

## Slide 1: The 2021 Fluency Report: Health Literacy



Slide 1: Report title slide

Title: The 2021 Fluency Report: Health Literacy

By: The Real Chemistry Emerging Insights Lab

Photo of the S.I. Newhouse School Of Public Communications at Syracuse University

## Slide 2: Our Approach



Slide 2: Section introduction

Section Title: Our Approach. Research Focus and Methodology

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## Slide 3: Research Focus

### Research Focus

Our goal was to explore that evolving nature of health discussions on the web and across social media platforms. To that end, we focused on three interrelated aspects of online conversations within the health communication space.

- Key topics
- Sentiment toward topics
- Important actors and organizations



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## Slide 3: Research Focus

Our goal was to explore that evolving nature of health discussions on the web and across social media platforms. To that end, we focused on three interrelated aspects of online conversations within the health communication space, including: key topics, sentiment toward topics, and important actors and organizations.

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## Slide 4: Methodology

### Methodology

We used quantitative and qualitative analysis to study health related discussions at scale. Our methods included:

- Social listening
- Topic clustering
- Audience segmentation
- Sentiment analysis



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## Slide 4: Methodology

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## Slide 6: Audience Fragmentation

### Audience Fragmentation

Audience fragmentation continues to grow as users gravitate toward individuals and politicians who aggressively use social media to disseminate their views on topics. Influence is not based on subject matter expertise, instead on social media expertise. Major topics will persist year over year but will fade as new issues and concerns arise. Close attention must be paid to intergenerational differences in trusted sources and topics of interest..

Government agencies, appointed health officials, and corporate organizations are not the dominant voices in online discussions. Online discussions can be shaped by what official organizations are not saying, as well as questions of legitimacy of those same organizations. The short feedback cycle in social media leads to rapidly evolving conversations requiring constant monitoring to stay relevant.

### Slide 6: Summary of observations

Audience fragmentation continues to grow as users gravitate toward individuals and politicians who aggressively use social media to disseminate their views on topics. Influence is not based on subject matter expertise, instead on social media expertise. Major topics will persist year over year but will fade as new issues and concerns arise. Close attention must be paid to intergenerational differences in trusted sources and topics of interest.

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## Slide 7: Key Highlights

### Key Highlights

- Overall mention volume around health topics **decreased 31%** from 2020
- *Health* related discussions still account for the majority of discussion volume, with *fitness* and *healthcare* taking second and third positions, respectively
- Discussions around COVID still dominated social media but those conversations captured a smaller percentage of the overall discourse
- Emerging topics of interest included *public health*, *healthcare workers*, and *wellness (staying healthy)*

## Slide 7: Key Highlights

- Overall mention volume around health topics decreased 31% from 2020.
- Health related discussions still account for the majority of discussion volume, with fitness and healthcare taking second and third positions, respectively.
- Discussions around COVID still dominated social media but those conversations captured a smaller percentage of the overall discourse.
- Emerging topics of interest included public health, healthcare workers, and wellness (staying healthy).

## Slide 8: Top Twitter Highlights

### Top Twitter Hashtags

2021	2020
#COVID19	#covid19
#health	#coronavirus
#Healthcare	#covid
#fitness	#covid_19
#cancer	#cancer
#mentalhealth	#mentalhealth

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### Slide 8: Top Twitter Tags in 2020 and 2021

