



# Linguistic Analysis of NAMI & Trevor Project comments on Instagram

Princy Patel, Zoe Stratman, Maggie Bushman, Chelsea Olson  
University of Wisconsin – Madison  
School of Medicine and Public Health, Department of Pediatrics

**UW Health**  
American Family  
Children's Hospital

 Department of Pediatrics  
UNIVERSITY OF WISCONSIN  
SCHOOL OF MEDICINE AND PUBLIC HEALTH

## INTRODUCTION

- From 2009 to 2021, the proportion of teens who say they feel 'depressed' in the US has risen from 26% to 44%, which is the highest amount of sadness ever recorded. LGBTQ+ youth are 2 to 3 times more likely to attempt suicide
- NAMI (National Alliance on Mental Illness) is a mental health organization that advocates for awareness and education on mental illness and provides support to individuals and families affected by mental illness
- The Trevor project is a mental health nonprofit organization focused on mental health advocacy as well as crisis prevention / suicide prevention for LGBTQ+ teens
- Eight in ten online teens use some kind of social media. 72% of teens use Instagram
- Research has suggested that there may be a positive association between time spent on social media and more depressive symptoms. However, no research yet has examined sentiments expressed in language in comments on social media accounts dedicated to mental health awareness

The purpose of this study was to examine and compare emotional language use in comments on posts of two Instagram accounts, NAMI and Trevor Project, that are dedicated to mental health awareness.

