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The Role of Content Modality on the Likability of an Online Communicator

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THE ROLE OF CONTENT MODALITY ON THE LIKABILITY OF AN ONLINE
COMMUNICATOR

by

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Abstract

With the growing popularity of social media platforms like Facebook, human interaction in online environments is increasing. As a result, social perceptions of the individuals "behind the screen" has become a topic that needs to be explored. The present study explores how the media platform (specifically Facebook post versus Video) affects perceptions of an individual with a controversial opinion. Potentially, the same content in a video format may increase the likability of the presenter in contrast to reading the same opinions in Facebook posts. The present study examined the role of alignment of opinion (agree vs. disagree with presenter) and content modality (Facebook video vs. Facebook text post) on participants' perception of likeability towards the online persona. In this study, three hypotheses were tested. The first hypothesis is that video posts will generally yield more likability for the presenter about a controversial issue than the same content in a Facebook post. Second, people who agree with the presenter's position of a controversial issue will find the person posting more likable. Finally, an interaction is expected such that likability will be most affected for the participants who disagree with the presenter; specifically those participants who disagree will be more likely to like the presenter in the video condition, whereas format will matter less for those who agree with the presenter's opinion. The dependent variables of the present study are the Interpersonal Adjective Scale (IAS, Trapnell & Wiggins 1990) and scores on the Basic Empathy Scale in Adults (BES-A, Jolliffe and Farrington, 2006).

Keywords: social media, IAS-B5, BES-A, LIWC, gun control, content modality

INTRODUCTION

With the growing popularity of social media, human interaction is increasing in online environments. One of the most popular forms of social media on the internet today is Facebook. A survey conducted by the Pew Research Center in March of 2018 reports that roughly 68% of adults in the United States were Facebook users. In the same survey, about 73% of American adults use more than one social media platform; in fact, three different platforms were the reported median. Younger adults stand out in their social media use. About 88% of young adults ages 18-29 report using some form of social media (Smith & Anderson 2018). The popularity of these online communication platforms is not surprising given that the benefits of using them are so great. Social media allows individuals to connect with their friends and family, as well as expose them to information about current events. In addition, users also have a platform to voice their thoughts and opinions with little censorship and no standard for quality of information.

Social media users are exposed to many different ideas to which they may or may not agree. A bias called *belief polarization* occurs when 2 sides of a debate get more entrenched in their pre-existing opinions and is evident when these opposing sides will refer to the same fact to reinforce their very different opinions (Lord, Ross, & Lepper 1979). For example, in a study by Guerra, Wagner, Cardie, and Kleinberg (2013), tweets on the gun control debate were examined. All the tweets focused on the same event, a man stabbing 20 people with a knife in China, but the event was used to support contrasting arguments. For example, one of the tweets opposing gun control read: "2 those of you whining about #gun control-a madman used a KNIFE to stab 20+ kids in China today. It's not about guns, it's about mental health" (Guerra et al., 2013). In contrast, the pro-gun control tweets sounded much different; for example, "22 children in China

attacked with a knife today, no deaths. Senseless violence can't be prevented. Gun violence can"
(Guerra et al., 2013). Although these opposing arguments are referring to the same fact, they are
using it in a different context in order to support their own position.

It is normal for people to disagree, but why do we sometimes see the people we disagree
with as inferior or unlikable? What variables influence those perceptions? The present study
explores whether the content modality of a social media post affects perception of an online
communicator with a controversial opinion.

This question is particularly important as the current polarization of political attitudes in
the United States is creating an intolerance for those who do not possess similar or aligning
beliefs (Abramowitz & Saunders, 2008). This polarization hinders our ability to solve societal
problems, a notion that is becoming increasingly evident with the growing push for gun reform
in the media. For example, on February 14th, 2018 a mass shooting occurred at Marjory
Stoneman Douglas High School in Parkland, Florida in which a 15-year-old shooter killed 17
students. This tragedy sparked debate on many social media platforms, where anyone ranging
from politicians to victims of the attack was able to share opinions on how to end mass
shootings. The result seemed to only increase belief polarization, which obstructs compromise by
creating conflict and antagonism. Due to its relevance in the current media, the present study
uses the issue of gun control reform as a method of understanding the response to an online
presenter with a controversial opinion.

Polarization can stem from the unconscious phenomenon of confirmation bias.
Confirmation bias involves the observation that people are more likely to actively seek out
information that aligns with their existing beliefs (Rajsic, Wilson, & Pratt, 2015). When false or

fictitious information is presented as fact, individuals may still believe there is a possibility that this information is accurate, even after being debriefed and told that it was false (Nestler, 2010). One mechanism for confirmation bias is *selective exposure*, the phenomenon that individuals will spend more time reviewing articles or information that aligns with their beliefs and less time to information that opposes their point of view (Knobloch-Westerwick, 2015; Westerwick, Johnson, & Knobloch-Westerwick, 2017). In other words, equal exposure time is not being given to every viewpoint; instead people are selecting only those sources that reinforce existing beliefs. Unlike real-world scenarios, social media users can unfriend, unfollow, or even temporarily "snooze" users whose opinions they find intolerable or offensive (Yang, Barnidge, & Rojas, 2017). This feature is positive on the surface, but selective exposure may intensify cognitive biases which may in turn create a more antagonistic approach when presented with a disagreement on social media.