#### Top 2020 Twitter hashtags:

#covid19  
#coronavirus  
#covid  
#covid\_19  
#cancer  
#mentalhealth

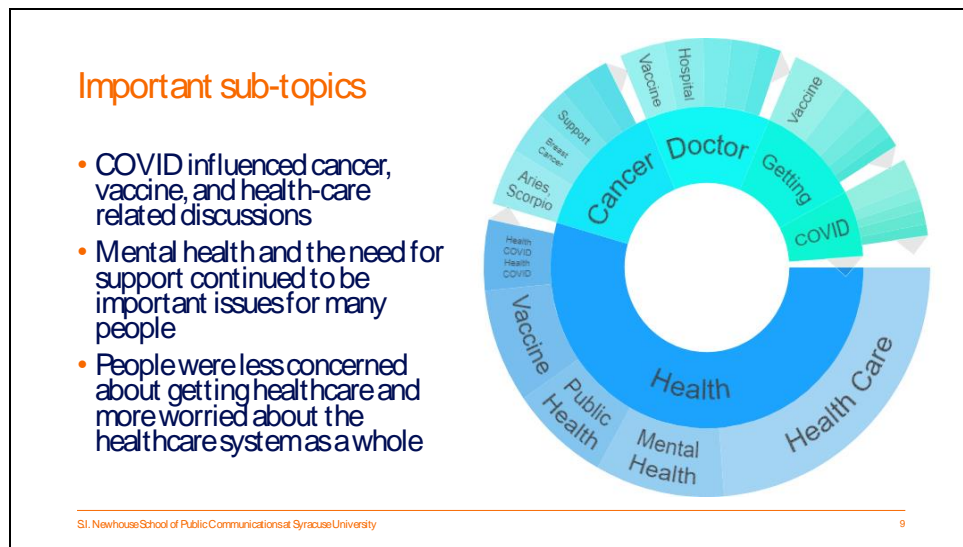
#### Top 2021 Twitter hashtags:

#COVID19  
#health  
#Healthcare  
#Fitness  
#cancer  
#mentalhealth





## Slide 9: Important Sub-Topics



Slide 9-

Image of topic wheel graphic, laying out keywords under major headings. COVID influenced cancer, vaccine, and health-care related discussions. Mental health and the need for support continued to be important issues for many people. People were less concerned about getting healthcare and more worried about the healthcare system as a whole.

Slide 9: Important sub-topics

- COVID influenced cancer, vaccine, and health-care related discussions.
- Mental health and the need for support continued to be important issues for many people.
- People were less concerned about getting healthcare and more worried about the healthcare system as a whole.

Slide includes a topic wheel graphic, laying out keywords under major headings.

- Health
  - Health COVID
  - Vaccine
  - Public Health
  - Mental Health
  - Health Care
- Cancer
  - Aries, Scorpio
  - Breast Cancer
  - Support
- Doctor
  - Vaccine

- Hospital
- Getting COVID
  - Vaccine

## Slide 10: Most Mentioned Twitter Handles

### Most Mentioned Twitter Handles

#### 2021

@potus  
@thehill  
@cancerterms  
@cdcgov  
@healthyblcklove  
@govrondesantis

#### 2020

@realdonaldtrump  
@joebiden  
@Reuters  
@berniesanders  
@cdcgov  
@who

## Slide 10: Most Mentioned Twitter Handles

### 2020

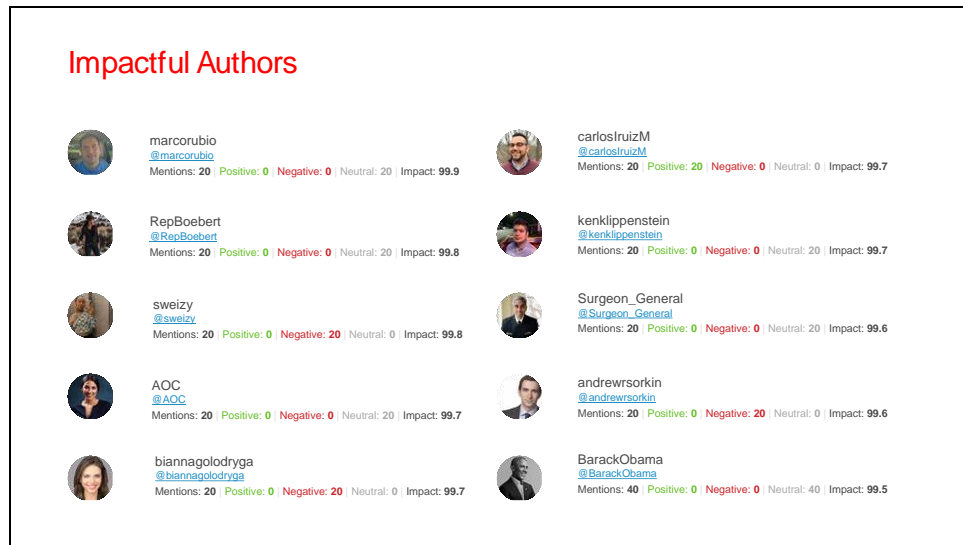
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@joebiden  
@Reuters  
@berniesanders  
@cdcgov  
@who

