



# Media Literacy: A Student Perspective

Janelle Bitter

The Phi Theta Kappa Officer Team:

Liam Waddleton, Danielle Marzigliano, Samuel Cartagena-Sergenian, and  
Rebecca Geary

# Phi Theta Kappa Honor Society

- Phi Theta Kappa is an honor society for two-year colleges. Members must have above a 3.5 GPA on a 4.0 GPA scale and have completed at least 12 college credit hours.
- Service, Fellowship, Scholarship and Leadership

Advisor: Janelle Bitter

Systems & Technical Services Librarian at  
RVCC



2020  
PHI THETA KAPPA  
HIA THEME



The Seventh  
Generation



Present



Melvil Dewey



Joseph Pulitzer

# The Student Perspective

Leaving a Legacy for the Seventh Generation

## THEME: Expressions of Truth

### + Honors in Action Project

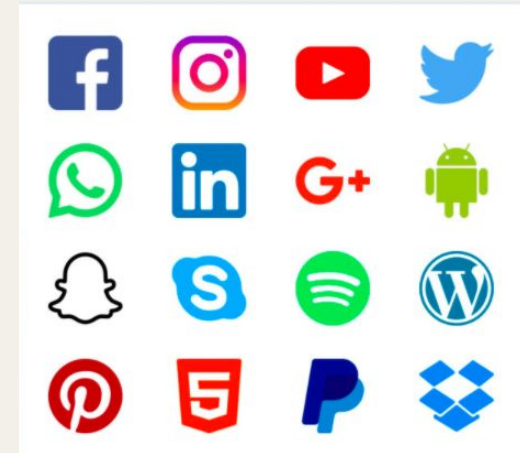
- + Focus is on making a lasting impact on the community at large: *How can we use the struggles we faced as students to leave a positive impact on the future education system?*
- + Explore how the inherited expressions of truth build lasting legacies

# Honors In Action Steps:

1. Research identifies large-scale problem: finding the present-day expressions of truth.
2. Use the work of previous scholars to inspire us: The complexity of media literacy education & future implications of studies
3. Solution: We interviewed experts in varying academic fields, provided interactive resources, and are conducting research on the effectiveness of media literacy education
4. Impact: spread awareness of the current state of fake news & advance academic pursuits

# The Student Advantage

The unique experience of generation z students in 2020:



- + We have technology at our finger-tips
- + There are always improvements to be made to our education system: We contributed towards the solution, other students can too!

# Study Explanation

- + Two online forms, one data set
  - + Which version participants took was randomized
  - + One educated, one did not
- + Three main sources we used
  - + Scholarly Publications
  - + Periodicals
  - + Interviews

# Analysis

- + Although the study is still ongoing, we wanted to begin performing initial testing so that we could have some preliminary data.
- + We hope to have over twice the current sample size when we conduct the finalized analysis. (n=100+ for each group)