## METHODS

**Design:** Content Analysis using LIWC (Linguistic Inquiry and Word Count)

**Subjects:** The intended subjects were comments from posts from NAMI and Trevor Project Instagram accounts

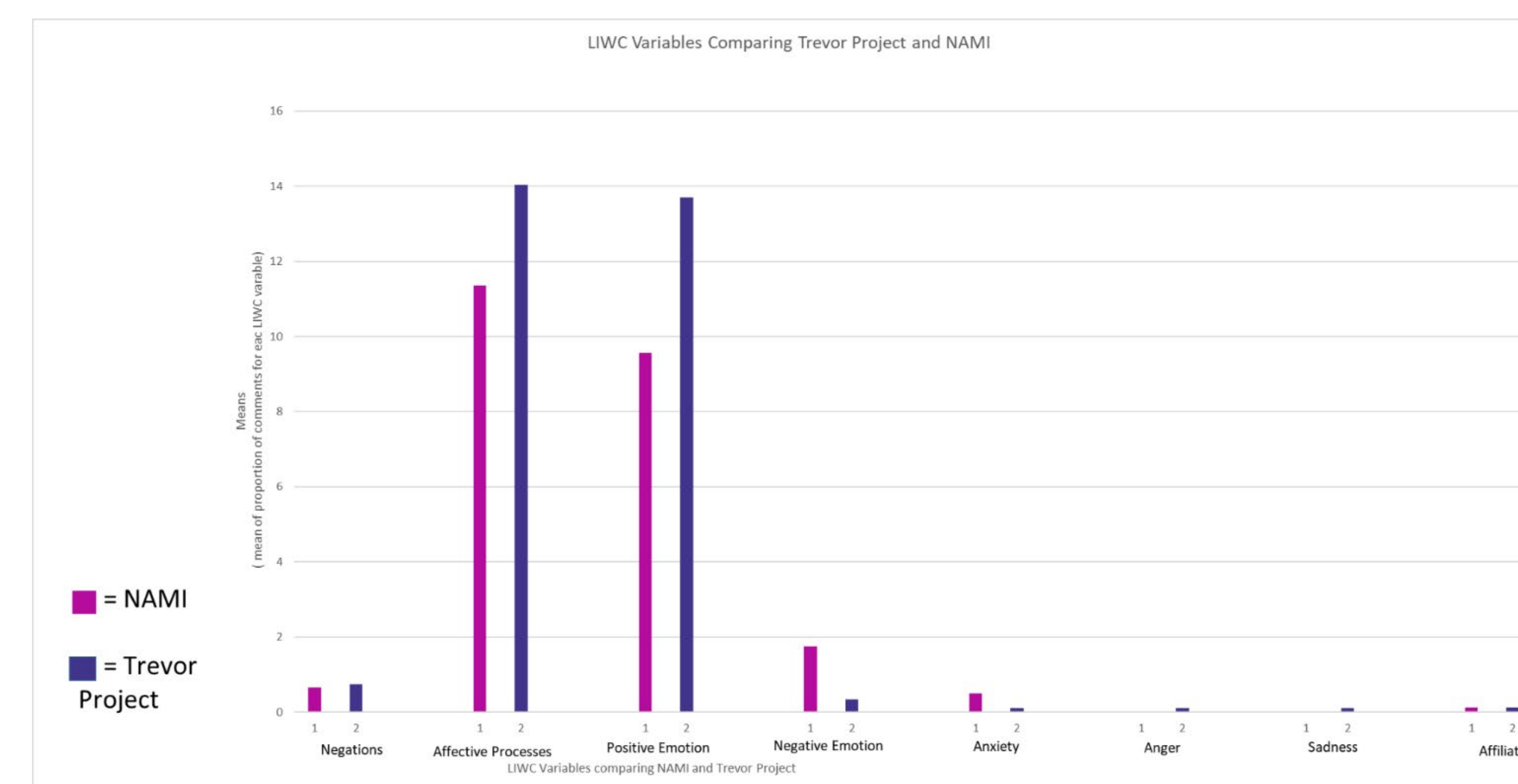
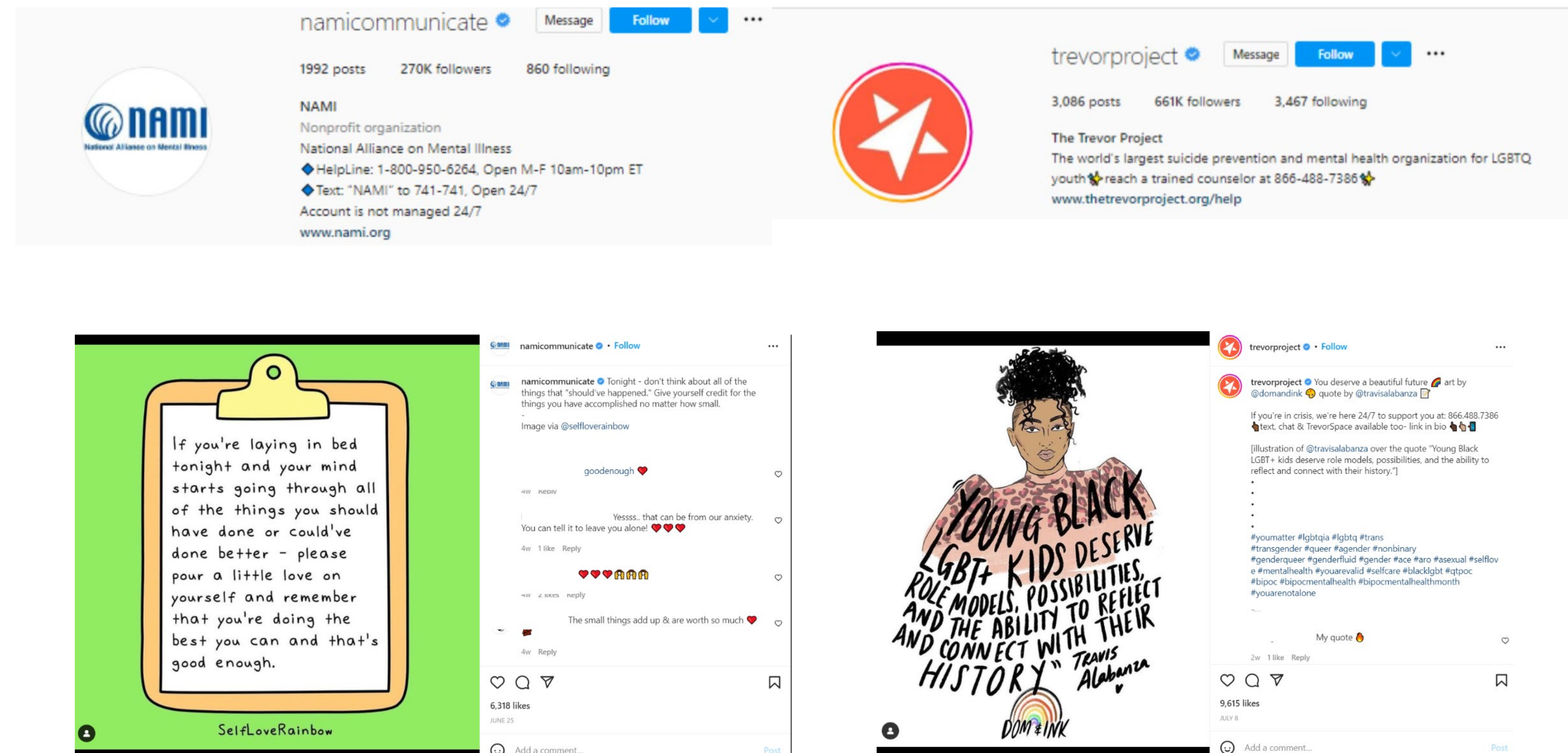
**Data Collection:**