### 2021

@potus  
@thehill  
@cancerterms  
@cdcgov  
@healthyblcklove  
@govrondesantis



## Slide 11: Impactful Authors



### Slide 11: Impactful Authors

marcorubio

[@marcorubio](#)

Mentions: **20** | Positive: **0** | Negative: **0** | Neutral: **20** | Impact: **99.9**

RepBoebert

[@RepBoebert](#)

Mentions: **20** | Positive: **0** | Negative: **0** | Neutral: **20** | Impact: **99.8**

sweizy

[@sweizy](#)

Mentions: **20** | Positive: **0** | Negative: **20** | Neutral: **0** | Impact: **99.8**

AOC

[@AOC](#)

Mentions: **20** | Positive: **0** | Negative: **0** | Neutral: **20** | Impact: **99.7**

biannagolodryga

[@biannagolodryga](#)

Mentions: **20** | Positive: **0** | Negative: **20** | Neutral: **0** | Impact: **99.7**

carloslruizM

[@carloslruizM](#)

Mentions: **20** | Positive: **20** | Negative: **0** | Neutral: **0** | Impact: **99.7**

kenklippenstein

[@kenklippenstein](#)

Mentions: **20** | Positive: **0** | Negative: **0** | Neutral: **20** | Impact: **99.7**

Surgeon\_General

[@Surgeon\\_General](#)

Mentions: **20** | Positive: **0** | Negative: **0** | Neutral: **20** | Impact: **99.6**

andrewsorkin

[@andrewsorkin](#)

Mentions: **20** | Positive: **0** | Negative: **20** | Neutral: **0** | Impact: **99.6**

BarackObama

[@BarackObama](#)

Mentions: **40** | Positive: **0** | Negative: **0** | Neutral: **40** | Impact: **99.5**

Slide 11-

Image- Top left- Marco Rubio in a Blue Shirt

Image- Second photo down of left side- Representative Boebert standing and looking to the right

Image- Middle left- Social media user, @sweizy, taking a photo in the mirror.

Image- Fourth photo down, left side- Alexandria Ocasio-Cortez in front of a dark backdrop

Image- Bottom left- Bianna Vitalievna Golodryga, a Moldovan-born American journalist and news anchor

Image- Top right- Social media user, @carloslruizM, taking a photo in a red sweater.

Image- Second photo down of right side- Photo of Ken Klippenstein, an American journalist working at The Intercept

Image- Middle right- Photo of surgeon General, Dr. Vivek Murthy

Image- Fourth photo down, right side- Photo of Andrew Sorkin with a white background

Image- Bottom right- Black and White image of former President of the United States of America, Barack Obama