Previous research has examined the roles of confirmation bias and selective exposure to political information online. In a study by Westerwick et al. (2017), participants indicated their political attitudes on four targets and eight distracting topics. In a computer lab, participants were asked to browse search results on these target topics, which were: health care, minimum wage, gun control, and abortion. Only four search results were displayed for each item with two results supportive of the argument and two against the argument. Additionally, for each result type aligning with a pro-message or an against-message, there would be one unbiased, credible source and one slanted source. Participants were told to read what they like and were given time to read search results. During each session, a software program called MS Silverlight tracked the amount of time they spent on each article as a measure of selective exposure. Clear confirmation bias

was found, showing a statistically significant difference in participants' selection of attitude-consistent messages versus messages that do not align with their attitudes. It was also found that participants selected unbiased-source messages more often than slanted-source messages. If we, as the Westerwick study demonstrates, limit the information we access online through search engines to sources that support our own beliefs, do we also customize our relationships on social media? Other research indicates that we may be as selective with our friend choices on social media as we are with the information we choose to view.

According to a study by Yang, Barnidge, and Rojas (2017), engagement with politics on social media positively associated with encountering political disagreement on social media. On social media sites like Facebook, political disagreement typically elicits user filtration or the "unfriending" of those with different opinions. The strength of one's political ideology can become positively associated with unfriending as a response to this disagreement (Yang et al., 2017).

Due to our own biases, we may assume that our friends or people that we perceive as likable have aligning political opinions with us, but this is not always the case. A study by Frost, Casey, Griffin, Raymundo, Farrell, and Carrigan (2015) demonstrated that we believe that our friends' opinions are consistent with our own. Undergraduate student participants were shown fake social media posts written by a friend or a stranger, in which the online persona expresses opinions either supporting or opposing stricter gun control laws. After viewing these posts, participants were asked to recall which posts were written by their friends and which posts were written by someone they did not know. When information conflicted with a participant's own beliefs, they were more likely to misattribute a post from a friend/acquaintance as being from a

stranger. These results illustrate a tendency to select and recognize social media posts that are supporting rather than opposing their own points of view despite the accuracy of the information presented as facts or the authority of the person posting them (Frost, et al., 2015).

It is likely that there is a 'likability' factor that influences these selection biases. Multiple studies examined the types of cues that influence perceived likability on social media. Bradley, Roberts, and Bradley (2017) investigated whether greater number of friends on social media translates into greater popularity or likability. The participants evaluated a series of twelve fictitious profiles with a varied number of status indictors like number of friends, number of likes, attractiveness, and posted selfies. Then, participants were asked to make judgments of perceived likability. Higher numbers of followers, friends and likes were positively associated with likability. This relationship was strengthened when the profile's owner was attractive. These results are consistent with findings in earlier studies, predating the use of social media. Snyder, and Rothbart (1971) found that when participants were shown a photo of an attractive communicator, they were more likely to be persuaded by, or agree with, that communicator's audio message than they were when presented with an unattractive communicator.

Bacey-Giles and Haji (2017) investigated a cognitive bias called the *halo effect*, in which those who favorably evaluate a person's personality will also favorably evaluate that person's appearance. Fictitious profiles were created for participants to view. To control for perceived attractiveness, a computer-generated avatar was used as the profile picture instead of a photo of a real person. The halo effect was observed, as out of the 22 participants who positively evaluated the avatar's appearance, 19 also favorably evaluated the avatar's personality. Participants who rated the profile as likable also rated the profile as being similar to themselves or one of their

friends. This finding relates to the findings from Frost et al. (2015) and supports the idea that we perceive our friends and people we find likable as having personality traits and beliefs similar to our own.

Other studies investigated how the content users post affects judgments about their character and personality. Online users' behavior on social media can influence how likable and how respected the user is perceived to be by those viewing their profile (Batenburg & Bartels, 2017). Posting only socially desirable content, as well as keeping work and professional contacts from having access to private or more personal content, yielded higher likability and respect for the Facebook profile owner (Batenburg & Bartels, 2017). These findings are consistent with other studies of online impression formation. For example, Mou, Miller, and Fu (2015) found that both students and teachers perceived a blog's author to be a more credible if the blog consisted of professional content versus personal content.

Guadagno, Muscanell, Rice, and Roberts (2013) examined the influence of social validation and communicator likability when requests to volunteer were presented online. Participants were asked to read one of nine randomly assigned blog entries where a fictitious student was recruiting volunteers for a university fundraiser. The blogs contained either a likable, an unlikeable, or no likability content to determine the role of communicator likability on the participant's willingness to help. The blogs also contained comments from fictitious students willing to help, refusing/denying help, or no responses in order to assess the influence of social validation. Blogs with a lot of comments were considered to be the high social validation condition, and the blogs with no comments were the low social validation condition. Participants in the high social validation condition were willing to volunteer for more hours compared with

those in the low social validation condition. Communicator likability was not found to be a significant influence on compliance. However, likability was still noted as an important factor for online impression management (Okdie, Guadagno, Bernieri, Geers, & Mclarney-Vesotski, 2011; Guadagno et al., 2013).

