

The Psychological Impact of a Riot on the Community Ryan Pletcher Daniel Hart

Rutgers University

10 Second Takeaway

Riots have demonstrable psychological effects on the communities in which they occur. The hypothesis tested in this research is that following the 2014 unrest in Ferguson there will be increased interest in racism and misuse of force by police evident in internet search data from Google Trends. The results of this analysis suggested that searches for terms related to racism and police brutality increased after the violent demonstrations in Ferguson.

Introduction

Any number of neighbors, town members, or fellow citizens assembled to exact restitution through violence is captivating to the community at large. The lasting psychological effects of riots, especially those that have a foundation in the misuse of force by police are of interest to any community member regardless of their role. One such incidence of violent demonstration occurred in Ferguson, Missouri in 2014. While the majority of protests were peaceful, some assemblies led to the looting of 12 stores and the destruction of two buildings by arson (Toch, 2017).

Past research in the area of group violence has revealed a number of possible variables contributing to this phenomenon. One common theme identified by individuals as motivation to riot is police brutality (Toch, 2017). This is especially interesting because the police response to a group of violent protesters can create a feedback loop, wherein both protesters and police officers are continually retaliating for previous violence. It has also been noted that a robust group identity leads members to deflect guilt and shame and decreases the likelihood for reconciliation between two opposing groups (Costabile & Austin, 2017).

The hypothesis tested in this research is that following 2014 riots in Ferguson, there will be increased interest in racism and the excessive use of force by police, which will be demonstrated by internet search data from Google Trends.