## Slide 12: Demographics Subsets



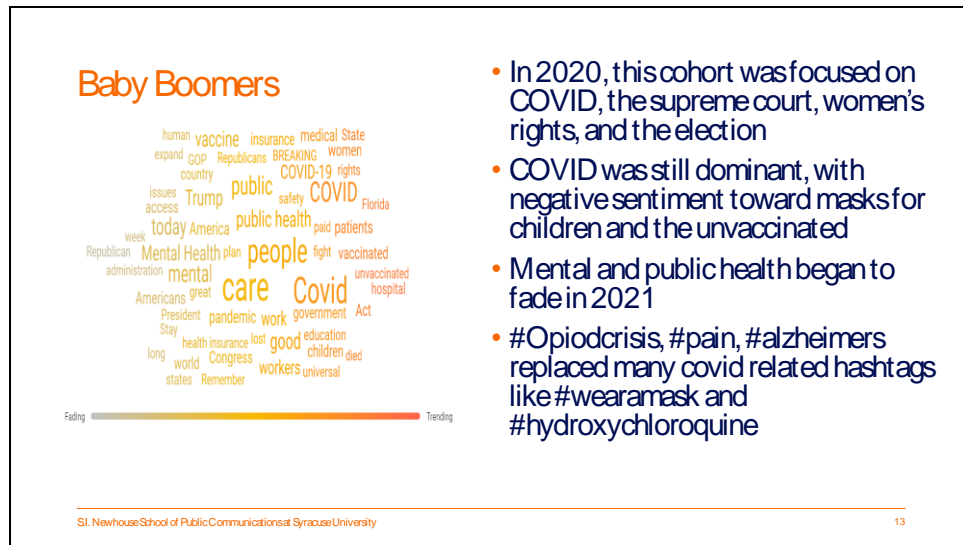
Slide 12: Section Title Slide

Demographic Subsets

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## Slide 13: Baby Boomers



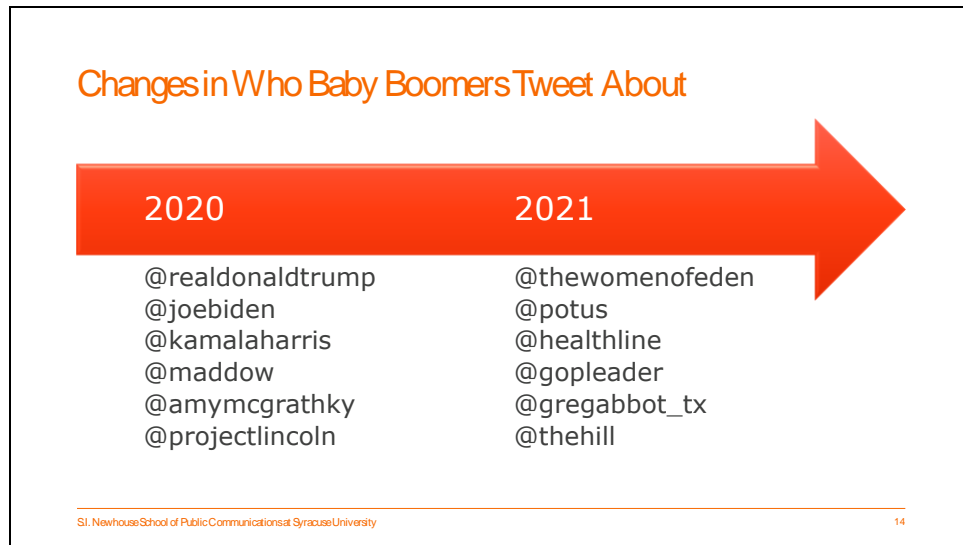
### Slide 13-

Word cloud visualization of most popular hashtags and keywords on social media for 2021 for baby boomers.

- In 2020, this cohort was focused on COVID, the supreme court, women's rights, and the election.
- COVID was still dominant, with negative sentiment toward masks for children and the unvaccinated.
- Mental and public health began to fade in 2021.
- #Opiodcrisis, #pain, #alzheimers replaced many covid related hashtags like #wearamask and #hydroxychloroquine.