Koroleva and Kane (2017) suggest that the strength of a relationship with an online friend can determine which cues are used when forming impressions of an online profile. Specifically, weak relationships cause the viewer to rely on heuristic cues, such as the number of likes or comments, to form opinions on the target's profile, whereas strong relationships already function as a heuristic. Users prefer information coming from their strong relationships, regardless of the content. With social media like Facebook becoming a medium for obtaining news, people must develop strategies to process the source of information quickly. Moreover, the need for these heuristic cues may be attributed to an individual's need for cognition, or tendency to engage in and enjoy thinking (Cacioppo & Petty, 1984; Pelled, Zilberstein, Tsirulnikov, Pick, Patkin, & Tal-Or, 2017). Individuals with a high need for cognition will rely mainly on textual cues; whereas individuals with a low need for cognition will depend primarily on visual cues (Pelled et al., 2017).

Findings on the cues used to form first impressions on social media lead to the question: are these first impressions accurate? Darbyshire, Kirk, Wall, and Kaye (2015) explored the accuracy of first impressions about Big 5 personality traits on Facebook users (McCrae & Costa, 1987). It was found that while some information could be found on the "less visible" personality traits of openness and conscientiousness, other personality traits could not be accurately judged based solely on observing a user's social media profile and text posts. These results influenced

the hypothesis of the current study. Perhaps personality characteristics cannot be accurately judged by text-based posts on profiles but can be discerned in the video format.

Previous research has provided us with a new understanding of factors that influence perceptions of online individuals. Still, the influence of content modality on our perceptions of others on social media remains a relatively unexplored area. Content modality, as it relates to this study, is defined as the format in which information is presented to the viewer; e.g., Facebook text posts vs. Facebook video posts. Studies predating the use of social media online indicate that content modality influences these perceptions and impressions we form. Content modalities such as video, audio, or written tape were utilized in these studies; only they were not presented in an online environment.

Chaiken and Eagly conducted several studies relating to the influences of content modality on impression formation. In their 1976 study, subjects were presented with either an easy or difficult to understand persuasive message. Messages were presented in one of three conditions: videotaped, audiotaped, or written. It was predicted that modality differences in comprehension and persuasion would show written over audiotaped and videotaped messaged only when the material presented was difficult. It was also anticipated that when presented with easy material, persuasion would be more significant in videotaped compared to audiotaped conditions and audiotaped would be more significant than written conditions. More challenging messages, persuasion and comprehension were found to be most significant when the message was written, supporting the first hypothesis. In contrast, easy messages were found to be most persuasive in the video condition and least persuasive in the written condition. In a later study by Chaiken and Eagerly, it was hypothesized that a likable communicator will be more persuasive

through video and audiotape than written messages and that an unlikable communicator would

be more likable through written words than video or audiotape. The likable communicator was

significantly more persuasive within both videotape and audiotape conditions (Chaiken &

Eagerly, 1983).

Andreoli, and Worchel, (1978) aimed to demonstrate that the perceived trustworthiness

of a communicator determines how the content modality will generate attitude change.

Participants viewed a presentation either through television, radio, or written text either

supporting or opposing their position on regulation of liquor sales. In addition to the three

mediums of communication, there were four different communicator conditions: a political

candidate, a representative, a former representative, and a newscaster. After viewing the

presentations, participants were asked to complete a questionnaire about their views on the liquor

sales laws; how likely they would be to vote for the political candidate; how trustworthy they

perceived the communicators to be; and finally how much of the information they remembered

from the presentations. Television was the most effective medium for the newscaster and the

former representative; however, it was the least effective for the political candidate.

Taken together, the literature provides a picture of biased processing on the basis of

likability cues. The present study aims to extend the literature on the role of content modality on

the perceived characteristics of an online presenter with a controversial opinion by investigating

the role of video vs. text posts in the context of social media (specifically Facebook). Three

hypotheses will be tested:

Hypothesis 1: There will be a main effect such that participants will rate the presenter of

a controversial issue more positively and will use less negative language when describing

him when he posts a video post compared to a series of Facebook posts with the exact same text. This prediction was formed based on the previous findings of Chaiken (1976; 1983) and Andreoli (1978).

Hypothesis 2: There will be a main effect such that people who agree with the position of the presenter will find the presenter more likable and will have less negative words for that person, similar to results from Frost (2015) and Yang (2017).

Hypothesis 3: There will be an interaction such that content modality (Facebook post versus video) will not make a significant difference in the likability for those who agree with the position being presented, whereas video will increase likability for those who disagree. This prediction is consistent with the results of Chaiken (1976; 1983), Andreoli (1978), Pelled (2017), and Koroleva (2017).

METHOD

Participants

A total of 169 participants were included in the analysis. The sample was 45% female, 40.8% male, and 14.2% unspecified participants, with reported ethnicities as 49.7% White/Caucasian, 16% Hispanic/Latino, 9.5% Black/ African American, 5.3% Asian, and 19.6% other or not specified. Participant age ranged from 18 to 48 ($M = 19.81$, $SD = 3.61$) Participants were recruited from the University of Central Florida through the Psychology Department's online research website SONA https://ucf.sona-systems.com/. Upon completion, participants were awarded 0.75 credit points to the course of their selection through the SONA website.

