



RUTGERS

School of Communication
and Information

Understanding the impact of engagement with cancer (mis)information among Latino Facebook users

Yonaira M. Rivera, PhD, MPH

Assistant Professor of Communication

School of Communication & Information, Rutgers University

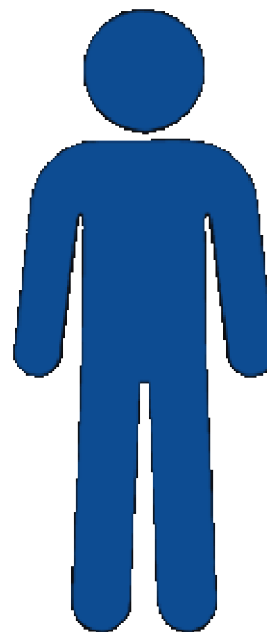
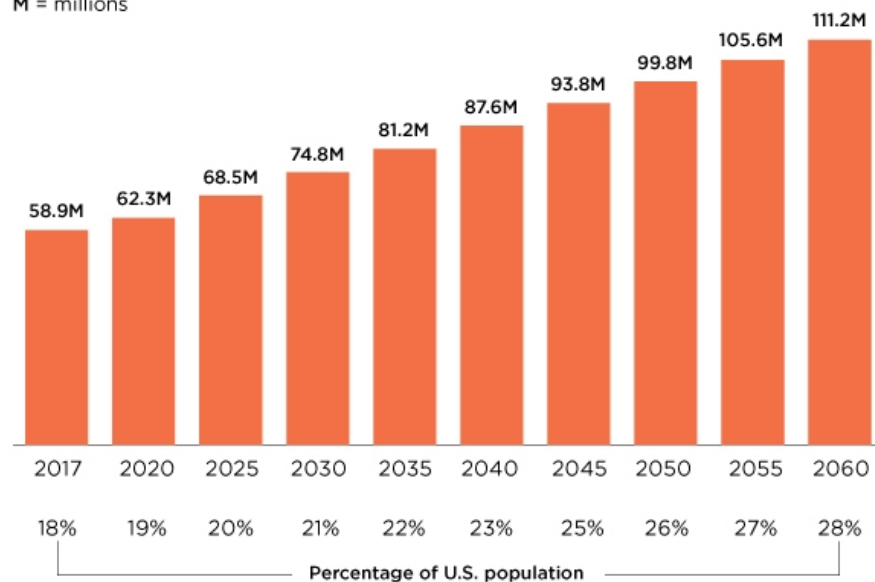
PRISM Health Symposium | December 4, 2020

yonaira.rivera@rutgers.edu

Background

Cancer health disparities among U.S. Latinos

M = millions







Cancer is the leading cause of death

Incidence highest for breast, colorectal & prostate cancers


Diagnosed at later stages

Social media among Latinos

				
General population	68%	22%	73%	35%
Latinos	73%	49%	78%	38%

LATINOS 18+ ARE AVID SOCIAL MEDIA USERS

Engaging with health information on social media



National Cancer Institute
April 11 at 3:15 PM · 🌐

Cancer screening tests aim to find cancer early, before it causes symptoms and when it may be easier to treat successfully.

Engagement

CANCER.GOV
Screening Tests

1032 · 9 Comments · 15 Shares

Like · Comment · Share

Performance for Your Post

776 People Reached

13 Reactions, Comments & Shares 🗨️

5 Like	2 On Post	3 On Shares
1 Love	1 On Post	0 On Shares
0 Comments	0 On Post	0 On Shares
7 Shares	7 On Post	0 On Shares

25 Post Clicks

2 Photo Views	0 Link Clicks	23 Other Clicks 🗨️
----------------------	----------------------	---------------------------

NEGATIVE FEEDBACK

0 Report as Spam

0 Unlike Page

Reported stats may be delayed from what appears on posts

“A quality of user experience with web-based technologies that enable users to interact with, create, and share content with individuals and organizations in their social networks.” – McCay-Peet & Quan-Haase, 2016

Misinformation on social media

RESEARCH AND PRACTICE

Weaponized Health Communication: Twitter Bots and Russian Trolls Amplify the Vaccine Debate

David A. Bromiatowski, PhD, Amelia M. Jamison, MAA, MPH, SiHua Qi, SM, Luluwah AlKulaib, SM, Tao Chen, PhD, Adrian Benton, MS, Sandra C. Quinn, PhD, and Mark Dredze, PhD

misinformation:
complex contagion

Jan. The Netherlands

Opinion

THE SPI

NEWS O

Soroush Vosoughi

VIEWPOINT

Addressing Health-Related Misinformation on Social Media

200

Wen-Ying Sylvia Chou, PhD, MPH
Health Communication and Informatics Research Branch, Behavioral Research Program, Division of Cancer Control and Population Sciences, National Cancer Institute, Rockville, Maryland.