#wearamask, #dumptrump2020

## Slide 14: Changes in Who Baby Boomers Tweet About



## Slide 14: Changes in Who Baby Boomers Tweet About

2020

@realdonaldtrump

@joebiden

@kamalaharris

@maddow

@amymcgrathky

@projectlincoln

2021

@thewomenofeden

@potus

@healthline

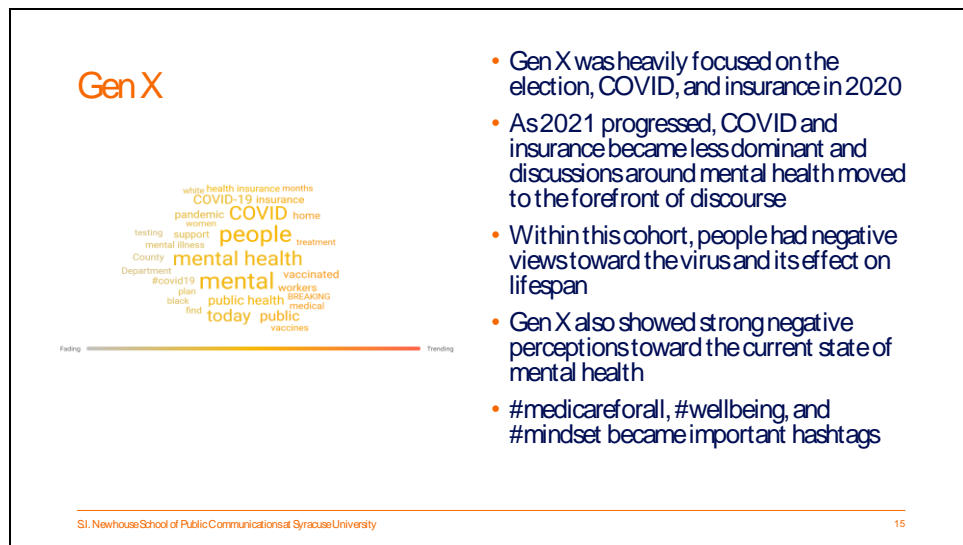
@gopleader

@gregabbot\_tx

@thehill



## Slide 15: Gen X

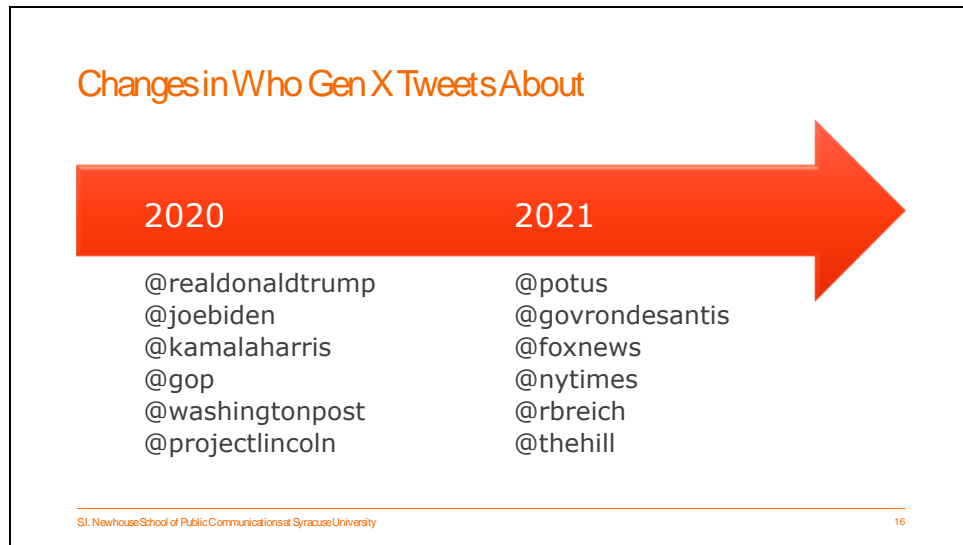


## Slide 15: Gen X

Word cloud visualization of most popular hashtags and keywords on social media for 2021 for Gen X.

- Gen X was heavily focused on the election, COVID, and insurance in 2020.
- As 2021 progressed, COVID and insurance became less dominant and discussions around mental health moved to the forefront of discourse.
- Within this cohort, people had negative views toward the virus and its effect on lifespan.
- Gen X also showed strong negative perceptions toward the current state of mental health.
- #medicareforall, #wellbeing, and #mindset became important hashtags.