Materials

Interpersonal Adjective Scale. The Interpersonal Adjective Scale i**s** a 124-item scale developed by Tarnell and Wiggins (1990). The scale measures eight interpersonal dimensions relating to personality and social psychology. These 8 dimensions include: Assured-Dominate (PA), Gregarious-Extraverted (NO), Warm-Agreeable (LM), Unassuming-Ingenuous (JK), Unassured- Submissive (HI), Aloof-Introverted (FG), Cold-hearted (DE), and Arrogant-Calculating (BC). This version also includes a portion of the NCO with subscales measuring Neuroticism (NEURO+, NEURO-), Consciousness (CONSC+, CONSC-), Openness (OPEN+, OPEN-). Participants report on an 8-point Likert scale: (1- extremely inaccurate, 2- very inaccurate, 3- quite inaccurate, 4- slightly inaccurate, 5- slightly accurate, 6- quite accurate, 7- very accurate, 8- extremely accurate). Some examples of adjectives/items included in the scale are: "Neighborly", "Hypersensitive", and "Organized". The Cronbach's alpha reliability score of the IAS-B5 ranges from .77 to .88. The scale is reported in Appendix A.

Basic Empathy Scale in Adults. The Basic Empathy Scale is a 20-item scale developed by Jolliffe and Farrington (2006). There are three-factors included on the scale: 1) Emotional contagion 2) Cognitive Empathy, and 3) Emotional Disconnection. The Emotional Contagion subscale measures the adjustment of emotions to suit an emotional situation and consists of six items (Carré et al., 2013). An example of an item from this subscale is "After being with a friend who is sad about something, I usually feel sad". Cognitive Empathy is defined as a person's ability to understand others' emotions (Carré et al., 2013). This subscale consists of eight items relating to Cognitive Empathy, such as "When someone is feeling 'down' I can usually understand how they feel.". Finally, there are six items measuring Emotional Disconnection which can be defined as a response to emotions considered to be unsustainable or excessive (Gross, 2002; Carré et al., 2013). One item from the scale is: "My friend's unhappiness doesn't make me feel anything". For all items, participants report on a 5-point Likert scale from Strongly Agree to Strongly Disagree. The Cronbach's alpha for the three factors of the BES-A are: .69 for cognitive empathy, .72 for emotional contagion, and .82 for emotional disconnection. The scale is included in Appendix B.

Linguistic Inquiry and Word Count. The Linguistic Inquiry and Word count (LIWC; Pennebaker, Booth, & Francis 2007) program is an automatic text analysis software system created to analyze the percentage of various word categories within a text. LIWC categories include: emotional words such as "furious" and "awesome"; cognitive words such as "believe" and think", and categories of function works like articles and pronouns. This program will be utilized in this study to analyze comments made by participants about the online presenter.

Videos. One-half of the participants will be randomly assigned to watch a video with a presenter reading a script about their opinion on gun control. The presenter in the video will be portrayed as an anonymous volunteer student sharing their views on gun control. The presenter's face will also be blurred to protect their identity as well as to control for confounding variables such as attractiveness and ethnicity. This blurring will not affect the study by erasing factors that contribute to empathy because, while facial expressions play a role in empathic ability, previous research has found that voice-only communication elicits a more accurate perception of emotions than vision-based cues (Kraus, 2017). The script is included in appendix C.

Facebook Posts. One-half of the participants will be assigned the set of Facebook posts, with the poster addressing their opinions about their rejection of gun control. The other half of the participants will be assigned to the Facebook video post. The posts are verbatim copies of the video script in a series of 5 posts. The presenter will be portrayed as an anonymous student allowing the use of their Facebook page for the study. Script is included in the Appendix C.

Demographic Questionnaire. Participant also completed a questionnaire asking for basic demographic information including age, race, gender, major, political affiliation, class standing, as well as questions addressing the participants' opinion about gun control. The questionnaire can be found in Appendix D.

Procedure

Participants were informed that they were taking part in a research study about attitudes toward gun control. This study was only available online through the SONA recruitment website. All participants indicated their consent by clicking "agree" before participating. Participants were randomly assigned to one of two conditions. In the first condition, participants were shown

a video in which the presenter states his opinions on gun control laws. In the second condition, participants were read a series of written Facebook posts from the same presenter. The posts were a verbatim copy of the video script that were posted through a series of 5 written posts. Participants were then given a window box to write their comments about the presenter and then they rated the presenter on the Interpersonal Adjective. Next, participants were asked to answer the questions on the Basic Empathy Scale honestly about themselves. Finally, they were asked to complete the demographic scale.

RESULTS

To assess how modality and agreement affected ratings of likability, a 2 (agree vs. disagree with presenter) X 2 (video vs. text only) between subjects multivariate analysis of covariance was conducted using the 8 levels of the IAS as dependent variables and BES-A scores as covariates. Because of the high number of comparisons, a Bonferroni adjusted alpha level of .006 was applied to the analysis. The first hypothesis stated that participants in the video condition would rate the presenter more positively than in the text condition. Although not significant at the adjusted alpha level, a marginally significant main effect was found on subscale DE (cold-hearted) of the IAS-B5 in with participants rated the presenter as more cold-hearted in the text condition with a mean of 4.50 (SD = 1.26) than in the video condition (M = 4.00, SD = 1.22) $F(1, 139)$ = 4.219, p = .042 η^2 = .03.