# Was the increase in score of the education group statistically significant?

## Education group (#1)

N = 49

Mean score (0-14) = 10.53

Stdev. = 2.46

2-Sample pooled T-test  
conducted at 1%  
significance level

$$H_0: \mu_1 = \mu_2$$
$$H_a: \mu_1 > \mu_2$$

p-value = 0.0003

## No education group (#2)

N = 60

Mean score (0-14) = 8.87

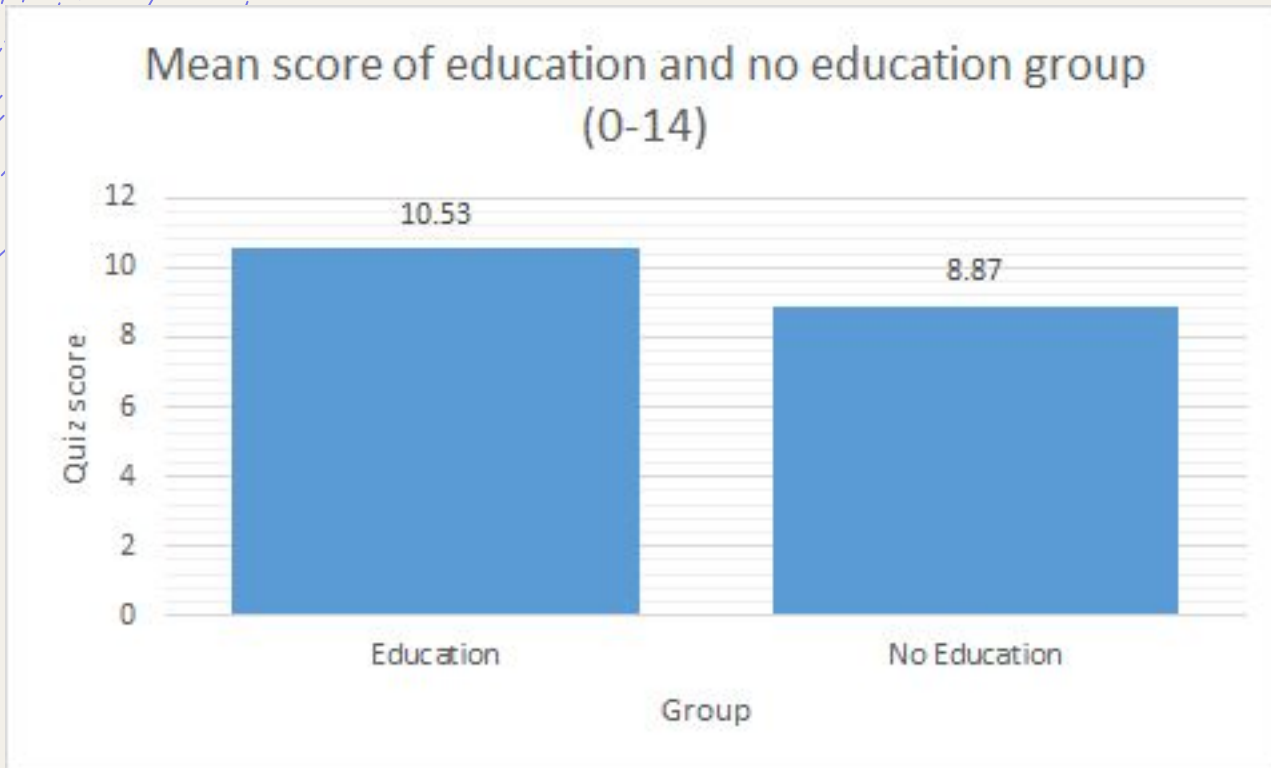
Stdev. = 2.41

0.0003 < 0.01,  
sufficient evidence (very  
strong) to reject  $H_0$

Only a ~0.03% chance that our  
sample findings don't carry  
over to the population as a  
whole

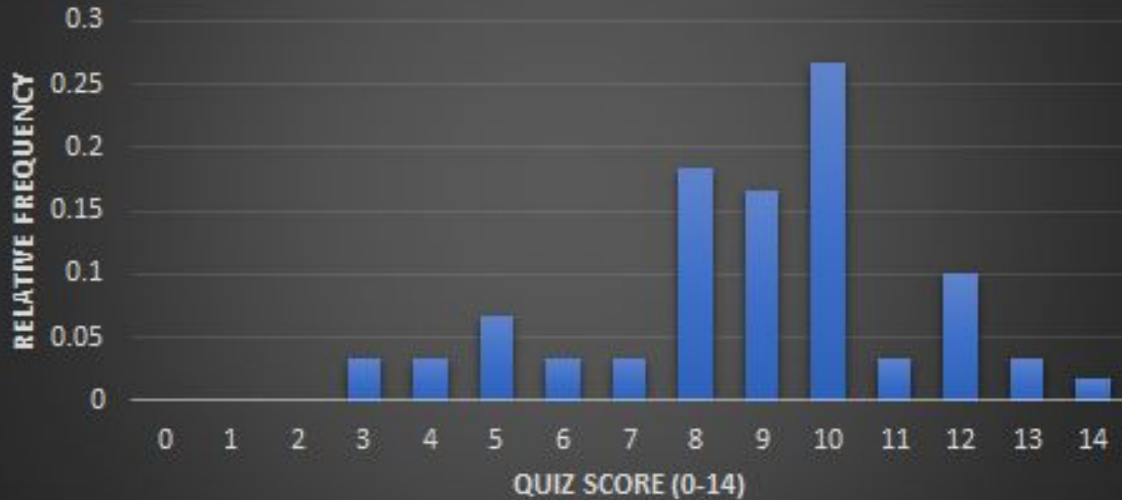
At the 1% significance level the data provide very strong evidence ( $p < 0.001$ ) to conclude that the mean score of those that took the media literacy survey with the educational video included is higher than the mean score of those that took the media literacy survey without said video.