## Slide 16: Changes in Who Gen X Tweets About



## Slide 16: Changes in Who Gen X Tweets About

2020

@realdonaldtrump

@joebiden

@kamalaharris

@gop

@washingtonpost

@projectlincoln

2021

@potus

@govrondesantis

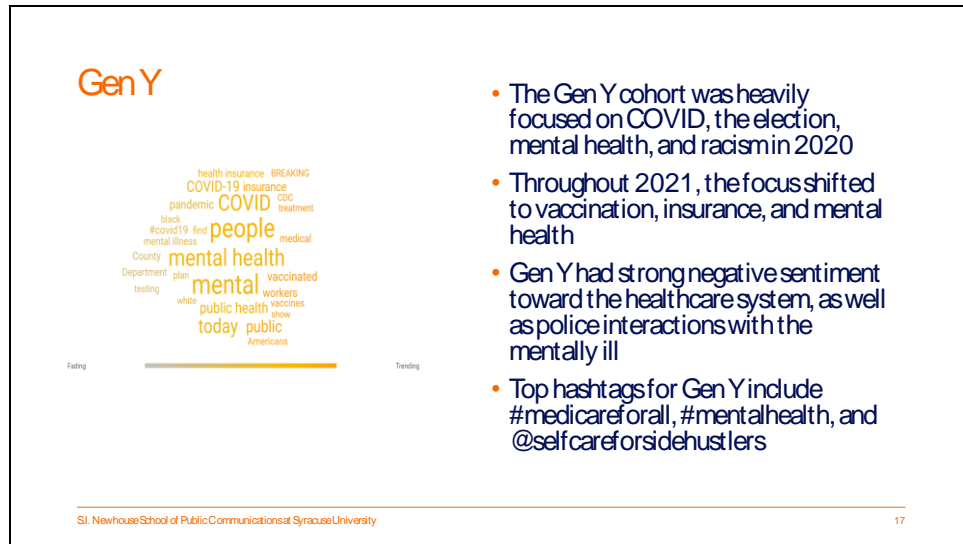
@foxnews

@nytimes

@rbreich

@thehill

## Slide 17: Gen Y

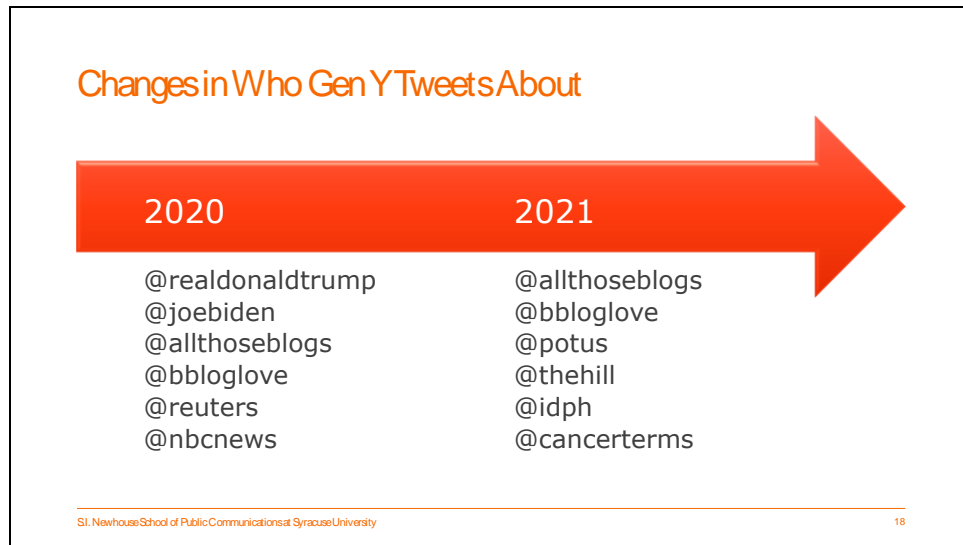


## Slide 17: Gen Y

Word cloud visualization of most popular hashtags and keywords on social media for 2021 for Gen Y.

- The Gen Y cohort was heavily focused on COVID, the election, mental health, and racism in 2020.
- Throughout 2021, the focus shifted to vaccination, insurance, and mental health.
- Gen Y had strong negative sentiment toward the healthcare system, as well as police interactions with the mentally ill.
- Top hashtags for Gen Y include #medicareforall, #mentalhealth, and @selfcareforsidehustlers.

## Slide 18: Changes in Who Gen Y Tweets About



## Slide 18: Changes in Who Gen Y Tweets About

2020

@realdonaldtrump

@joebiden

@allthoseblogs

@bbloglove

@reuters

@nbcnews

2021

@allthoseblogs

@bbloglove

@potus

@thehill

@idph

@cancerterms





## Slide 19: Gen Z

### Gen Z

- In 2020, Gen Z was focused heavily on COVID, mental health, racism, and insurance
- Mental health issues moved to the forefront in 2021, along with vaccinations
- Like Gen Y, Gen Z had negative views on relationships between the police and mentally ill
- Gen Z also had negative perceptions regarding being forced to work during the pandemic
- Gen Z was, and continues to be, the most focused on fitness. Top hashtags include #homeworkout, #exercise, and #gym