Hypothesis 2 stated that participants who agree with the presenter will rate the presenter more positively than participants who disagree with the presenter. A significant main effect was found on several subscales of the IAS-B5. The first was subscale BC (arrogant-calculating), in which participants rated the presenter as more arrogant and calculating if they disagreed with him (M = 4.74, SD = .90) than if they agreed with him (M = 3.89, SD = 1.03) $F(1, 135)$ = 25.12, p < .006, η^2 = .157. The next significant main effect was found on subscale DE (cold-hearted) where participants who disagreed with the presenter rated him as more cold hearted (M = 4.74, SD = 1.23) than if they agreed with him (M = 3.83, SD = 1.11) $F(1,135)$ = 18.842, p < .006, η^2 = .122. A marginally significant main effect was found on subscale LM (warm-agreeable), in which participants rated the presenter as more warm and agreeable when they agreed with him (M = 4.53, SD = 1.10) than when they disagreed with him (M = 3.98, SD = 1.27) $F(1, 135)$ =

6.367, $p = .013$, $\eta^2 = .045$. Finally, a marginally significant main effect was found on subscale FG (aloof-introverted) in which participants rated the presenter as more aloof-introvert if they disagreed with him ($M = 4.21$, $SD = 0.94$) than if they agreed with him ($M = 3.73$, $SD = 0.99$) $F(1, 135) = 7.228$, $p = .008$, $\eta^2 = .051$. These results support Hypotheses 2.

Hypothesis 3 stated that there would be an interaction such that there would be no difference in likeability across content modality for those who agree with the position being presented, whereas the video format would increase likability for those who disagree. No significant interaction was found at the Bonferroni adjusted alpha level of .006, however, one significant interaction was found at the .05 alpha level on subscale FG (aloof-introverted) of the IAS-B5. Participants who agreed with the presenter rated him as slightly more aloof-introverted in the video condition ($M = 3.92$, $SD = .984$) than in the text condition ($M = 3.56$, $SD = .985$), and participants who disagreed with the presenter rated him as more aloof-introverted in the text condition ($M = 4.33$, $SD = .87$) than in the video condition ($M = 4.032$, $SD = 1.03$) $F(1,135) = 4.003$, $p = .047$, $\eta^2 = .029$. Therefore, hypothesis 3 was not supported. The means and standard deviations are reported in Figure 1.

To assess how content modality and agreement affected the emotional content of participant comments, a 2 (agree vs. disagree with presenter) X 2 (video vs. text only) between subjects multivariate analysis of covariance was conducted using 3 categories of negative emotion words from LIWC; anxiety, anger, and sadness as dependent variables and BES-A scores as covariates. Again, because of the high number of comparisons, a Bonferroni adjusted alpha level of .017 was applied to the analysis. The only significant effect was a main effect of content modality, those who viewed the video were more likely to comment with anger words

($M = 2.89$, $SD = 4.36$) than those who saw the text-only content ($M = 1.86$, $SD = 2.77$), $F (1,135)$

$= 5.81$, $p = .017$, $\eta^2 = .041$.

DISCUSSION

In general, participant opinions of the presenter were influenced by whether or not they agreed with the presenter's opinion on gun control. Content modality did not seem to provoke a difference in comments. The first hypothesis, that participants would rate the presenter more favorably in the video condition than the text condition, was only marginally supported on a few subscales of the IAS-B5. In other words, content modality had little influence on the participants' ratings of the presenter. On the other hand, there is ample evidence to support the second hypothesis and conclude that when a person agrees with the online presenter, they view him as more warm-hearted and less arrogant in either presentation modality. This aligns with and expands on previous research on impression formation (Frost, 2015; Yang, 2017). Specifically, content modality did not undercut the effects of confirmation bias; in fact, those who agreed with the presenter rated him more positively than those who disagreed with him regardless of the modality. When analyzing the participants' comments using the LIWC, it was found that they used more "anger" words when reacting to the video condition than to the text condition. This was not anticipated, but should be explored further, as it may imply that video content elicits an angrier response than text content. For the current study, the comments were only analyzed for words relating to anxiety, anger, and sadness. In the future, more word categories will be explored using the data collected in this experiment.

There were a few limitations present in the current study. The sample size was very small for the amount of comparisons that were being made, and a significant number of participants did not complete the survey. Because the IAS-B5 can be time consuming and may fail to hold the attention of the participant, alternative methods of collecting participants' opinions of the

presenter will be explored. A total of 24 participants were excluded from the analysis for answering the manipulation check incorrectly. This may have been due to the attention of the participant, but also may have been caused by the confusing wording of the question.

In addition, the image of the presenter blurred so that facial features were undetectable may have dampened the effect of these modalities. Content modality did not undercut confirmation bias; in fact, the video produced more anger words in the participants' comments. Those who agree with the presenter rated him more positively than those who disagreed with him regardless of the content modality.

