

# COMBATING UNTRUSTWORTHY ARTICLES



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## ABSTRACT

- Issue at Hand: There is a struggle between determining whether or not articles online are credible
- Created a website similar to 'Yelp', but for websites and sources
- Allows users to insert link of article/site and view average ratings of other users (if any)
- Allows users to rate article/site on their own for others to see
- Website goals:
  - ◆ Be user-led
  - ◆ Encourage awareness of fake news and false information online
  - ◆ Creating a more credible environment online
  - ◆ Eliminating bias or fake news online

## METHODS

Our proposed intervention was to create a user-led website that instills a user source rating system. While there are a variety of rating systems, we felt a user rating system would be the best to combat the spread of misinformation and fake news.

- How it works:
  - User inserts desired link to website
  - The users are then led to survey page
  - The survey questions allow the user to rate the article based on authority, objectivity, currency, depth, and purpose based on a scale from 1 to 5
  - After they hit submit, they will see the average percentage score for that website
    - The percentage will be an average of their ratings along with other users, if no others have rated it the percentage score will be the score only they gave
  - Things to note: The purpose of showing the user the percentage score after they rate it themselves is to get rid of any bias
- Code used: HTML, CSS, php, Javascript

Goal:

- Allow users to rate websites and articles without the influence of anyone else's opinion and then self-determine whether or not that the site/article is credible

**Site Rating Extension**

Website:

→ The initial page, allows user to insert desired link to website

**Authority**  
This author is considered to be an expert or well-respected author:  
 (1) Never heard of the author  
 (2) I only know of the author's name  
 (3) I know the author but people's opinion of them are controversial  
 (4) I know the author but I don't know what people think of them  
 (5) I know the author and they are considered well-respected

**Objectivity**  
Their position focuses on and is informed by research and reasoning rather than personal feelings and opinions:  
 1  
 2  
 3  
 4  
 5

**Currency**  
This article was published recently:  
 (1) Over 5 years ago  
 (2) Within 5 years  
 (3) Within 2 years  
 (4) Within this year  
 (5) Within 6 months

**Depth**  
Please rate the depth in which the author covers:  
 1  
 2  
 3  
 4  
 5

**Purpose**  
The content is very specific in nature and is relate to a very specific field:  
 1  
 2  
 3  
 4  
 5

→ Survey Questions

## INTRODUCTION

- Grand Challenge: Combating the spread of fake news
  - Using online resources without determining if it is credible or not can be dangerous and its effects are widespread
  - 60% of adults rely on social media and online sources to read news (Kim et. al. 2019)
- Impacts of fake news on culture and society:
  - Online sources affect how people perceive and care for the world around them
  - Misinformation is a threat to cultural representations, the ability for people to believe the actual truth, health, grades, etc.
  - Fake news targets people that are generally guided by emotion rather than logic (Moscadelli et. al., 2020)
    - Emotion is a main reliability filter, people are easily influenced by information that tends to align with their own held beliefs rather than the truth
    - The results of this can be catastrophic, encouraging people to act irrationally
- A research study found that people are more likely to be critical of articles when a rating system is in place (Kim et. al., 2019)
  - Using this as a basis for our project, we decided to create a user generated system where the public would rate the article
  - Our goal is for the rating system to help people look at articles objectively and slow the spread of misinformation

## RESULTS

→ Meaning of Data Collected:

- ◆ An average rating score is determined through the mean of user scores
- ◆ Average score used to display the reliability of articles to users
- ◆ Scores are collected through the user questionnaire into a database

→ News Consumption Research:

- ◆ News consumption research shows that more fake news articles are posted on social media than real news articles (Kim et. al., 2019)
  - Social is a limitedly filtered source of information where fake news can spread easily
  - Reading news on social media puts one in a hedonic mindset that leads one to be more easily influenced (Kim et. al., 2019)

→ Study on Rating System Effectiveness

- ◆ This study found that the rating system had an effect on user believability (Kim et. al., 2019)
  - Lower scored articles influenced individuals to be more cautious when reading news articles
  - High scores did not effect believability but low scores lowered believability in articles