The ubiquitous social media landscape has created an information ecosystem populated by a cacophony of opinion, true and false information, and an unprecedented quantity of data on many topics. Policy makers and the social media industry grapple with the challenge of curbing fake news, disinformation, and hate speech; and the field of medicine is similarly confronted with the spread of false, inaccurate, or incomplete health information.¹

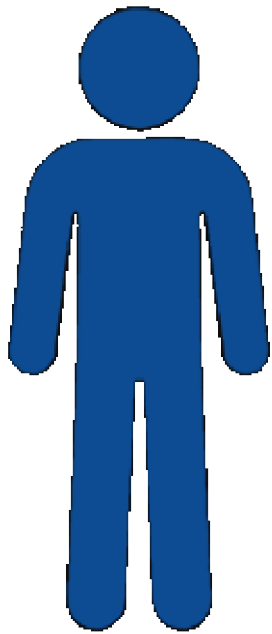
From the discourse on the latest tobacco prod-

social media. This Viewpoint outlines a framework that includes priorities in research, public health, and clinical practice.

Gaps in Understanding the Effect of Health Misinformation

Health misinformation can be defined as a health-related claim of fact that is currently false due to a lack of scientific evidence. This misinformation may be abundant on social media and some evidence has linked

Influencing health behaviors



Cancer is the leading cause of death

Incidence highest for breast, colorectal & prostate cancers

Diagnosed at later stages

Latinos in the U.S.

Engagement

?

Action

Objectives

Exploring engagement with cancer prevention and screening information (CPSI) on Facebook among U.S. Latino adults ages 40-75 without a history of cancer

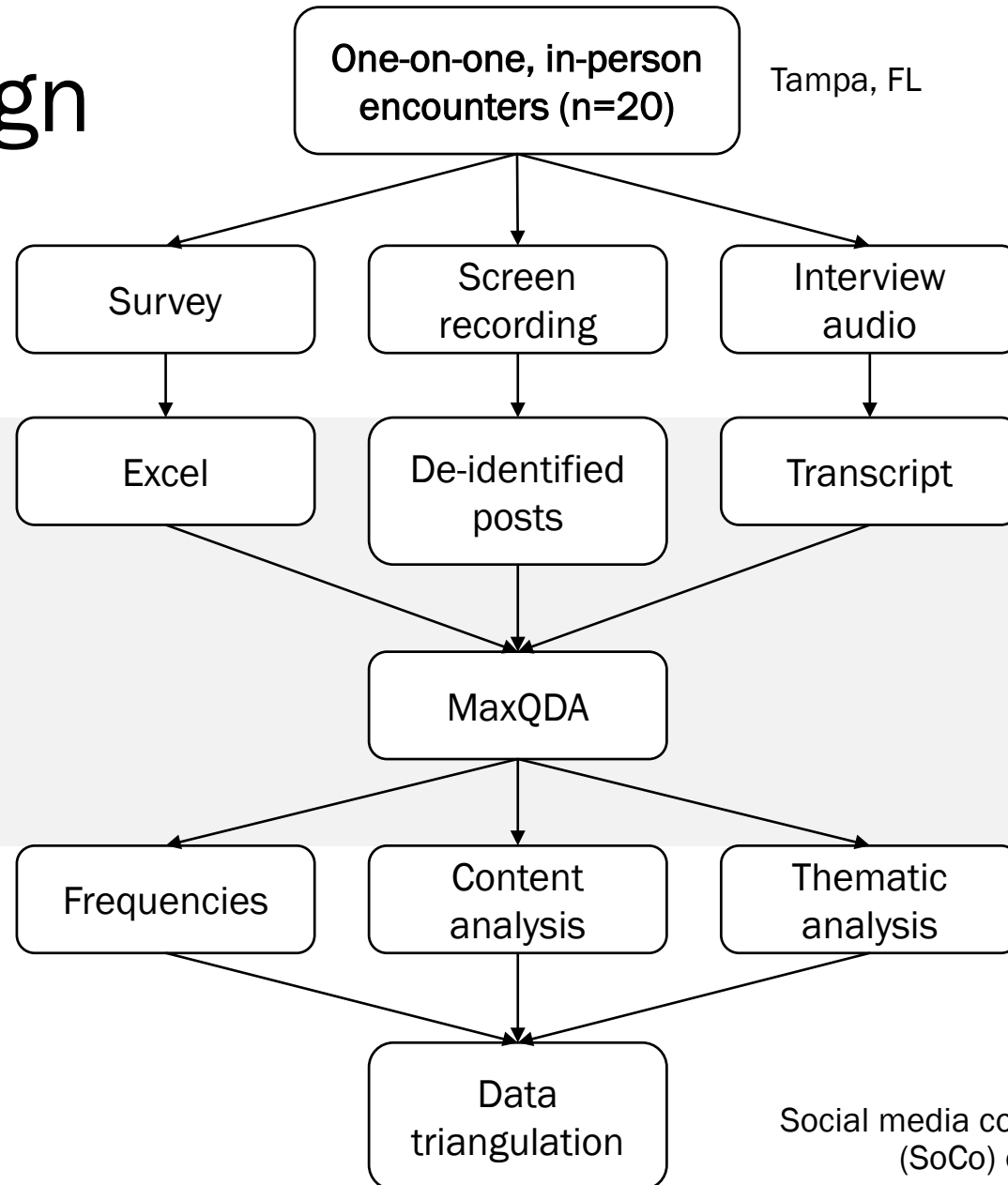
Aim 1: Explore how and why Latino adults engage with CPSI on Facebook

