

Is Aggression Contagious Online? A Case of Swearing on Donald Trump's Campaign Videos on YouTube

K. Hazel Kwon, Asst. Prof.

Arizona State University

Anatoliy Gruzd, Assoc. Prof.

Ryerson University

Aims of the Study

- Empirical evidence of the contagion of offensive comments
- Examination of two mechanisms of swearing in YouTube: Public vs. Interpersonal.

Background: Emotional Mimicry

- Emotional contagion offline
: Emphasis on *nonverbal mimicry & microsynchrony*
- Is emotion contagious text-based interactions online (where nonverbal signals are largely absent, and interactions are asynchronous)?

YES

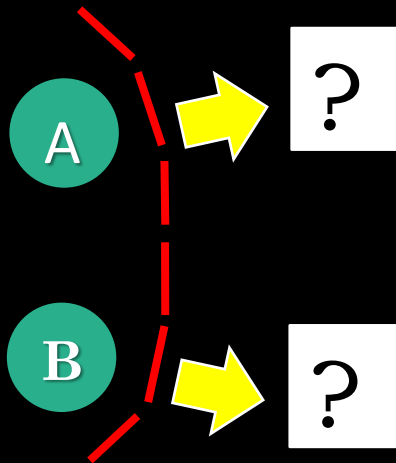
Background: Emotional Mimicry Online

- Emotion is contagious...
 - (1) through text-based social interactions (in form of **linguistic style matching**)
 - (2) in **asynchronous** setting
(e.g. Facebook posting)
- Simply positive vs. negative (?)
- No work on *disinhibited* emotional expression (e.g., swearing)

Background: Social Network Influence (Social Contagion)

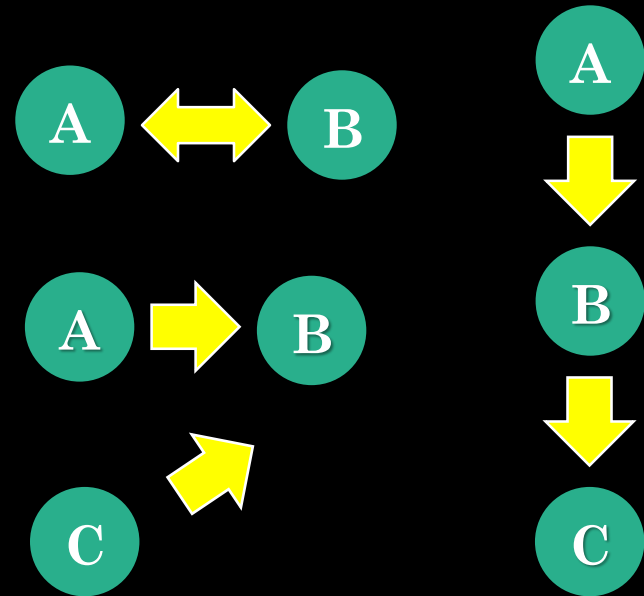
(1) Simple exposure effect
 \approx mimicry

Public Swearing



(2) Higher-order network effect

Interpersonal Swearing



Background: Public vs. Interpersonal SW

Public SW

- No specific user attacked
- No anticipation of social interaction
- Contagion due to simple exposure / linguistic mimicry effect

Interpersonal SW

- Attacks a specific user within community
- Anticipation of (negative) social interactions
- Contagion due to sequential interactions

Two Sources of SW Exposures: “parent” and Immediately preceding “child” comment

- Nested structure of YouTube comments

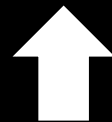
Level 1: Video

Level 2: Thread (“parent” comment)

Level 3: ((hidden child comment))

child comment at $t-1$

child comment at t



Focal Actor



Two Sources of SW Exposures: “parent” and immediately preceding “child” comment

The image shows a screenshot of a YouTube comment section with several annotations. A box labeled "Parent-comment" points to the top comment by Ann. A box labeled "Children-comments" points to a group of four comments below it. A box labeled "Public swearing" points to the word "shit" in a comment by Cathy. A box labeled "Interpersonal swearing" points to the word "idiot" in a reply by Daniel to Cathy.