Further investigation of the effects of content modality on the likability of on online presenter is needed. This study will proceed with collecting data from more participants in order to assure sufficient statistical power to test the hypotheses. In the present study, the text and video posts were both out of context, with no additional information provided about the number of friends or likes their presenter had on their Facebook page. Background information about the presenter may or may not influence the opinions of the presenter formed by the participants when viewing his online profile, as seen in the research of Bradley, Roberts, and Bradley (2017). In the video and on the icon associated with the text posts, the image of the presenter is blurred to protect their identity. While anonymity is important to the presenter, alternative conditions may need to be explored where the face of the presenter is visible as any nonverbal cues are censored. As seen is previous research like that of Snyder and Rothbart (1971), the presenter's attractiveness or physical appearance may also generate more favorable ratings of the presenter from participants.

With political and social opinions becoming more polarized in the United States, it is important to explore the possible influences on the perceptions we form of others because of their differences in opinion. If we perceive everyone we disagree with as arrogant and cold-hearted while perceiving those we agree with as warm and agreeable, it becomes more difficult to reach compromises and work toward finding solutions to the controversial issues that affect the population as a whole. The present study explored the perceptions of an online presenter with a controversial opinion by manipulating the content that was viewed by an online user. Though more research clearly needs to be done, this study offers preliminary insight into some of the factors influencing our perceptions of the person posting "behind the screen".

TABLES AND FIGURES

Figure 1.0

IAS-B5 subscales means and standard deviations of all participants

Item	Means	Standard Deviations
PA	5.41	.986
HI	3.36	1.01
BC	4.30	1.06
JK	4.15	.836
LM	4.28	1.19
FG	3.97	1.00
NO	4.54	.973
DE	4.25	1.28

Figure 2.0

IAS-B5 subscales means and standard deviations for participants who agreed and disagreed with the presenter

Item	Agree Means	Agree Standard Deviations	Disagree Means	Disagree Standard Deviations
PA	5.31	.901	5.60	1.03
HI	3.36	.930	3.33	1.09
BC	3.89	1.03	4.74	.898
JK	4.32	.840	4.00	.818
LM	4.53	1.10	3.98	1.27
FG	3.73	.993	4.21	.941
NO	4.68	.896	4.34	1.01
DE	3.82	1.11	4.74	1.23

Figure 3.0

IAS-B5 subscales means and standard deviations for participants in the text and video conditions

Item	Text Means	Text Standard Deviations	Video Means	Video Standard Deviations
PA	5.49	1.09	5.36	.802
HI	3.23	1.04	3.50	.956
BC	4.40	1.06	4.17	1.04
JK	4.11	.842	4.26	.838
LM	4.12	1.23	4.45	1.18
FG	3.96	.999	3.97	.997
NO	4.53	.902	4.51	1.05
DE	4.48	1.24	4.00	1.22

Figure 4.0

IAS-B5 subscales (NCO) means and standard deviations of participants

Item	Means	Standard Deviations
CONSC	4.97	.990
CONSC-	3.85	1.12
NEURO	4.20	1.03
NEURO-	4.37	.889
OPEN	4.41	1.07
OPEN-	4.43	.901

Figure 5.0

BES-A subscales means and standard deviations of participants

Item	Means	Standard Deviations
Cognitive Empathy	3.40	.444
Emotional Contagion	2.54	.592
Emotional Disconnection	3.29	.669

APPENDIX A: INTERPERSONAL ADJECTIVE SCALE

APPENDIX B: THE 20 ITEMS OF THE BES-A

1. My friends' emotions don't affect me much.

2. After being with a friend who is sad about something, I usually feel sad.

3. I can understand my friend's happiness when she/he does well at something.

4. I get frightened when I watch characters in a good scary movie.

5. I get caught up in other people's feelings easily.

6. I find it hard to know when my friends are frightened.

7. I don't become sad when I see other people crying.

8. Other people's feeling don't bother me at all.

9. When someone is feeling 'down' I can usually understand how they feel.

10. I can usually work out when my friends are scared.

11. I often become sad when watching sad things on TV or in films.

12. I can often understand how people are feeling even before they tell me.

13. Seeing a person who has been angered has no effect on my feelings.

14. I can usually work out when people are cheerful.

15. I tend to feel scared when I am with friends who are afraid.

16. I can usually realize quickly when a friend is angry.

17. I often get swept up in my friends' feelings.

18. My friend's unhappiness doesn't make me feel anything.

19. I am not usually aware of my friends' feelings.

20. I have trouble figuring out when my friends are happy.

APPENDIX C: SCRIPTS/ VIGNETTES

Video:

So, I want to tell you more about why the whole gun ban thing is the wrong solution to the problems this country is facing. I know everyone is tired of hearing it, but it's true: guns don't kill people, people kill people. If we get rid of the guns, it won't matter, because disturbed individuals will still find a way to carry out violence. We banned drugs, but people still use them, don't they? People die in car accidents all the time, so should we ban cars? No, of course not, we punish the driver who was negligent or reckless and caused the accident. The worst part pf gun control: violating our second amendment rights! Our right to bear arms prevents government tyranny, that's the whole reason the second amendment was put in place. There is a reason this country is called the "land of the free", and if we start putting sanctions on what we can do to protect ourselves, it'll be a slippery slope until we are the same as every other totalitarian dictatorship. The only thing that'll stop these bad guys with guns, is a good guy with a gun. If we really want to solve the issue of mass shootings in schools, we should arm teachers and employ veterans to be armed guards in schools. I want to keep kids safe as much as anyone else, but we need to be realistic about how we are going to do that.