Aim 2: Understand how Latino adults assess the credibility of CPSI they engage with on Facebook

Aim 3: Explore if/how engagement with CPSI on Facebook contributes to subsequent action

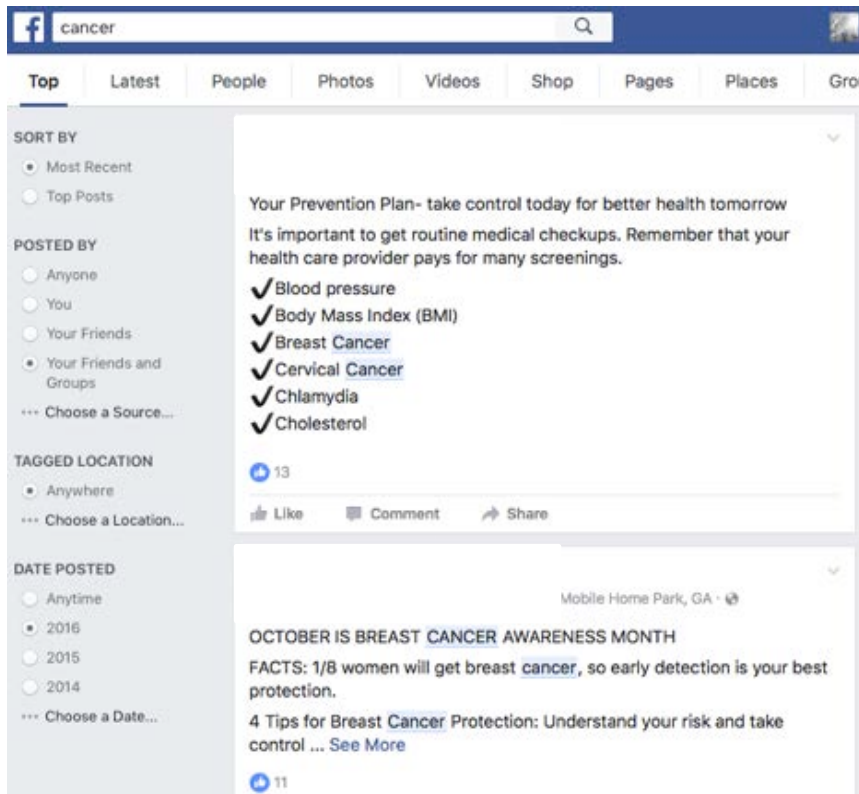
Methodological Approach

Study design



Social media content and context (SoCo) elicitation method

Recording of cancer posts



- Scrolled through cancer information with participant
 - Sorted by “Most Recent”
 - Posted by “Your Friends and Groups”
 - Started with “cancer”; refined as needed (prevention, screening)
 - Posted by “You”

Sample Facebook posts that appear upon entering the search term “cancer”

Results

Overarching Findings

(1) Engagement beyond *liking, commenting* or *sharing* with visual content about prevention (food/diet) shared by friends

(2) Engagement with cancer prevention and screening (mis)information is influenced by culture

(3) Sources appear to enhance engagement with (or be more important than) culturally-relevant content

(4) Engagement may lead to (potentially harmful) actions that are not always evidence-based

(1) Engagement beyond liking, commenting or sharing

- 73% of engagement occurred by watching/reading content (n=66)
- Most engaged CPSI was:
 - Related to food/diet (75%)
 - In Spanish (58%)
 - Visually appealing (91%)
 - Shared by friends (55%)
 - From unofficial sources (60%)



