022-04-29, I, as a representative of Shanghai's citizens, am particularly concerned about: Amidst stringent lockdown measures, residents are feeling the fatigue but are hopeful for positive news on the pandemic front..

Mayor: to implement a comprehensive plan that focuses on the health and safety of our community while also supporting our local businesses.

Firstly, we will continue to closely monitor the COVID-19 situation and follow all guidelines and recommendations from the CDC and local health officials. This includes promoting social distancing, wearing masks, and practicing proper hygiene.

Secondly, we will work with our local businesses to ensure that they have the necessary resources and support to operate safely. This may include providing access to personal protective equipment, offering financial assistance, and facilitating virtual or outdoor options for businesses that are unable to operate indoors.

Additionally, we will prioritize the well-being of our most vulnerable populations, such as the elderly and immunocompromised, by providing resources and support to meet their

Citizen: Having heard the proposed policy, we still have concerns regarding: Relief and renewed hope spread among the citizens as the report of zero cases suggests that the lockdown measures may be paying off..

Citizen: 1. Implementation and enforcement of the policy: While the policy may sound effective on paper, the actual implementation and enforcement on the ground may be challenging. There needs to be a clear plan in place on how the policy will be enforced and monitored to ensure that everyone complies with it.

2. Impact on businesses and the economy: The lockdown measures have already had a severe impact on businesses and the economy. While lifting the lockdown may provide some relief, it is important to have measures in place to support affected businesses and individuals during this transition period.

3. Potential for a resurgence of cases: Zero cases may be a positive sign, but there is still a risk of a resurgence of cases if the policy is not implemented carefully. There needs to be

Mayor: We will take your feedback into account and make the necessary adjustments. Thank you for your constructive dialogue.

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Event Date: 2022-06-01

Due to the COVID-19 outbreak starting in March 2022, the Shanghai Municipal Government gradually began to implement city-wide lockdown measures. Every citizen was required to stay within their homes, undergoing regular testing for the COVID-19 infection. Throughout the initiation and gradual easing of these lockdown measures, there exists a representative of Shanghai's citizens, who communicates the public's sentiment to the mayor following the announcement of policies, aiming to better align them with the community's needs.

Citizen: On 2022-06-01, I, as a representative of Shanghai's citizens, am particularly concerned about: After a prolonged period of lockdown, there is a sense of cautious optimism among residents about the prospect of returning to normalcy..

Mayor: 1. To increase funding for mental health services in our city: We recognize that the pandemic has had a significant impact on the mental health of our residents. Therefore, we will be allocating more resources towards mental health services, including counseling and therapy, to ensure that everyone has access to the support they need.

2. To implement a mask mandate in all public spaces: In order to protect the health and safety of our citizens, we will be enforcing a mask mandate in all public spaces, including indoor and outdoor areas. This will help prevent the spread of the virus and keep our community safe.

3. To support small businesses: We understand that many small businesses have been struggling during the pandemic. To support them, we will be offering financial assistance and

Citizen: Having heard the proposed policy, we still have concerns regarding: Residents express relief and gratitude as work and economic activities resume, although there remains concern about potential health risks and the desire for a return to normal life..

Citizen: 1. Potential health risks: While we understand the need to resume work and economic activities, we are still concerned about the potential health risks involved in doing so. The COVID-19 pandemic is far from over and there is a possibility of a second wave of infections. We urge the government to prioritize the safety and well-being of its citizens above all else.

2. Lack of clear guidelines: We would like to see more concrete and detailed guidelines on how the resumption of work and economic activities will be carried out. This includes measures such as mandatory use of masks, social distancing protocols, and regular disinfection of workspaces. Without clear guidelines, there is a risk of confusion and potential violations that could further exacerbate the spread of the virus.

Mayor: We will take your feedback into account and make the necessary adjustments. Thank you for your constructive dialogue.

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2: Casual Inference