Facebook Posts

1. So, I want to tell you more about why the whole gun ban thing is the wrong solution to the problems this country is facing. I know everyone is tired of hearing it, but it's true: guns don't kill people, people kill people. If we get rid of the guns, it won't matter, because disturbed individuals will still find a way to carry out violence.

2. We banned drugs, but people still use them, don't they? People die in car accidents all the time, so should we ban cars? No, of course not, we punish the driver who was negligent or reckless and caused the accident.

3. The worst part of gun control: violating our second amendment rights! Our right to bear arms prevents government tyranny, that's the whole reason the second amendment was put in place.

4. There is a reason this country is called the "land of the free", and if we start putting sanctions on what we can do to protect ourselves, it'll be a slippery slope until we are the same as every other totalitarian dictatorship

5. The only thing that'll stop these bad guys with guns, is a good guy with a gun. If we really want to solve the issue of mass shootings in schools, we should arm teachers and employ veterans to be armed guards in schools. I want to keep kids safe as much as anyone else, but we need to be realistic about how we are going to do that.

APPENDIX D: DEMOGRAPHIC SCALE

1. What is your current age? _____

2. What do you identify your gender: Male Female Gender Diverse

3. What is your major? _____

4. Which best describes your academic status? FR SO JR SR GRAD OTHER

5. Would you describe yourself as:

   a. American Indian/Native American
   b. Asian
   c. Black/African American
   d. Hispanic/Latino
   e. White/Caucasian
   f. Pacific Islander
   g. Other

6. What do you consider your political affiliation? DEM REP IND LIB OTHER

QUESTIONS ABOUT OPINION ON GUN CONTROL:

1. How do you feel about implementing higher restrictions on gun control in the U.S?

1-Strongly agree, 2-agree, 3-somewhat agree, 4-somewhat disagree, 5-disagree, 6-strongly

disagree

2. What was the online presenter position on stricter gun-control regulation?

   a. Supporting

   b. Opposing

3. What level of agreement would you say you feel toward the presenter's views?

1-Strongly agree, 2-agree, 3-somewhat agree, 4-somewhat disagree, 5-disagree, 6-strongly

disagree.

REFERENCES

Abramowitz, A. I., & Saunders, K. L. (2008). Is polarization a myth? *The Journal of Politics*, 70, 542–555. doi:10.1017/S0022381608080493

Andreoli, V., & Worchel, S. (1978). Effects of media, communicator, and message position on attitude change. *Public Opinion Quarterly*, *42*(1), 59-70. doi:10.1086/268429

Bacev-Giles, C., & Haji, R. (2017). Online first impressions: Person perception in social media profiles. *Computers in Human Behavior*, *75*, 50-57. doi:10.1016/j.chb.2017.04.056

Batenburg, A., & Bartels, J. (2017). Keeping up online appearances: How self-disclosure on Facebook affects perceived respect and likability in the professional context. *Computers in Human Behavior*, *74*, 265-276. doi:10.1016/j.chb.2017.04.033

Boyd, R. L., & Pennebaker, J. W. (2017). Language-based personality: A new approach to personality in a digital world. *Current Opinion in Behavioral Sciences*, *18*, 63-68. doi:10.1016/j.cobeha.2017.07.017

Bradley, S. W., Roberts, J. A., & Bradley, P. W. (2017). Experimental Evidence of Observed Social Media Status Cues on Perceived Likability. *Psychology of Popular Media Culture*, 1-15. doi:10.1037/ppm0000164

Cacioppo, J. T., Petty, R. E., & Feng Kao, C. (1984). The efficient assessment of need for cognition. *Journal of Personality Assessment*, *48*, 306-307.

Carré, A., Stefaniak, N., D'Ambrosio, F., Bensalah, L., & Besche-Richard, C. (2013). The Basic Empathy Scale in Adults (BES-A): Factor structure of a revised form. *Psychological Assessment*, *25*(3), 679-691. doi:10.1037/a0032297

Chaiken, S., & Eagly, A. H. (1976). Communication modality as a determinant of message

    persuasiveness and message comprehensibility. *Journal of Personality and Social*

    Psychology, *34*(4), 605-614. doi:10.1037/0022-3514.34.4.605

Chaiken, S., & Eagly, A. H. (1983). Communication modality as a determinant of persuasion:

    The role of communicator salience. *Journal of Personality and Social Psychology*, *45*(2),

    241–256. doi:10.1037/0022-3514.45.2.24

Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of

    psychopathology. *Journal of Consulting Psychology, 24*(4), 349-354.