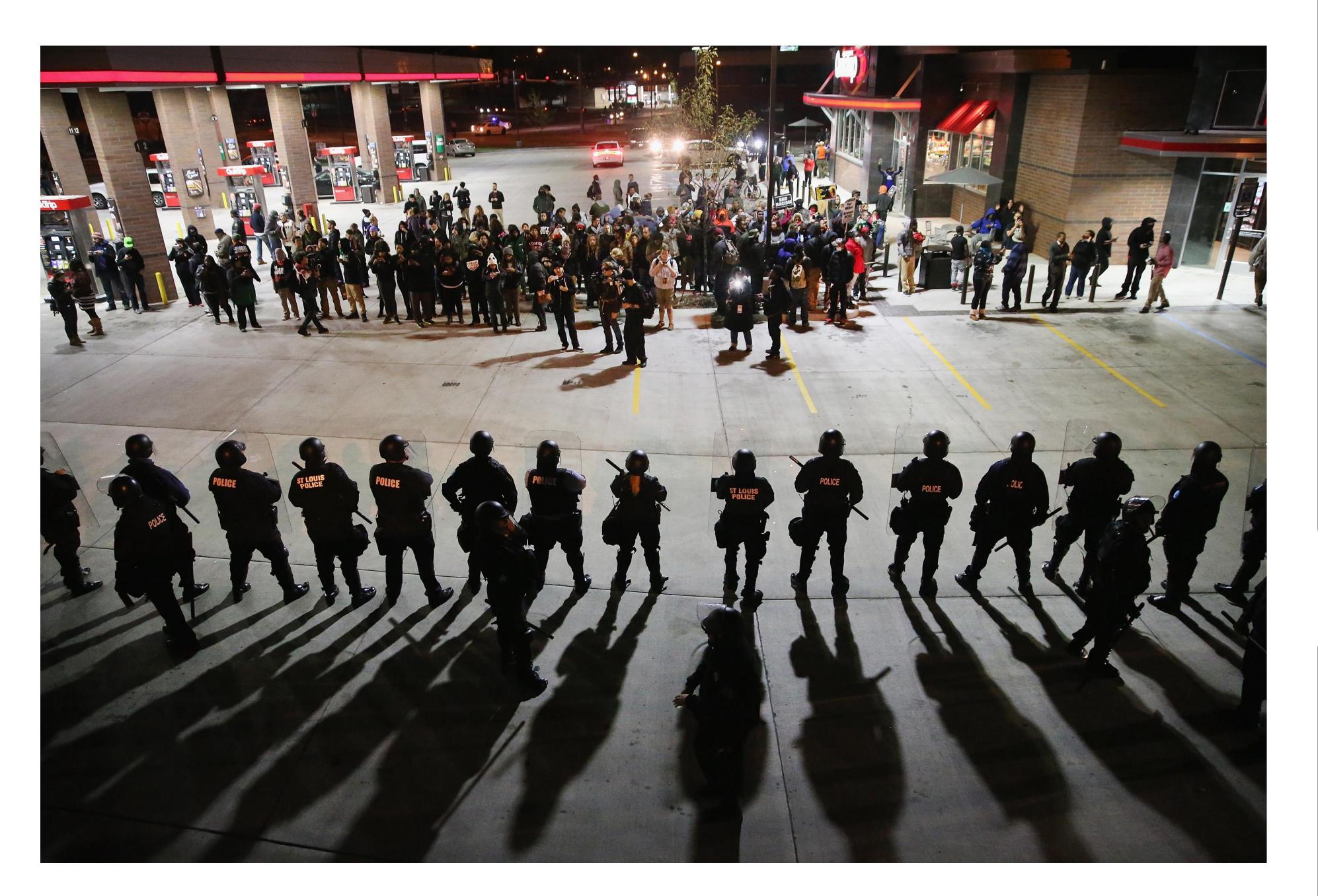
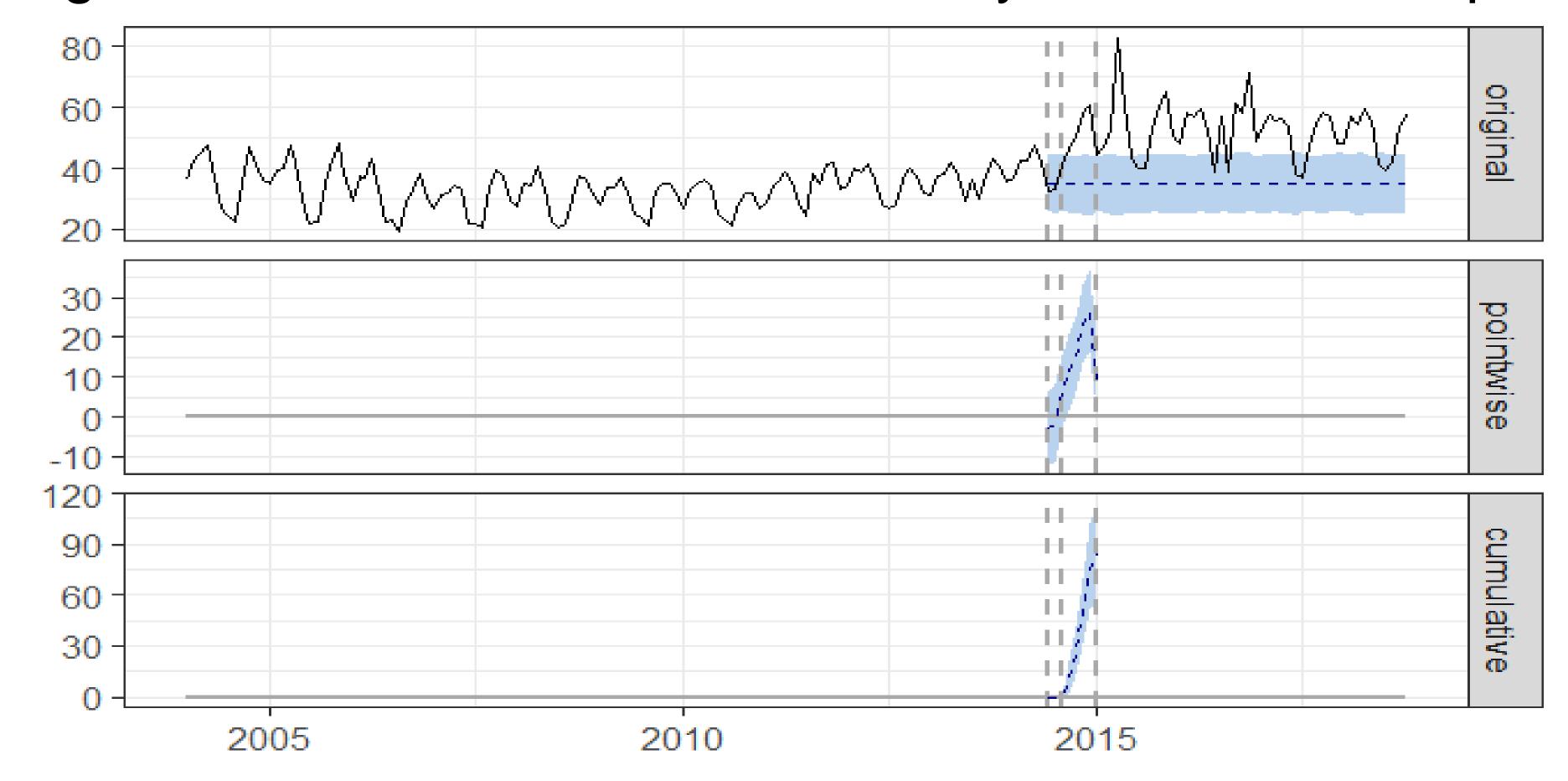


Figure 1: Results of time-series analysis for causal impact



Method

The search terms "rioting", "stereotype", "police brutality", "racism", and "anxiety" were used for this analysis. The search data for these terms was obtained from Google Trends, which is a program designed by Google that allows users to define keywords and analyze the relative usage of those keywords in internet searches. Only search data for the United States was considered in the analysis. A separate program written to be implemented by the statistical software *R* was used to pull the data from Google Trends and analyze the impact of the unrest in Ferguson on the frequency of searches for the terms of interest.

Results

To test the impact of the Ferguson unrest on internet search trends, an interrupted time-series analysis in the statistical software R was used. This method of analysis, detailed by Brodersen and colleagues (2015), allows for the evaluation of an intervention and provides the ability to compare the impact of the intervention with a time-series without the intervention. It was found that searches for the terms of interest had an average salience of 51.96 following the first violent protest in Ferguson, where in the absence of the disturbance the average salience of the terms would have been approximately 35.10. Figure 1 illustrates this finding.

Conclusions

The results of the analysis do suggest that the uptick in searches for terms related to racism, anxiety, and the excessive use of force by police was borne out of the protest in Ferguson. The increased salience of these terms may be a contributing factor to the sensitization of the population toward further instances of police brutality.