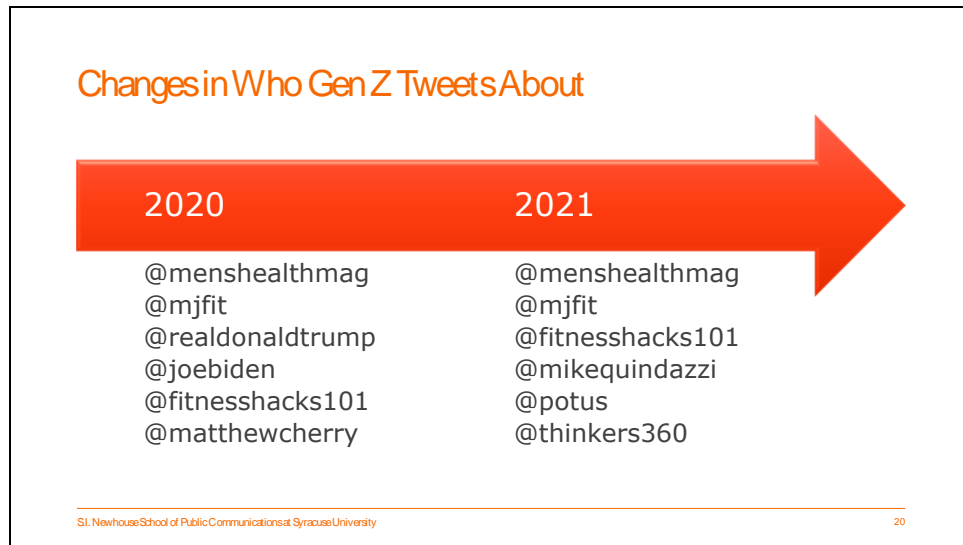
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## Slide 19: Gen Z

Word cloud visualization of most popular hashtags and keywords on social media for 2021 for Gen Z.

- In 2020, Gen Z was focused heavily on COVID, mental health, racism, and insurance.
- Mental health issues moved to the forefront in 2021, along with vaccinations.
- Like Gen Y, Gen Z had negative views on relationships between the police and mentally ill.
- Gen Z also had negative perceptions regarding being forced to work during the pandemic.
- Gen Z was, and continues to be, the most focused on fitness. Top hashtags include #homeworkout, #exercise, and #gym.

## Slide 20: Changes in Who Gen Z Tweets About



## Slide 20: Changes in Who Gen Z Tweets About

### 2020

@realdonaldtrump  
@joebiden  
@allthoseblogs  
@bbloglove  
@reuters  
@nbcnews

### 2021

@allthoseblogs  
@bbloglove  
@potus  
@thehill  
@idph  
@cancerterms



## Slide 21: Student Centered Research



Slide 21: Title Slide

Student Centered Research

## Slide 22: Overview and Research Topic Focus

### Overview and Research Topic Focus

Research that examines multicultural communities' experiences during the COVID-19 pandemic can inform health promotion campaigns about how to use communication channels that targeted audiences can access, tailor campaign messages to community values, leverage key resources and trusted spokespersons, and engage affected communities in developing strategies. In this premise, multiple student projects were conducted with participants from multicultural communities in fall 2020 and fall 2021—COVID-19 risk communications with the Hispanic community, vaccine hesitancy of American Indian and Alaskan Native (AIAN) and Hispanic parents with children younger than 12 years old, social media use in making vaccine decisions among Hispanic Generation Z, and medical racism and vaccine hesitancy among the Black community. In addition to race and ethnicity, students were encouraged to explore the intersectionality of other demographics in their research, including age, gender, educational background, socioeconomic status, and geographic location.

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## Slide 23: In-Depth Studies

### In-Depth Studies

- COVID and vaccinations continue to dominate social media discussion volume but are fading in importance
- The analysis in this report focused solely on discussions on social media
- There are clear generational differences in terms of who people are following and what they are talking about
- In order to develop a richer understanding of health literacy, the Real Chemistry Emerging Insights Lab published several related studies
- Those studies explored views on vaccinations and social media use in specific subsets of the U.S. population

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## Slide 24: To Vaccinate or Not to Vaccinate?