Ann 2 months ago
God it seems most of the comment section didn't even watch the video.
Reply · 93
Hide replies ^

Bobby 2 months ago
Just rampant haters, I suppose. A bit refreshing to know you're not as stupid as they are.
Reply · 4

Cathy 2 months ago
Most of them are uneducated illegals that can't do shit but work at factories
Reply · 5

Daniel 2 months ago
+ Cathy : Confirmed.. you're an idiot!
Reply · 1

Erin 2 months ago
+ Cathy : you can't blame people for being uneducated especially those in developing countries. there is always a reason .leaving school to start or be employed. also we need more people to work on the industries too

Parent-comment

Children-comments

Public swearing

Interpersonal swearing

Research Questions

1. Does swearing messages show significantly higher (a) anger and (b) verbal aggression than non-swearing messages?
2. How does a parent-comment swearing influence the likelihood of a focal child-comment swearing?
3. How does a preceding child-comment swearing influence the likelihood of the following (focal) child-comment swearing?

Data: YouTube Comments

- 35 videos in the official channel of Donald Trump (“Donald J. Trump for Presidents”) between January 18 and April 29, 2016
- 13,852 comments constituted 2,075 threads
- Children-comments ($N=11,777$) as unit of analysis
- Multilevel modeling (child \in thread \in video)

