



Evaluating engagement with and language in Tweets before and after the SCOTUS *Roe v. Wade* draft opinion leak

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INTRODUCTION

- Estimates for the last yearly national total for abortion (in 2019) range from 629,898 to 886,000
- Three in ten young women in the U.S. will become pregnant at least once before age 20, and there are close to 750,000 pregnancies per year with the majority (~82%) of these pregnancies being unintended
- Restricting or outlawing abortion poses harm to women's mental health, such as higher levels of anxiety, lower life satisfaction, and lower self-esteem

The purpose of this study was to understand how emotional sentiments, health, and anxiety language about *Roe v. Wade* and abortion rights have changed since May 2, 2022 (when the SCOTUS draft opinion about the overturn of *Roe v. Wade* was leaked), as measured through public Tweets.

METHODS

Study Design: Content Analysis

Subjects:

- Tweets mentioning #RoeVWade and/or #abortionrights posted by public Twitter account users were collected
- Half of the Tweets collected were posted before May 2, 2022, and the other half were posted after that date

Data Collection: Using the below criteria, the Twitter advanced search was applied to collect 100 Tweets as well as the number of likes, retweets, and replies to the Tweets.

HASHTAGS
#RoeVWade and/or
#abortionrights

DATES
Pre-Roe: March 1 - May 1
Post-Roe: May 3 - July 10

LANGUAGE
English

COLLECT
Click on "Top" column and collect first 50 Tweets for each time period.

Data Analysis:

- T-tests were run to compare engagement with pre- and post-Roe Tweets
- LIWC was used to analyze affect, positive emotion, negative emotion, anxiety and health language
- Further t-tests were run to assess the difference in LIWC variables in pre- and post-Roe Tweets

RESULTS

Demographics: Tweets mentioning #RoeVWade and/or #abortionrights in the specified pre- and post-Roe time periods (N = 100, N = 50 in each time period).

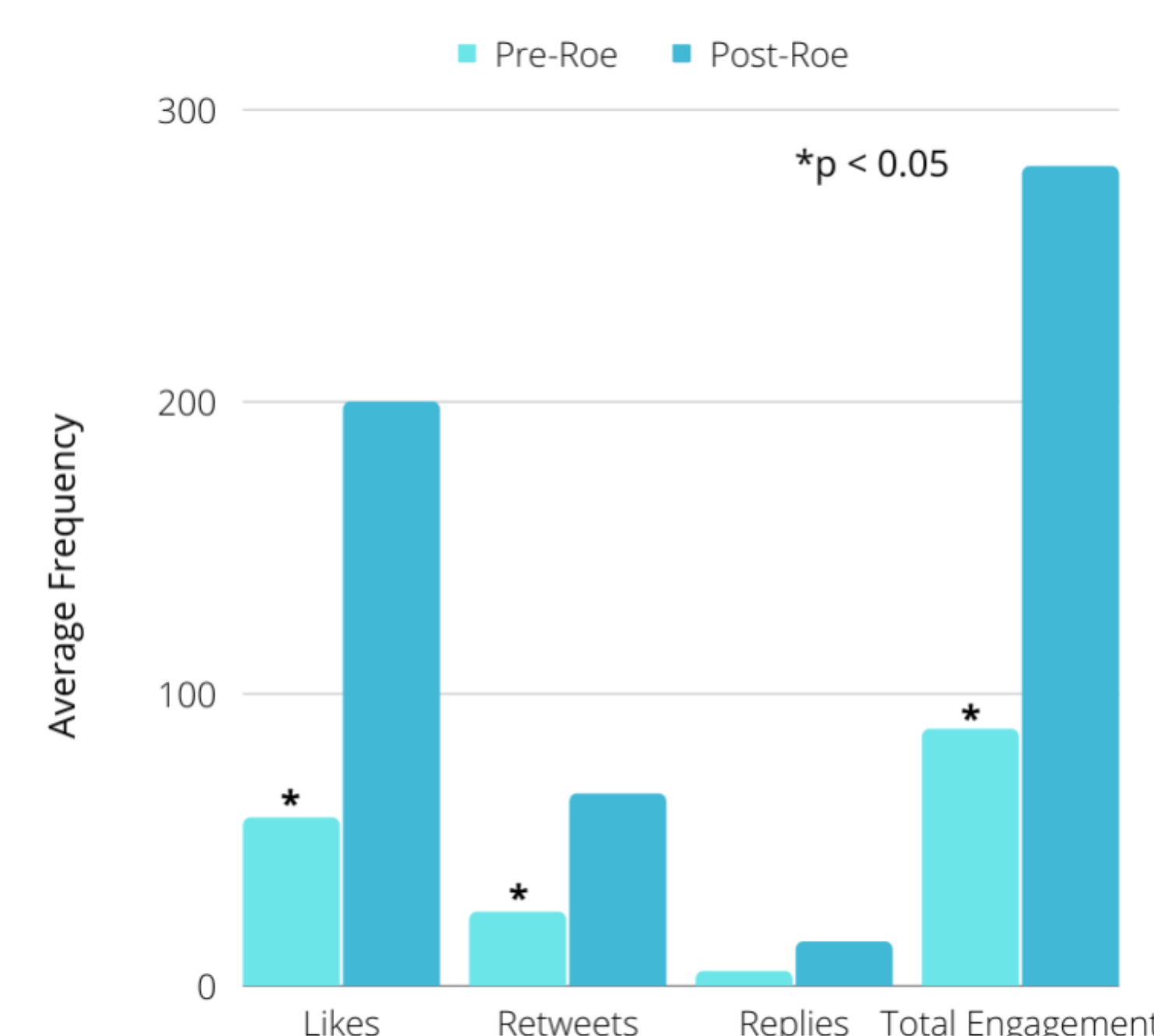
	Avg. Likes	Avg. Retweets	Avg. Replies
pre-Roe	57.64	25.32	4.92
post-Roe	199.96	65.60	15.00