# Graphs

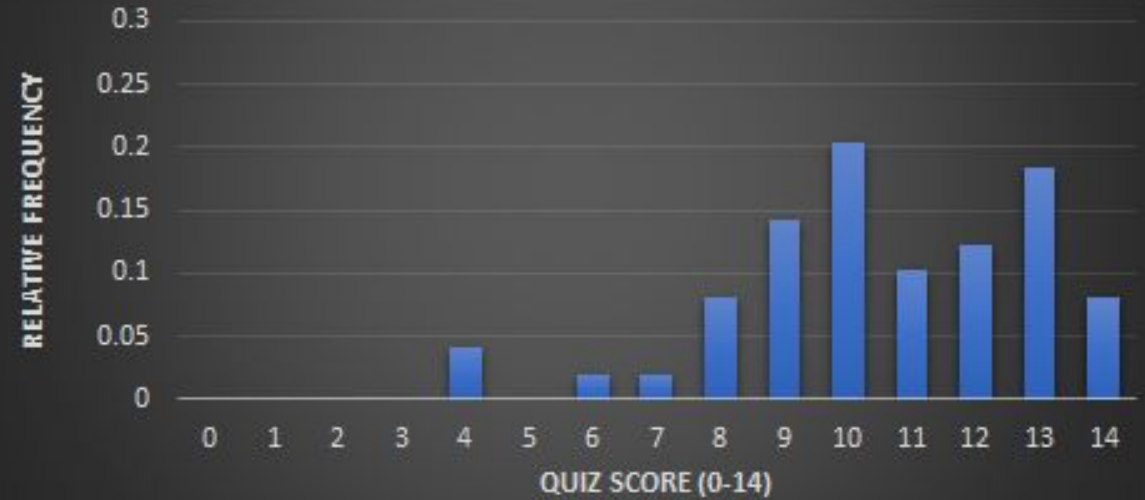


The education group had an average score that was 1.66 higher than that of the no education group. This was statistically significant at the 1% significance level with our sample sizes.