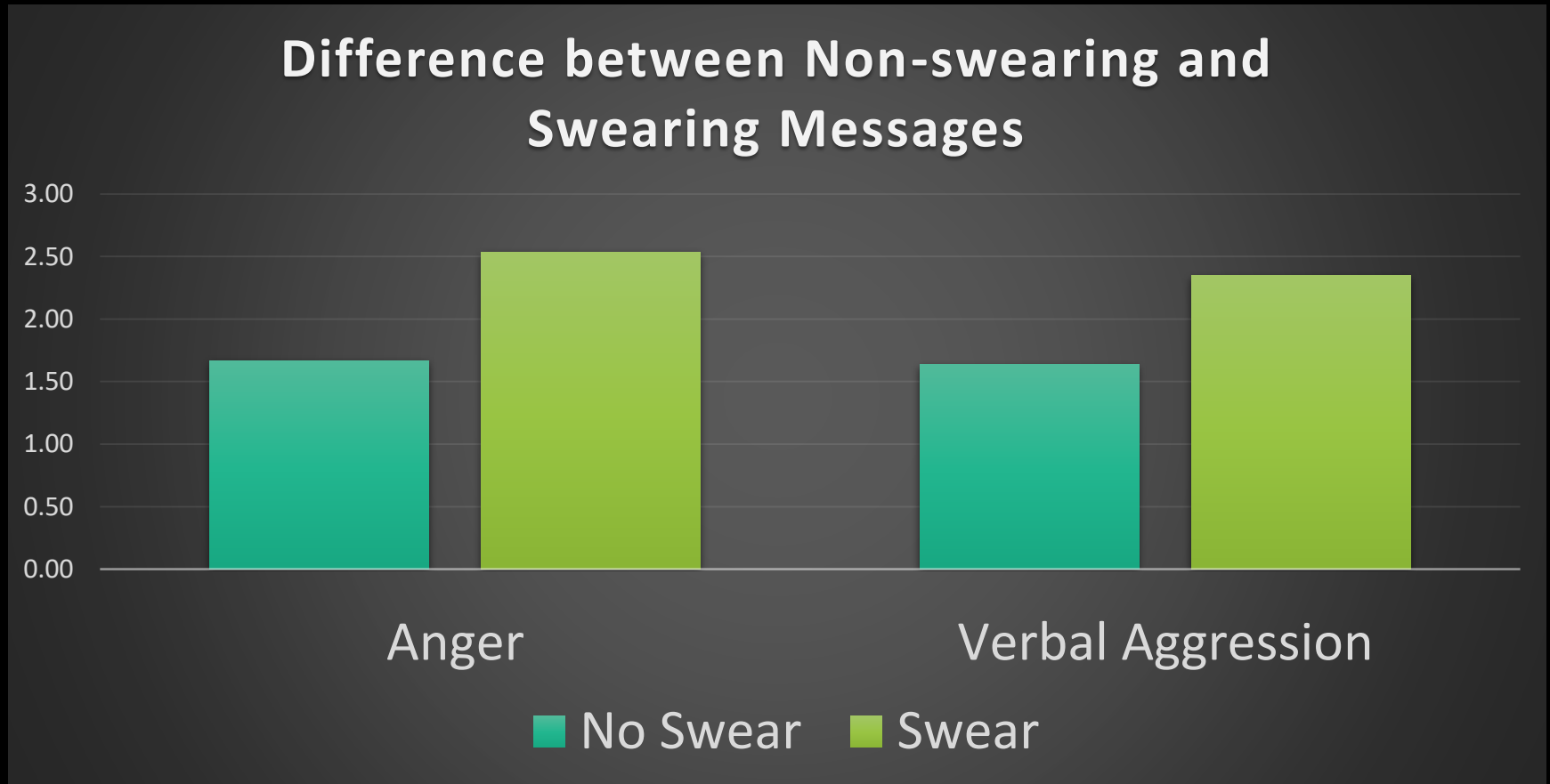
Data : Variables

- Linguistic matching using custom-built swear words dictionary (432 derivative words)
- # of swearwords in a parent and preceding child comments
- Three types of children-comments: no-swear / public swear / interpersonal swear
- Video and thread attributes accounted.

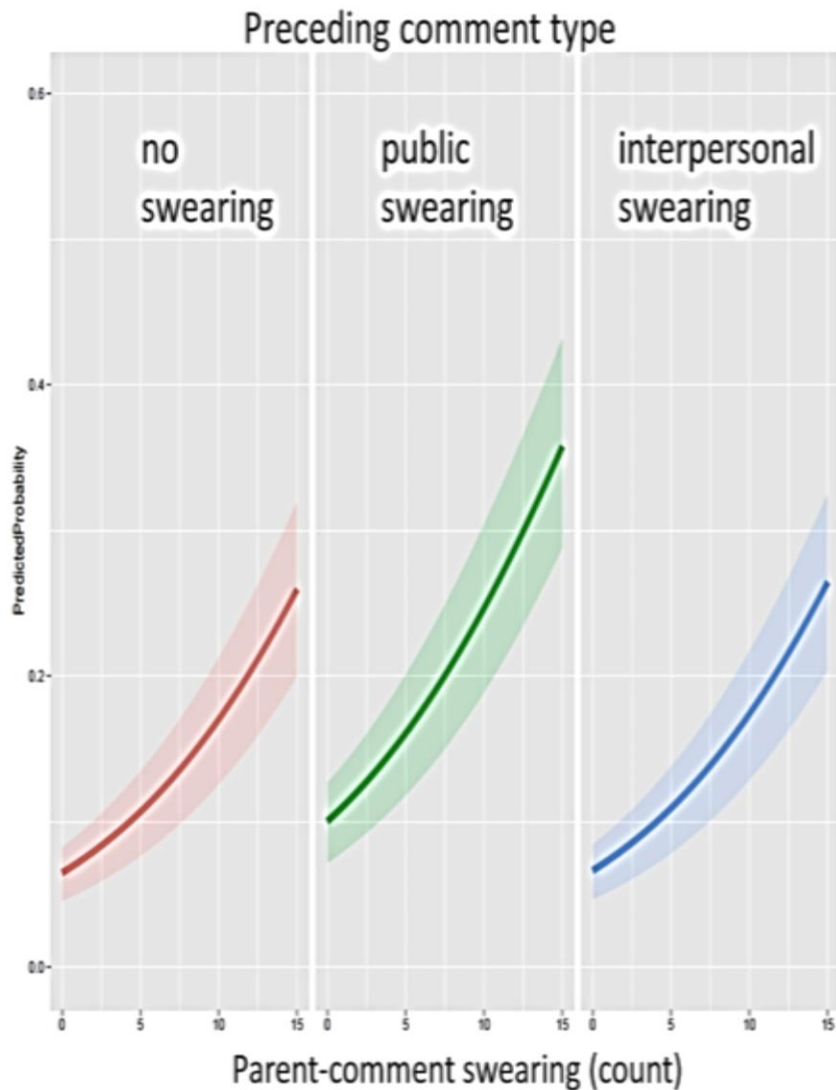
Number of swearwords \approx Intensity of anger/verbal aggression

