The Impact of Essentialist Beliefs on Individuals' Reactions to the COVID-19 Pandemic

Monica Calderon, Tonghui (Kailee) Zhu, Rose M. Scott PhD

Social Sciences, Humanities, and Arts

University of California, Merced

Introduction

- Essentialism is the notion that members of certain groups are inherently similar in terms of behavior and appearance.[1]

- These beliefs often cause prejudice in regard to social groups, such as race or gender.[2]

- This study analyses whether essentialist beliefs related to outgroup bias or stigma and prejudice during the ongoing COVID-19 pandemic.

- This study focused on the following questions:

  - Is there a relationship between an individual's ingroup and character attribution or their endorsement for the "Chinese virus" phrase?

  - Is there a relationship between the use of character attribution and endorsement of the name?

Methods

- We focused on tweets containing "#ChineseVirus"

- Tweets from 3/14. 3/15, 3/17, and 5/15 were selected

  - 3/16 → Trump uses the phrase in a tweet
  - Coded tweets from 2 days prior and 2 days after to track the possible changes in the phrase's usage
  - Tweets from 2 months after were selected to analyze how the usage changed as the pandemic progressed.

- All tweets from 3/14 and 3/15 containing the hashtag were coded, and 100 tweets from 3/17 and 5/15 were randomly selected.

  - 3/14 → 78 tweets
  - 3/15 → 60 tweets
  - 3/17 → 98 tweets
  - 5/15 → 98 tweets
  - Total → 334

- Tweets consisting of only hashtags or media were not used, thus two tweets from 3/17 and 5/15 each were excluded.

Code Sample

- **Ingroup/Outgroup**: Does the author identify themselves as in the same ingroup as China?
- **Character**: Does the author make an attribution to character? Who is the character attribution for? Is it positive or negative?
- **Ok with name**: Do the authors endorse the use of the phrase "Chinese virus?"
- **Justification**: If so, do they provide a justification for their endorsement?

Mention China	Yes✓	
	No	
China Ingroup	Yes	
	No✓	
	Unclear	
Character	Yes✓	No
	Group/Person: **Chinese people**	
	Positive	Negative✓
	Word/Phrase: **bat-eaters**	
Ok with name?	Yes✓	
	No	
	Unclear	
Justification	Yes	No✓
	Justification word phrase:	

- **Sample Tweet:** *well I'll use all the juicy hashtags for bat-eaters #Chinavirus #Wuhanvirus #Chinesevirus #ChineseCoronavirus #ChinaCoronaVirus #ChinaWuhanVirus*

- This Tweet contains a character attribution, therefore we selected [Yes] when coding it.
- We provide a short phrase to describe the group or person.
  - "Chinese people"
- We then select [positive] or [negative]
- Lastly, we include the word or phrase used
  - "bat-eaters"

- **Sample Tweet**: *If this #chinesevirus drill is a dry run for how well we'd do in a real emergency we failed miserably!*

- This Tweet does not mention China, Asia, Wuhan, etc. besides the hashtag "#Chinesevirus," therefore we code it as [No].
- There are no character attributions, nor do they mention whether they endorse the phrase "Chinese virus."

Mention China	Yes	
	No✓	
China Ingroup	Yes	
	No✓	
	Unclear	
Character	Yes	No✓
	Group/Person:	
	Positive	Negative
	Word/Phrase:	
Ok with name?	Yes	
	No	
	Unclear✓	
Justification	Yes	No
	Justification word phrase:	

Descriptive Statistics

Variable	Yes	No	Unclear
China Ingroup	0.9%	97.3%	1.5%
Character Attribution	19.8%	80.2%	0%
Name Endorsement	13.5%	1.8%	84.7%

Results

Chi-square test for independence

- All character attributions about China were negative $X^2(2, N = 334) = 166.983$, $p = .001$

- There was no significant relationship between the use of character attribution and endorsement of name $X^2(1, N = 334) = .004$, $p > .05$.

- Both the use of character attributions and endorsement for the "Chinese virus" phrase decreased over time

  - Character attribution: $X^2(2, N = 334) = 13.219$, $p = .001$

  - Endorsement for name: $X^2(4, N = 334) = 18.81$, $p = .001$

Discussion

- We were unable to run a successful test to compare the China ingroup variable with character attributions and endorsement for the phrase due to the small number of individuals who identified themselves as belonging to the China ingroup.

- For future studies, a larger data sample that includes more individuals that are in the China ingroup and more character attributions might be more indicative of any possible relationships between our current variables.

- Additionally, we could have a mixed-methods study looking at similar data

References

1. Gelman, S. A. (2003). *The essential child: Origins of essentialism in everyday thought*. Oxford University Press, USA.
2. Rhodes, M., & Mandalaywala, T. M. (2017). The development and developmental consequences of social essentialism. *Wiley Interdisciplinary Reviews: Cognitive Science*, 8(4), e1437.