No education group scores by relative frequency.  $\bar{x} = 8.87$   $n = 60$

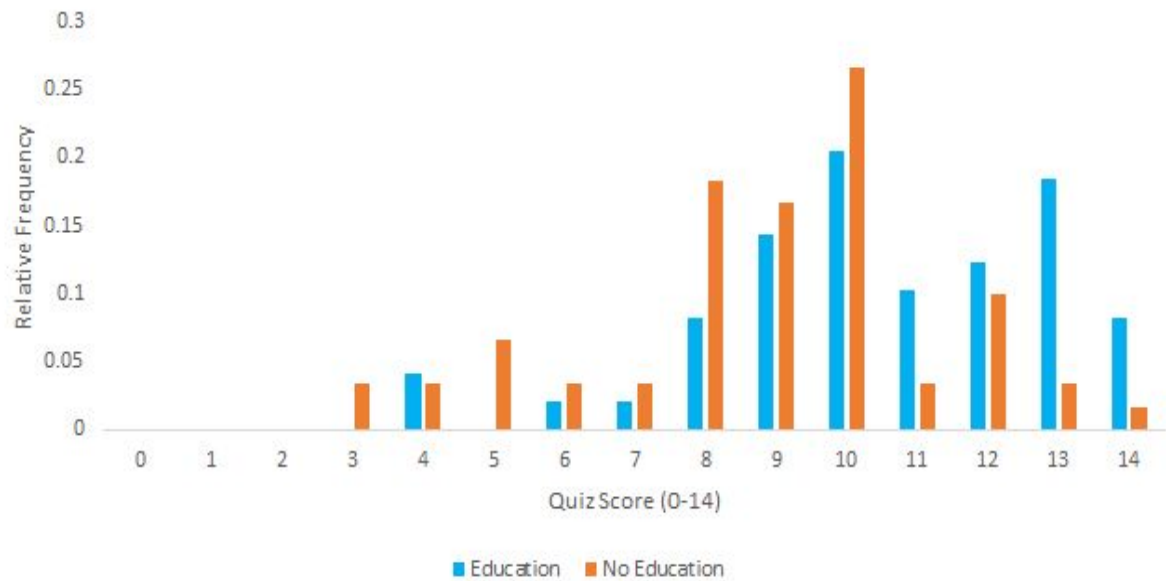


Education group scores by relative frequency.  $\bar{x} = 10.53$   $n = 49$

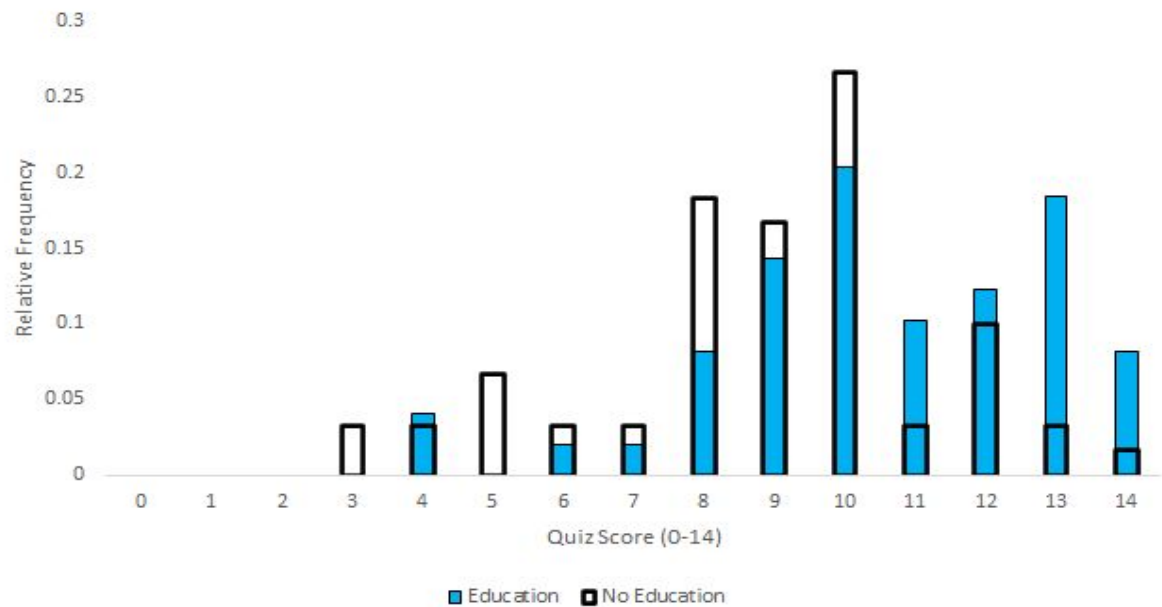


Both groups had a mode of 10, but there was a far