- “You fucking dictator! Fuck you! You don’t know what it’s like to live without a house and without freedom motherfucker! make America great again? Brainwashing people into voting for you! This is the new fucking Adolfo hitler motherfuckers!” (5 swear words)
- “At least Hillary doesn’t discriminate people like that nazi fuck Trump. You see how your boy Trump made fun of a disabled reporter a while back some guy. He hates women as well but your too blind to see that. I hope you enjoy voting for that cold hearted celebrity as our president” (1 swear word)

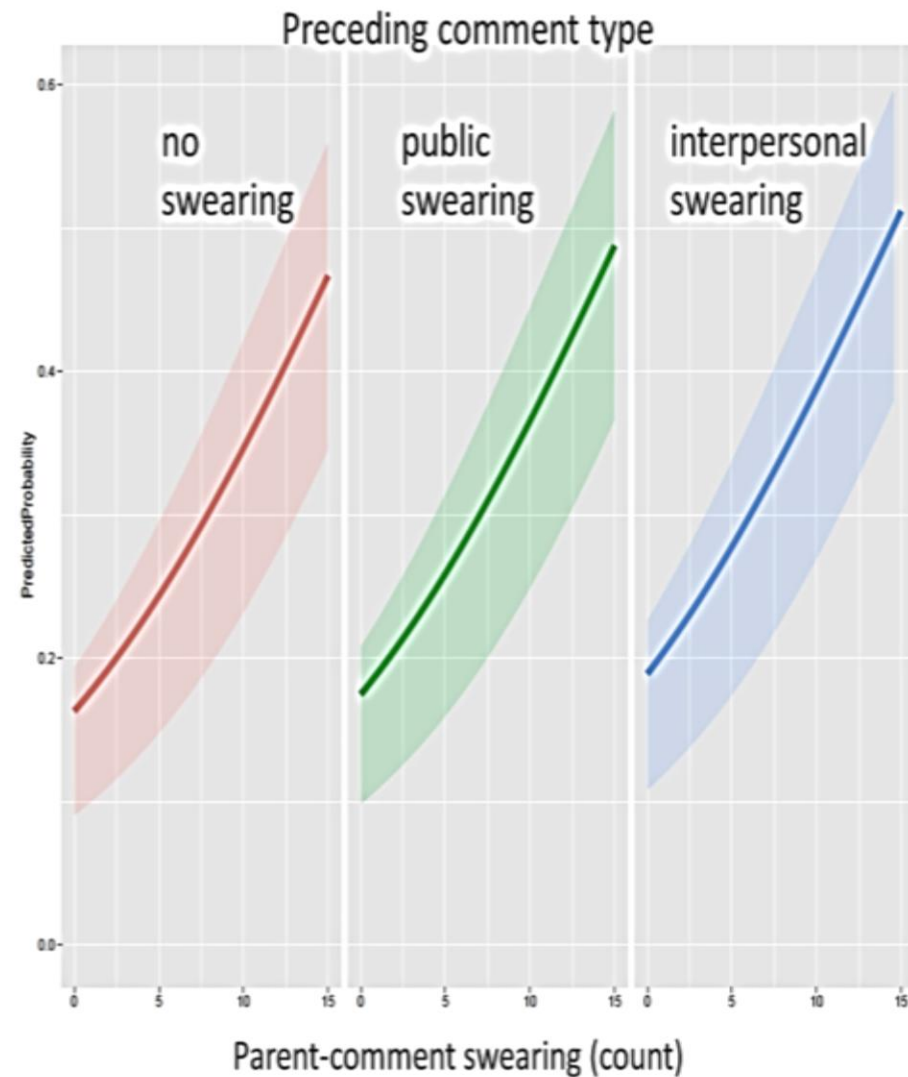
Results: Anger and Verbal Aggression



Public



Interpersonal



Discussion & Conclusion

- **Theoretical** Implication:

- ✓ Anti-social motives of contagion
- ✓ Distinguishing mimicry and social network (interaction effect) as different mechanisms of contagion

- **Practical** implication:

- ✓ Pay attention to parent comments
- ✓ Public emotional outburst vs. interpersonal hostility