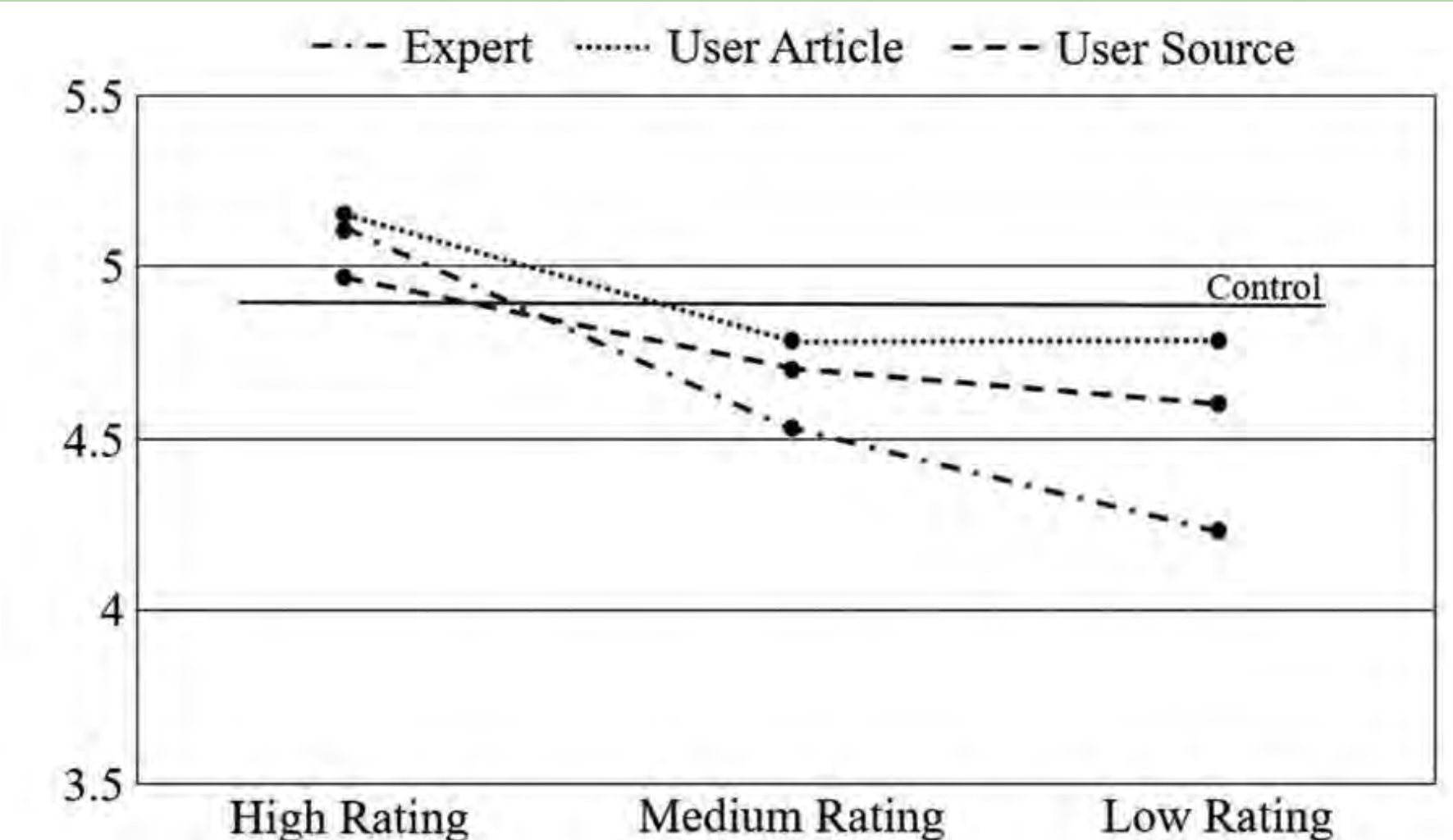


Figure 4. Study 1 mean believability by rating mechanisms and levels.

- ◆ Figure displays how the rating system affects believability with a high, medium and low rating in relation to the control

## CONCLUSION

- This project aims to lower the spread of fake news through the online media
  - Fake news is a prevalent issue in the modern world that can have dangerous consequences
- This group created an application where users can input a website and find its user generated scores by fellow users and be able to participate themselves in raking an articles reliability based on reliability questionnaire
- Studies show that ranking articles has an effect on believability and has the ability to lower the influence of fake news on individuals by making them more aware of what they read
- The prototype created by this group has the potential to expand in the future and help curb the dangers of fake news for all unsuspecting users on the internet

## ACKNOWLEDGEMENTS

- Professor Brynn Nodarse - Psychology Professor at Chapman University
  - Last semester our interview with Nodarse helped us better understand the power of surveys and people's tendency to be biased
- Journal of Management and Information Systems
  - Our project was based off this article, where they explain the effects of user and expert reputation ratings
  - They examined the effectiveness of different mechanisms for source ratings
  - Discussed expert ratings, user article rating, and user source ratings
    - Our project is a user source rating system