higher frequency of 11s, 12s, 13s and 14s in the education group. The no education group had a rounded median of 9, whereas the education group had a rounded median of 10.

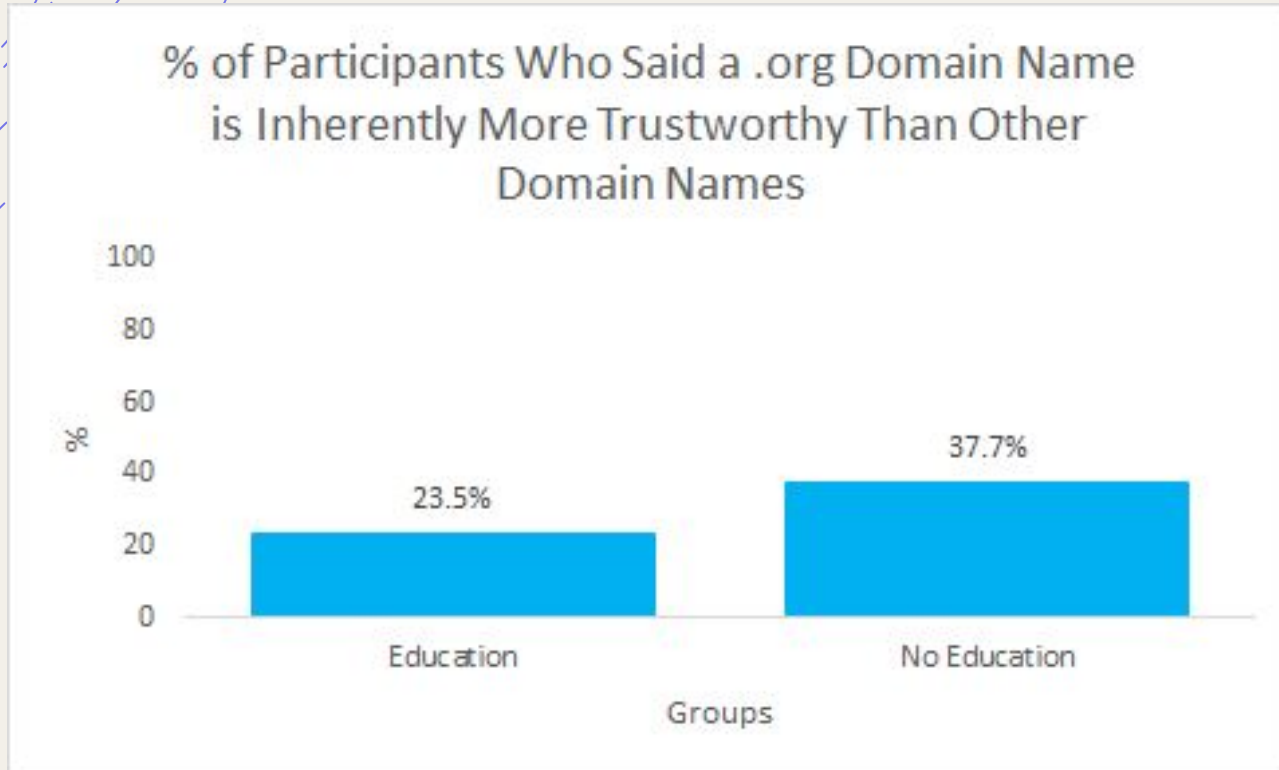
### Quiz Score Relative Frequencies of Education and No Education Groups