(2) Reasons for engaging with message

Post Content

General prevention/healthy eating interest

Salient chronic conditions

Sociopolitical issues

Personal experiences

Professional context

Curiosity

Post Features

Visual appeal

Language

Sensationalism

Example of reasons for message engagement

General interest in prevention and/or healthy eating

It's true, **all these are good for your health...** [they] may not be specifically good for cancer – or do anything – but **if you are healthy, it contributes to getting well faster.** -*Bilingual Puerto Rican female, 60*

No, I don't believe in that [statement]. Does it help?
It possibly helps, as prevention.
-*Spanish-preferring Colombian female, 45*

Whether it works or not, **it won't hurt me in any way.**
-*Bilingual Colombian male, 56*



7.451.542 reproducciones

Salud

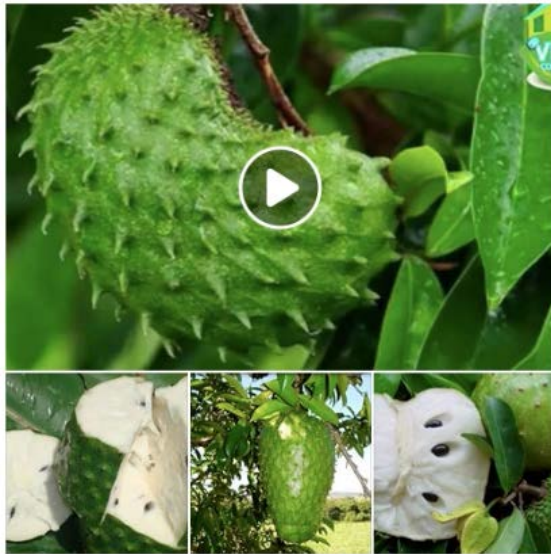
1 de diciembre de 2017 · 🌐

👍 Me gusta esta página

El Cáncer muere en 42 horas, después de tomar esta bebida totalmente natural.!

Example of reasons for message engagement

Visual appeals and language



If it doesn't enter **through your eyes**, you don't get [the message]. –*Bilingual Cuban male, 61*

I do remember that [post] because **it's a fruit that's very popular in Colombia**. [...] It's supposed to be one of the best fruits to drink that prevents cancer. And it is a fruit from Colombia, from the Amazon.

–*Bilingual Colombian male, 56*

It's in Spanish, but I don't know if it's from Puerto Rico or Mexico or whatever.

–*Bilingual Puerto Rican female, 43*



(3) Reasons for engaging with source

Post Source

Perceived topic expertise or authority

Role of interpersonal relationships

Alignment with identity

Example of reasons for source engagement

Venezuelan community activist
(example of all source themes)

People [in the community] listen to him because he is in everything. [...] The truth is that he is very efficient, very collaborative and very proactive in all these things.

-Bilingual Venezuelan female, 67

He calls everyone, and he goes to where the people are and everyone receives him!

-Spanish-preferring Venezuelan female, 49



(4) Acting upon (mis)information

When important enough, engagement influenced different actions
(Not always evidence-based)

Online

Start search process

**Share with others (via FB
and other platforms)**

Offline

Discussing with others
offline

**Decisions made on
consumed
(mis)information**

Online action example: Sharing with others

So, during the day I go on [to Facebook], I look and if there is anything there, **I take it and share it on my page**, and as I also receive things from other pages, from other applications, **I copy and send [via] WhatsApp and [Facebook] Messenger** – those two.

-Spanish-preferring Puerto Rican female, 60



HEALINGORACLE.CH

Colonoscopy: Another Medical Scam that Does NOT Prevent Cancer BUT Can Cause Death!

There are always two sides to a coin. [...] Yes, there are risks, I will not deny it. But, in my son's case, that is what saved his life. So, how can I tell you that it is not effective? Every procedure has a risk. **[I shared it because] I am giving you my point of view.** That is, 'ok, maybe this [article] is valid but, in my son's case, it's the opposite.' **So, it's up to each person to discern [the information], you know?** *-Bilingual Venezuelan female, 49*

Offline action example: Behavior change/reinforcement

So, [the guy in the video] is [either] a naturopath or a doctor in Ponce, and he said so many things... [...] **Well, I didn't get the mammogram.** It was in February – and I've [had mammograms] all my life in February, which is my birthday – and this year I didn't do it. **Well, I had the date and everything, and I called and canceled.** I saw the video one day, and the appointment was the following week, and I called and canceled the appointment, hahaha!

-Spanish-preferring Puerto Rican female, 60



Study Contributions

Methodological

More robust, contextual data →
Power of narratives, sources & culture

Theoretical

Role of culture in engagement → Theory building & testing

Applied

Interventions exploring role of health literacy & narratives on
counteracting health misinformation

Transnational, interdisciplinary collaborations are needed!

Interdisciplinary Implications