Darbyshire, D., Kirk, C., Wall, H., & Kaye, L. (2015). Don't Judge a (Face)Book by its Cover:

    Exploring Judgement accuracy of others' personality on Facebook. *Computers in Human*

    Behavior, *58*. 380-387. doi:10.1016/j.chb.2017.04.056

Errasti, J., Amigo, I., & Villadangos, M. (2017). Emotional uses of Facebook and Twitter: Its

    relation with empathy, narcissism, and self-esteem in adolescence. *Psychological*

    Reports, *120*(6), 997-1018. doi:10.1177/0033294117713496

Frost, P., Casey, B., Griffin, K., Raymundo, L., Farrell, C., & Carrigan, R. (2015). The influence

    of confirmation bias on memory and source monitoring. *Journal of General Psychology*,

    142(4), 238-252. doi:10.1080/00221309.2015.1084987

Gross, J. J. (2002). Emotion regulation: Affective, cognitive, and social consequences.

    Psychophysiology, 39, 281–291. doi:10.1017.S0048577201393198

Guadagno, R. E., Muscanell, N. L., Rice, L. M., & Roberts, N. (2013). Social influence online:

    The impact of social validation and likability on compliance. *Psychology of Popular*

    Media Culture, *2*(1), 51-60. doi:10.1037/a0030592

Guerra, P.H.C., Wagner, M., Cardie, C., & Kleinberg, R.D. (2013). A Measure of Polarization on Social Media Networks Based on Community Boundaries. *In proceedings of the International AAAI Conference on Web and Social Media (ICWSM-13)*. 215-224.

Jolliffe, D., & Farrington, D. P. (2006). Development and validation of the Basic Empathy Scale. *Journal of Adolescence, 29,* 589–611. doi:10.1016/j.adolescence.2005.08.010

Knobloch-Westerwick, S. (2015). *Choice and preference in media use: Advances in selective exposure theory and research.* New York, NY: Routledge.

Koroleva, K., & Kane, G. C. (2017). Relational affordances of information processing on Facebook. *Information & Management*, *54*(5), 560-572. doi:10.1016/j.im.2016.11.007

Kraus, M.W. (2017) Voice-Only Communication Enhances Empathic Accuracy. *American Psychological Association*, *72*(7), 644-654.

Lord, C., Ross, L., and Lepper, M. (1979). Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence. *Journal of Personality and Social Psychology*, *37*(11):2098–2109.

McCrae, R. R. & Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, 52, 81-90.

Mou, Y., Miller, M., & Fu, H. (2015). Evaluating a target on social media: From the self-categorization perspective. *Computers in Human Behavior*, *49,* 451-459. doi:10.1016/j.chb.2015.03.031

Nestler, S. (2010). Belief perseverance: The role of accessible content and accessibility experiences. *Social Psychology*, *41*(1), 35-41. doi:10.1027/1864-9335/a000006

Okdie, B. M., Guadagno, R. E., Bernieri, F. J., Geers, A. J., & Mclarney-Vesotski, A. R. (2011). Getting to know you: Face-to-face vs. online interactions. *Computers in Human Behavior, 27,* 153–159.

Pelled, A., Zilberstein, T., Tsirulnikov, A., Pick, E., Patkin, Y., & Tal-Or, N. (2017). Textual primacy online: Impression formation based on textual and visual cues in Facebook profiles. *American Behavioral Scientist*, *61*(7), 672-687. doi:10.1177/0002764217717563

Pennebaker, J. W., Booth, R.J., & Francis, M.E. (2007). Operation Manual for Linguistic Inquiry and Word Count.

Rajsic, J., Wilson, D.E., & Pratt, J. (2015). Confirmation bias in visual search. *Journal of Experimental Psychology: Human Perception and Performance*, 41(5), 1353-1364).

Smith, A., & Anderson M. (2018). Social Media Use in 2018. Pew Research Center. Retrieved from http://www.pewinternet.org/2018/03/01/social-media-use-in-2018/

Snyder, M., & Rothbart, M. (1971). Communicator attractiveness and opinion change. *Canadian Journal of Behavioural Science / Revue Canadienne des Sciences du Comportement, 3*(4), 377-387. doi:10.1037/h0082280

Trapnell, P. D., & Wiggins, J. S. (1990). Extension of the Interpersonal Adjective Scales to include the Big Five dimensions of personality. *Journal of Personality and Social Psychology*, *59*(4), 781-790. doi:10.1037/0022-3514.59.4.781

Tyson, N.G. (Neiltyson). (2017, February 16). "Almost all armed conflict in the history if the world cam about because opposing sides believed different things to be true." [Twitter Post]. Retrieved from: https://twitter.com/neiltyson/status/832352653053095937?lang=en

Westerwick, A., Johnson, B. K., & Knobloch-Westerwick, S. (2017). Confirmation biases in selective exposure to political online information: Source bias vs. content bias. *Communication Monographs*, *84*(3), 343-364. doi:10.1080/03637751.2016.1272761

Wiggins, J., Trapnell P., & Phillips N. (1988). Psychometric and Geometric Characteristics of the Revised Interpersonal Adjective Scales (IAS-R). *Multivariate Behavioral Research*, *23*(4), 517-530. doi:10.1207/s15327906mbr2304_8

Yang, J., Barnidge, M., & Rojas, H. (2017). The politics of 'Unfriending': User filtration in response to political disagreement on social media. *Computers in Human Behavior*, *70*, 22-29. doi:10.1016/j.chb.2016.12.079