### Quiz Score Relative Frequencies of Education and No Education Groups (Stacked)



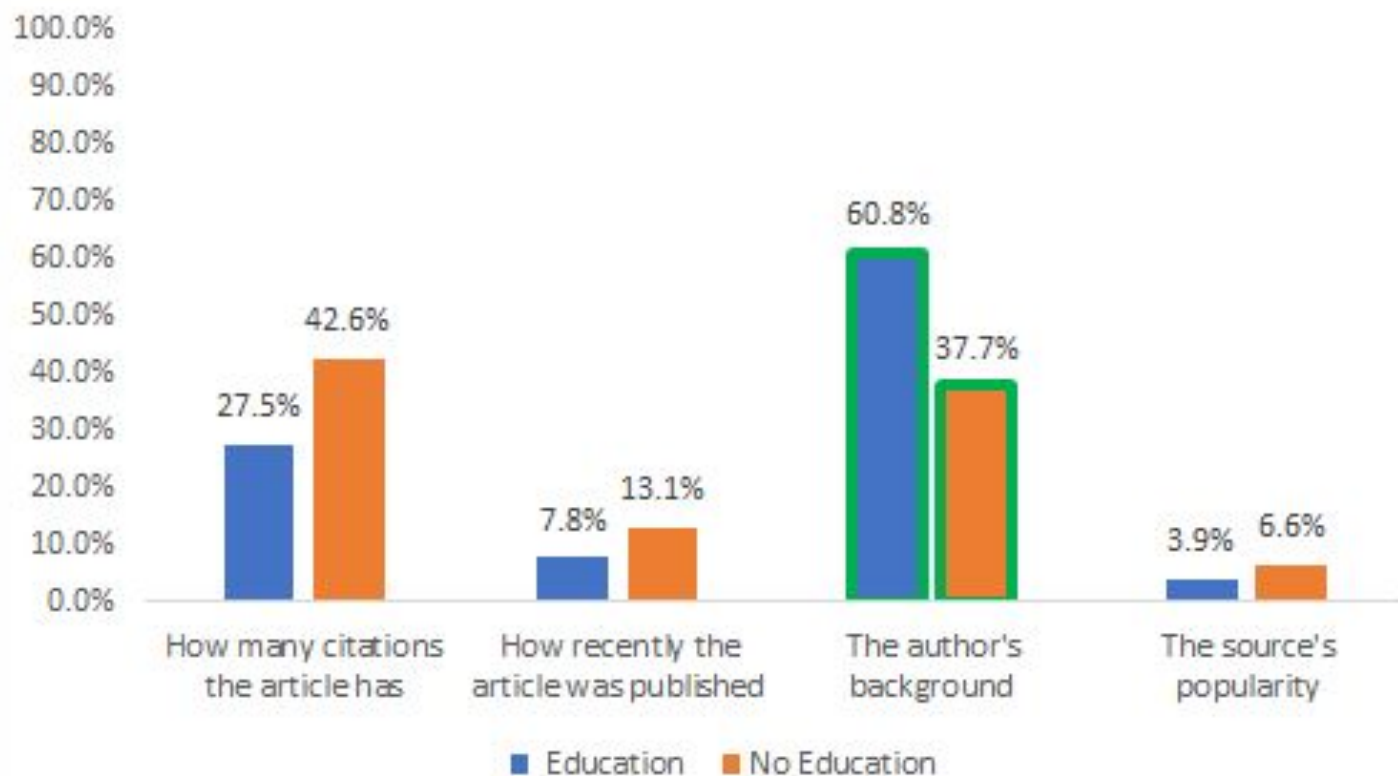
# Largest single question differences



One of the questions in the quiz asked if a .org domain name is more inherently trustworthy than other domain names. The correct answer was that it was not.

Those in the education group were only around 60% as likely to answer that a .org domain name is inherently trustworthy compared to the group that received no education.

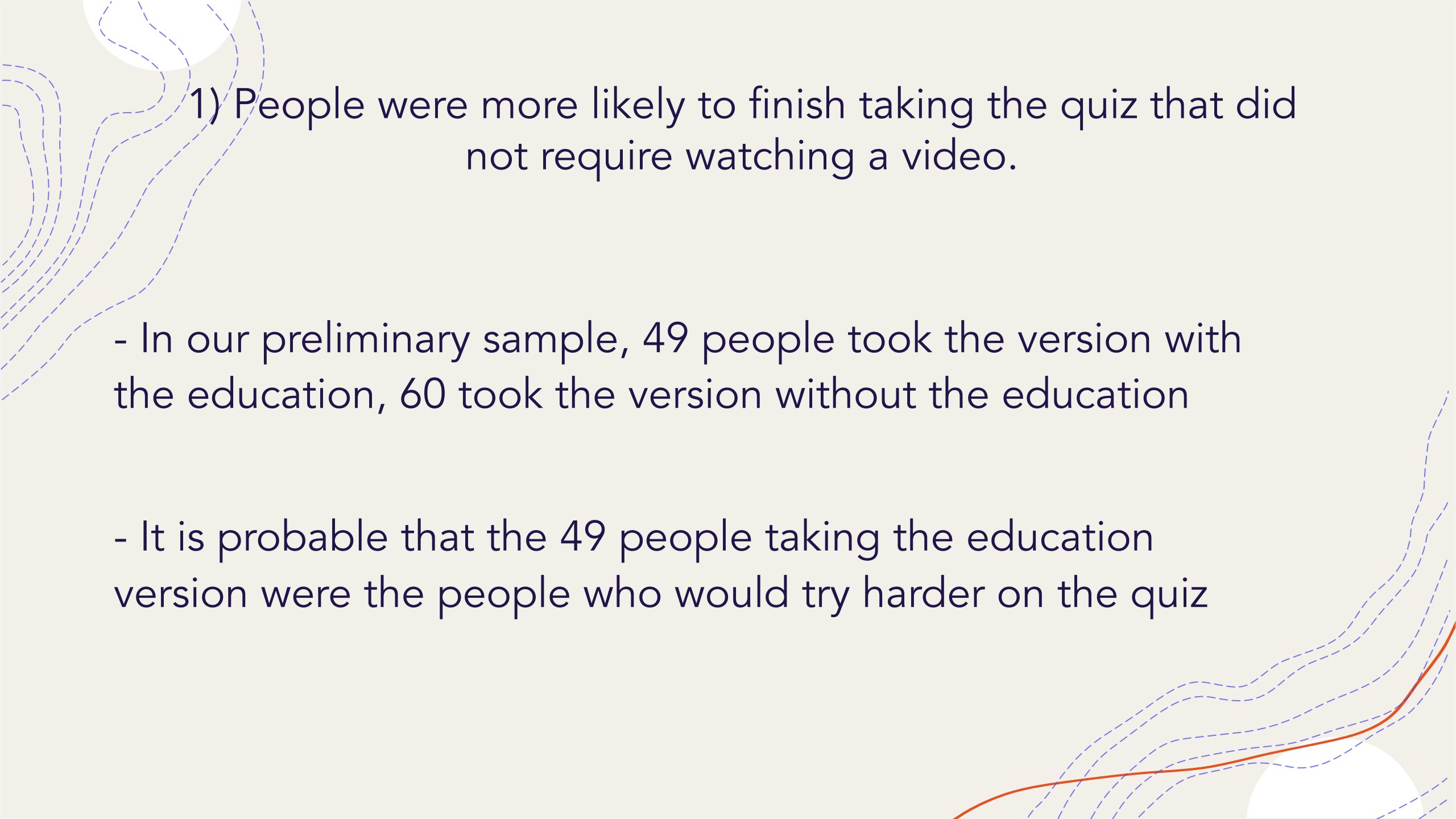
Answer to the question "Which one of these is generally the most important aspect in determining a source's credibility?" (Green = correct answer)