### *To Vaccinate or Not To Vaccinate?*

- This report outlines the behavioral and social factors that influenced the decision-making process of American Indian and Alaska Native (AIAN) parents of children ages 5 to 11 to vaccinate their children against COVID-19
- The report delivers insight into the current perceptions and concerns of the COVID-19 vaccine among the AIAN population
- The report discusses:
  - The vaccination status of the parents and their children
  - The parents' attitudes and concerns regarding vaccines for children
  - What the parents' trusted sources of information about the COVID-19 vaccine are and how these sources influence parents' attitudes
  - What motivates the AIAN community to get their children vaccinated

Slide 24: *To Vaccinate or Not To Vaccinate? A look at the behavioural and social drivers influencing AIAN parents considering vaccinating children between 5-11 years against COVID-19*

Prepared by: AbdelHalim AbdAllah, Alexa Cash, Matthew Edwards and Nianru Chen

- This report outlines the behavioral and social factors that influenced the decision-making process of American Indian and Alaska Native (AIAN) parents of children ages 5 to 11 to vaccinate their children against COVID-19.
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  - What motivates the AIAN community to get their children vaccinated.

## Slide 25: Vaccine Confidence in Parents with Children During the Pandemic

### *Vaccine Confidence in Parents with Children During the Pandemic*

- This report outlines the factors that influenced the decision-making process of Latinx parents of children aged 7-12 to vaccinate their children against COVID-19
- The report delivers insight into the current perceptions and concerns of the COVID-19 vaccine among the Latinx parent population.
- The report discusses:
  - The vaccination status of the parents and their children
  - The parents' attitudes and concerns regarding vaccines for children
  - What the parents' trusted sources of information about the COVID-19 vaccine are and how these sources influence parents' attitudes
  - What motivates the Latinx community to get their children vaccinated

### Slide 25: *Vaccine Confidence in Parents with Children During the Pandemic*

Prepared by: Mayra Flores Mendez, David Halbert, Ezoza Ismailova, Tatevik Khachatryan

- This report outlines the factors that influenced the decision-making process of Latinx parents of children aged 7-12 to vaccinate their children against COVID-19.
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- The report discusses:
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  - What motivates the Latinx community to get their children vaccinated.



## Slide 26: Social Media & Covid 19 Among Hispanic Generation Z

### *Social Media & Covid-19 Among Hispanic Generation Z*

- This report outlines the factors that influenced vaccine hesitancy in the Hispanic Gen Z population
- The report delivers insight into the current perceptions and concerns of the COVID-19 vaccine among the target population
- The report discusses:
  - The effects social media information had on their perceptions of the vaccine
  - What approaches or interventions would help the target population address their vaccine concerns
  - How to better foster trust toward the vaccine and government in the target population

Slide 26: *Social Media & Covid-19 Among Hispanic Generation Z*

Prepared by: Raija Panicker, Rongzhen Lyu, Tessa Queri, Trang Nguyen

- This report outlines the factors that influenced vaccine hesitancy in the Hispanic Gen Z population.
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  - How to better foster trust toward the vaccine and government in the target population.

## Slide 27: Trust in Medical Providers & Vaccines Among Black American During Covid-19

### *Trust in Medical Providers & Vaccines Among Black Americans During COVID-19*

- This report outlines the factors that influenced vaccine hesitancy in the Black community
- The report delivers insight into the current perceptions and concerns of the COVID-19 vaccine among members of the community that are in the 20- to 24-year-old age range
- The report discusses:
  - The current sentiment about healthcare among Black social media users
  - Themes of conversation regarding medical racism
  - Factors influencing trust in healthcare professionals by Black Americans

Slide 27: *Trust in Medical Providers & Vaccines Among Black Americans During COVID-19*

Prepared by: Angela Scipione, Elisabeth Shirk, Michael Spencer, Annabelle Vanderwerf

- This report outlines the factors that influenced vaccine hesitancy in the Black community.
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