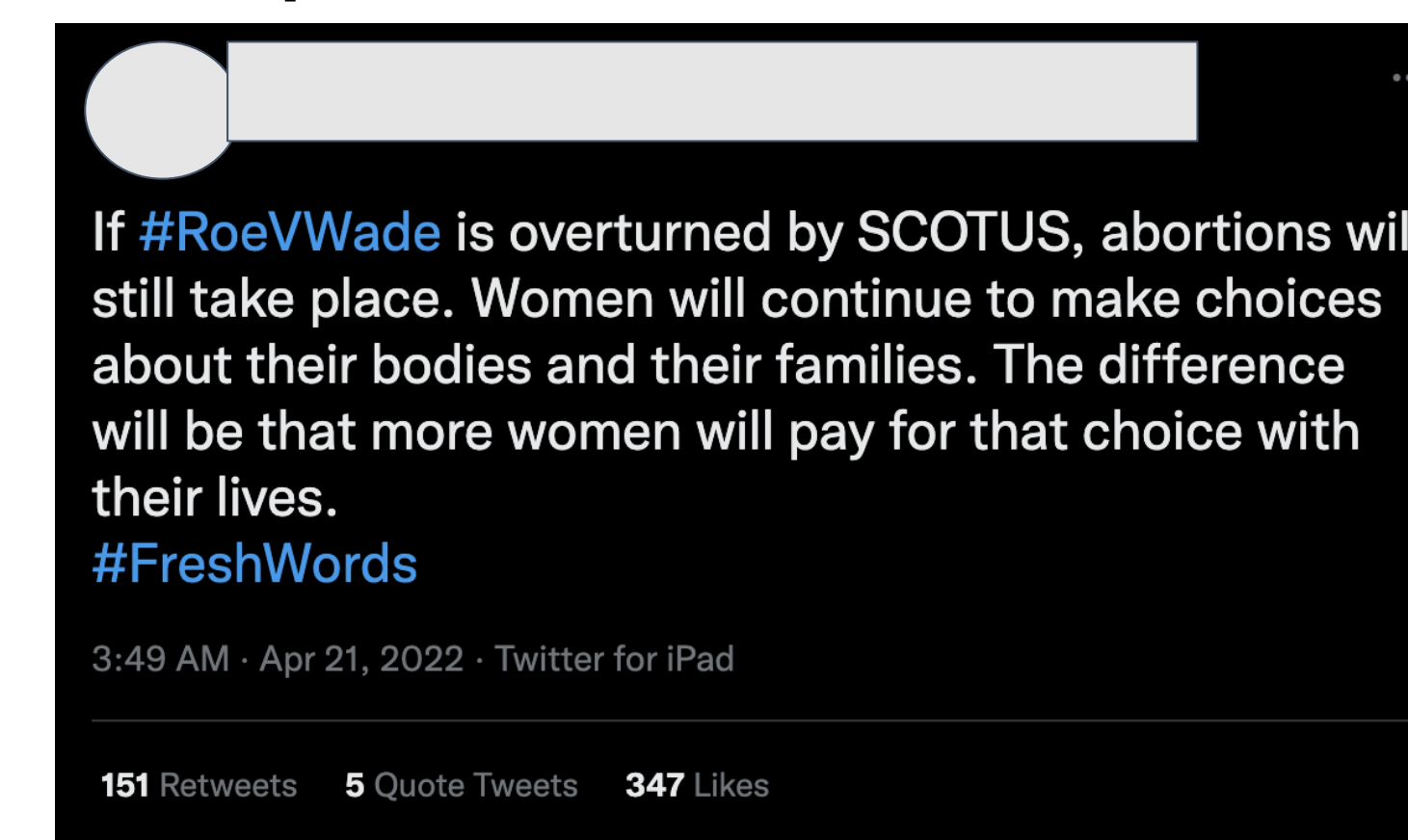
Findings:

Engagement:

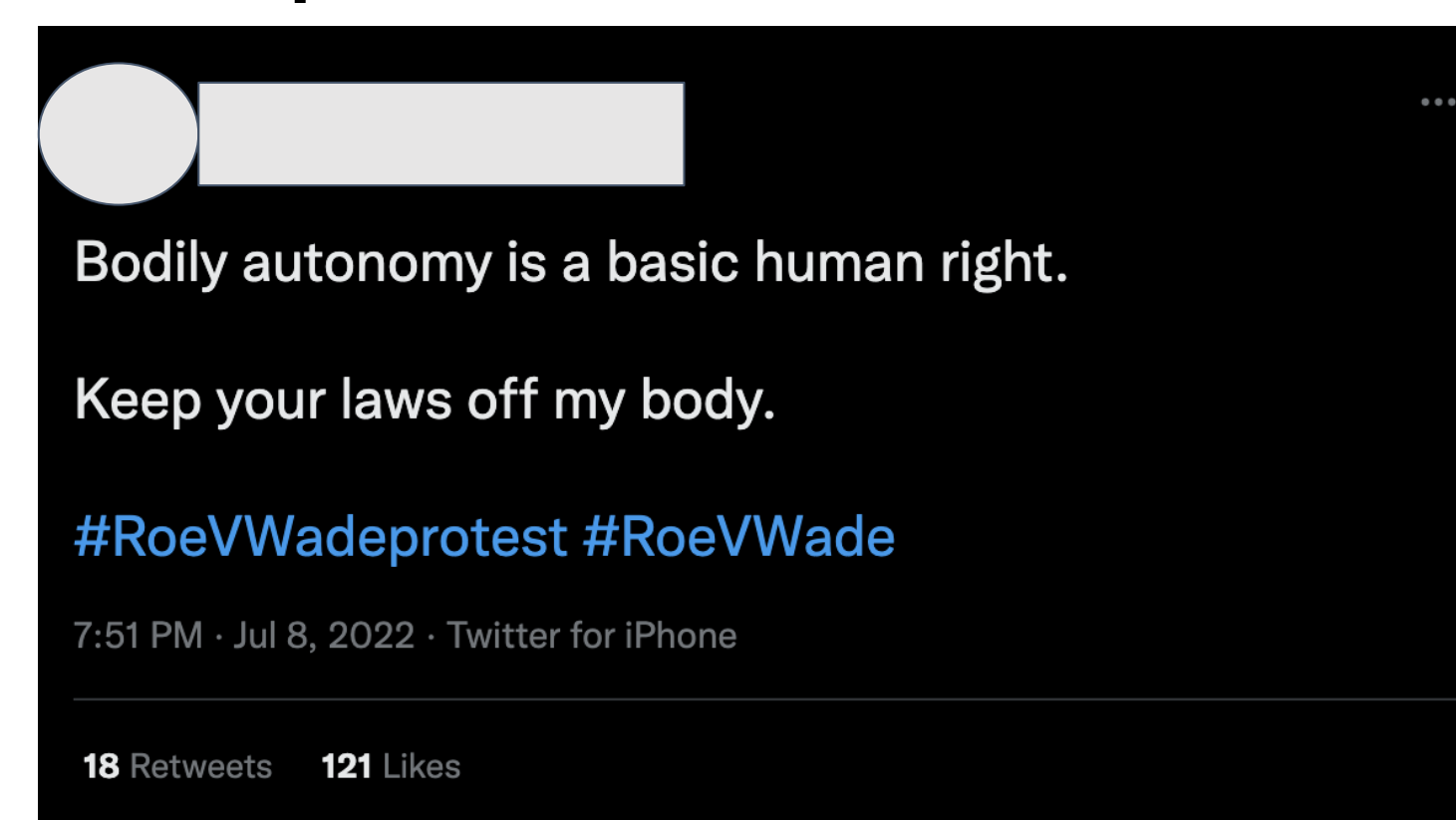
- There was a significantly greater average number of likes, retweets, and total engagement (likes + retweets + replies) of post-Roe Tweets compared to pre-Roe Tweets
- There was no significant difference in average replies to post-Roe Tweets compared to pre-Roe Tweets



Example Pre-Roe Tweet:



Example Post-Roe Tweet:



LIWC Analysis:

LIWC Variable	Example Words	Pre-Roe (M)	Post-Roe (M)	t-stat	p-value
affect	happy, cried	4.3162	4.4424	-0.148	0.883
positive emotion	love, nice, sweet	1.5392	2.5686	-1.64	0.104
negative emotion	hurt, ugly, nasty	2.774	1.8736	1.395	0.166
anxiety	worried, fearful	0.0862	0.2510	-1.271	0.207
health	clinic, flu, pill	4.8494	4.1474	-0.401	0.689

The average percentage of affect, positive emotion, negative emotion, anxiety, and health language did not significantly differ in pre- vs. post-Roe tweets.

CONCLUSIONS

Main Finding 1: There was a significantly greater number of likes, retweets, and total amount of engagement with post-Roe Tweets than pre-Roe Tweets.

This may suggest that the conversation about *Roe v. Wade* became more relevant/timely following the leak.

Main Finding 2: Language (affect, positive emotion, negative emotion, anxiety, and health) used in pre-Roe Tweets did not significantly differ compared to language in post-Roe Tweets.

This may suggest that emotional sentiments about *Roe v. Wade* and abortion rights in the general public have remained similar before and after the SCOTUS draft opinion leak.

FUTURE DIRECTIONS

Future directions for this research include examining emotional sentiments in language and engagement with Tweets before and after the overturn of *Roe v. Wade* on June 24, 2022. Additional potential areas of study include analyzing language and engagement with content about *Roe v. Wade* and abortion rights on other social media platforms (e.g. Instagram), or analyzing language and engagement with social media content about related issues, such as access to contraceptives, LGBTQ-affirming care, and same-sex and interracial marriage.

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