When asked which aspect is generally the most important in determining a source's credibility, those who received no education were more likely to answer "how many citations the article has" than they were to answer "the author's background". One of the points covered in the educational video was how the quality of the sources cited makes a bigger impact on credibility than sheer quantity does. There was a massive difference in scoring for this specific question between the two groups.

# Potential errors

There are a few errors we identified that could be skewing the results of the study. If we were to reattempt the study, we would need to find ways to control for these variables. Some of these possible errors include:



1) People were more likely to finish taking the quiz that did not require watching a video.

- In our preliminary sample, 49 people took the version with the education, 60 took the version without the education

- It is probable that the 49 people taking the education version were the people who would try harder on the quiz



2) We have no definitive way to measure whether the knowledge learned from the video will be retained

- Although there was a statistically significant difference in score between the two groups. This could be exclusively from short-term memory
- If we were to repeat this study, we might want to have a 3rd group that receives the education and then takes the quiz after a period of time

# Next steps

Once the study has officially concluded we plan to run deeper analysis of the data in order to hopefully gain more insight on this topic. Here are some questions we wish to explore in the future using the finished data:

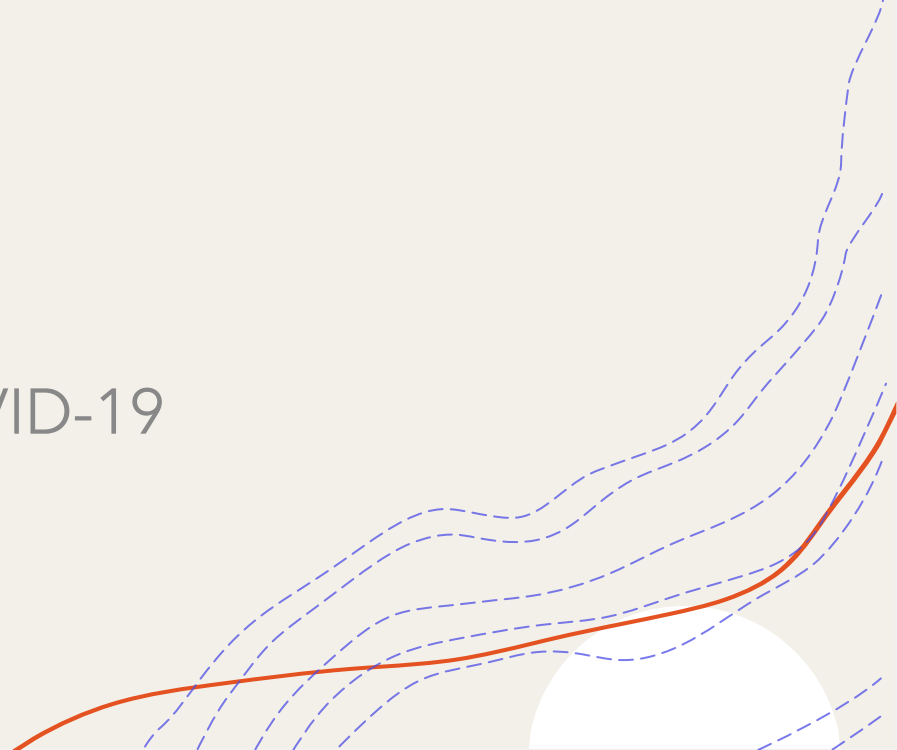
- 1) Was there a significant difference in average quiz score between participants of different socioeconomic classes?
- 2) How large of an effect did age play in determining score?
- 3) Did those that say they had experience with media literacy courses in the past score substantially better than those who did not?