- The demographic information that was collected from NAMI and Trevor Project's Instagram accounts were # of posts, following, and followers for each account
- 10 comments from the 5 most recent posts on NAMI's Instagram account were collected. 10 comments from the 5 most recent posts on Trevor Project's Instagram account were collected
- Comments were analyzed using LIWC software. The LIWC variables that were analyzed were: negations, affective processes, positive emotion, negative emotion, anxiety, anger, sadness, and affiliation

**Analysis:**

- LIWC was used to calculate percentages of each LIWC variable in each comment
- T-tests were run to compare the differences in LIWC variables between comments written on NAMI Instagram posts and comments written on Trevor Project Instagram posts

## RESULTS



LIWC Variable	t-value	p-value
Negations	-0.227	0.821
Affective Processes	-0.881	0.38
Positive Emotion	-1.402	0.164
Negative Emotion	1.343	0.182
Anxiety	1.656	0.101
Anger	-1	0.32
Sadness	-0.03	0.976
Affiliation	0.559	0.577

## CONCLUSIONS

**Main Findings:**

- There were no significant differences in any of the LIWC variables when comparing comments
- I wanted to compare an LGBTQ+ account focused on mental health to another mental health account because I wanted to see if there were differences in sentiments since it is thought there is a stronger stigma towards the LGBTQ+ community. On Instagram, it seems to be the same, and the accounts are promoting positivity towards mental health
- It can be implied that there is somewhat of an equal attitude towards NAMI and Trevor on Instagram and that it seems that Instagram has a supportive and positive attitude regarding the topic of mental health and the LGBTQ+ community

**Implications:**

- These findings can be used to research other social media platforms popular among teens, such as TikTok, to see if there are similar results
- Since there were no differences in sentiments on these two accounts, LGBTQ+ teens might find that the Trevor Project Instagram account is a supportive resource if they are struggling with mental health issues

**Limitations:**

- The time (what is going on in the news) when I am collecting this data might affect the results. The sample I might have collected might have been too small

## ACKNOWLEDGEMENTS

Thank you so much to everyone at SMARHT and my additional mentors: Bradley Kerr, and Reese Hyzer. Even if it was brief, I am very grateful for the opportunity to meet you and work with you. These mentors also helped me to create research from inception to analysis.

Thank you to my peer reviewers as well.


Last but not least, thank you SMARHT, for the incredible support and ample opportunities I am lucky to receive.

## CONTACT INFORMATION

**Princy Patel**  
23patelp@gmail.com

**Megan A. Moreno, MD, MSEd, MPH**  
moreno@wisc.edu

<http://smahrtresearch.com/>

 @SMAHRTeam

 @SMAHRTeam

 <https://business.facebook.com/SMAHRTeam/>