In addition to questions like these, we will rerun the original analysis to make sure our findings are still statistically significant with a larger sample size.



# Personal Effects of Misinformation

## Contents:

- Misinformation's Effect on Students
  - Misinformation's Effect on College Students
  - Students and Misinformation in The Time of COVID-19
- 

# Misinformation's Effect on Students

- + Students are most vulnerable; they are willing to accept the information provided to them
- + Can spread this false information to others because it seems reliable
- + Personal experience: as young students, we are involved in a lot of social media and social groups which makes us more likely to face misinformation and possibly spread it

# Misinformation's Effect on College Students

- + As they are given increased expectations in their higher education, the risks of misinformation can have greater consequences on college students
- + If misinformation impacts college students within their education towards their future career, this can have an effect later in life
- + As college students, we are expected to identify false information within personal research, but often do not know where to turn to when we are faced with this challenge and it can serve as an obstacle furthering us from our intended goals

# Students and Misinformation in The Time of COVID-19

- + COVID-19 increased the amount that students learn online, which increases the chances of coming into contact with false information as it is most likely to spread over the internet
- + COVID-19 has also introduced a new and very large topic for information to grow out of.

# Taking Action To Educate Others

- + Study Completion
  - + Google Classroom
  - + Additional resources
    - + Articles
    - + Animated video
    - + Interviews
- + Interviews with experts
  - + Janelle Bitter
  - + Dr. Jennifer Pearce-Morris
  - + Dr. Joel Breakstone
  - + Dan Cummins
- + NewseumED Class - "Fighting Fake News"

# Any questions?

- + We've become more skeptical of new information and taken the necessary steps to critically think about the content we consume
- + Personal Benefits
  - + Liam: "I've gained the confidence to challenge people who mindlessly repost nonsense, because we've all seen what believing in nonsensical conspiracy theories can do to the world. As I'm sure most, if not all of you are aware, conspiracy theories doubting the validity of anything coronavirus-related are the prime reason many haven't taken proper precautions to slow or even stop its spread."
  - + Becca: "Through our research on media literacy and the effects of fake news, I have seen how I have played a role in spreading misinformation in the past. Despite the positive effects of media literacy education, I must continue my efforts to help others avoid the tendency to spread fake information like I fell victim to in the past."
  - + Sammy: "I try to be as unbiased as possible when it comes to the information I believe and what sources I base my opinions on. I make a conscious effort of placing a higher importance on whether or not a source is objective than on whether or not it confirms by preexisting biases. I make sure to try and offer a balanced perspective when discussing controversial topics with others and I let my friends know when I think they are prioritizing trying to be right over trying to find an unbiased and truthful answer on an issue."
  - + Danielle: "I have used the topic we chose for our Honors in Action project to spread awareness about the dangers of fake news to those around me and inspire others to make change in their everyday lives around the topic of media literacy. Though this project, I've learned that educating people on exactly what you want them to know can be quite tough. Though, by simply introducing the topic of media literacy and the concept of how fake news can do extreme harm, I've been able to spread our message to many people within my community."

# Links

- + [Case Study Fillable Link](#)
- + [Chapter Website](#)
- + [Short documentary](#)

# Image Sources:

*Britannica*, Encyclopædia Britannica, Inc., 2020, [cdn.britannica.com/s:250x250,c:crop/30/181230-050-A1359EA0/Melvil-Dewey.jpg](https://cdn.britannica.com/s:250x250,c:crop/30/181230-050-A1359EA0/Melvil-Dewey.jpg).

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# Thank you!

## Questions & Discussion

Please take our [3-question survey](#).

Janelle Bitter, [janelle.bitter@raritanval.edu](mailto:janelle.bitter@raritanval.edu)

Liam Waddleton, [lwad3126@Stu.raritanval.edu](mailto:lwad3126@Stu.raritanval.edu)

Rebecca Geary, [rgea3903@Stu.raritanval.edu](mailto:rgea3903@Stu.raritanval.edu)

Samuel Cartagena-Sergenian, [scar9001@Stu.raritanval.edu](mailto:scar9001@Stu.raritanval.edu)

Danielle Marzigliano, [dmar0791@Stu.raritanval.edu](mailto:dmar0791@Stu.raritanval.edu)