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## Misleading Information in Social Media News: How Bias Affects Perceptions

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# Misleading Information in Social Media News: How Bias Affects Perceptions

## Abstract

Correcting misinformation is challenging because of the difficulty in changing biases (Ecker et al., 2013). Biased decisions are learned behaviors. People choose information that they are more frequently exposed to and from which they gather rewards (Sali, Anderson, & Courtney, 2016). Social media has become a new reward system for biased information (Neubaum et al, 2016). The difficulty of correcting misinformation multiplies as people have begun choosing social media as their preferred news platform. Social media news has recently focused its reporting on police (Sela-Shayovitz, 2015). Among participants who saw a misleading clip before a longer video of a police/suspect interaction, those with negative perceptions of police would be less likely to change their perspectives after seeing the full video. This study utilized results from 23 adults ages 18 to 77. Participants were given surveys on media consumption and a modified Global Attitudes Toward Police Scale (Hurst & Frank, 2000). Participants were directed towards one of two scenarios: 1) viewing a short, misleading clip from a longer video or 2) viewing a short, representative clip from a longer video. Participants were then given a survey to record their impression of their video clip. Participants were then shown the full video, followed by the survey. Results demonstrated that participants' personal bias did not have a significant influence on their perceptions of what occurred during the videos until viewing the full video. Results of showed the prevalence of confirmation bias over personal bias. Results also found that the representative video had a positive impact on participants' perceptions despite previously held biases, mirroring the findings of previous research on the impact of positive messages in television (Brown, 1992). As social media news expands, and information becomes easier to send and receive, it is important to explore its uses as a positive tool.

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Misleading Information in Social Media News: How Bias Affects Perceptions

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### Abstract

Correcting misinformation is challenging because of the difficulty in changing biases (Ecker et al., 2013). Biased decisions are learned behaviors. People choose information that they are more frequently exposed to and from which they gather rewards (Sali, Anderson, & Courtney, 2016). Social media has become a new reward system for biased information (Neubaum et al, 2016). The difficulty of correcting misinformation multiplies as people have begun choosing social media as their preferred news platform. Social media news has recently focused its reporting on police (Sela-Shayovitz, 2015). Among participants who saw a misleading clip before a longer video of a police/suspect interaction, those with negative perceptions of police would be less likely to change their perspectives after seeing the full video. This study utilized results from 23 adults ages 18 to 77. Participants were given surveys on media consumption and a modified Global Attitudes Toward Police Scale (Hurst & Frank, 2000). Participants were directed towards one of two scenarios: 1) viewing a short, misleading clip from a longer video or 2) viewing a short, representative clip from a longer video. Participants were then given a survey to record their impression of their video clip. Participants were then shown the full video, followed by the survey. Results demonstrated that participants' personal bias did not have a significant influence on their perceptions of what occurred during the videos until viewing the full video. Results showed the prevalence of confirmation bias over personal bias. Results also found that the representative video had a positive impact on participants' perceptions despite previously held biases, mirroring the findings of previous research on the impact of positive messages in television (Brown, 1992). As social media news expands, and information becomes easier to send and receive, it is important to explore its uses as a positive tool.

*Keywords:* bias, police, perceptions, social media

### Misleading Information in Social Media News: How Bias Affects Perceptions

As of 2014, 74% of all adults in the United States use a social network site (Social Networking Fact Sheet, 2014). With the rise of use of social media, society's reliance on technology and the internet as the source for sending and receiving minute-by-minute updates of life events is growing (Rich & Zaragoza, 2016). Not only do people access social media via personal computers, but with developing technology social media updates can now scroll by on people's watches. Social media use has become unavoidable. Even employers rely on the various platforms as a way to vet probable employees, utilizing the search bar as a hiring tool. In 2014, LinkedIn, a social networking site specifically designed for workers looking to both enter and maintain their presence in the professional world, had 28% of online adult users on their platform (Social Networking Fact Sheet, 2014). Due to its wide popularity, social media has also become a major place for information to spread, turning social media sites into one of the larger sources which people turn to for news (Turcotte, York, Irving, Scholl, & Pingree, 2015).

Reporting the news comes with a high level of responsibility as the public relies on news sources for quick, but accurate information. Though quick, social media reporting lacks quality control and dedicated fact-checking, allowing social media news to disseminate distorted information. This is problematic because misinformation can have a large impact on the outlet's readers. The spread of misinformation can also impact readers' views of future information. Studies of misinformation in news media demonstrate that once information has been delivered to the public it is difficult to retract or change, and thus the misinformation can become part of the new narrative surrounding the story (Rich & Zaragoza, 2016).

This study will employ the definition of misinformation as used in studies of the continued influence effect (Ecker, Lewandowsky, Cheung, & Maybery, 2015). The continued

influence effect focuses on how information is received and processed. Specifically, it refers to information which is initially presented as factual but later turns out to be false and has a continued influence on the perception of the information (Ecker et al., 2015). Misinformation in these cases refers to the information which is initially, and mistakenly present which is later corrected (Rich & Zaragoza, 2016).

Because of the complication in correcting misinformation, it can be found to have a large effect on the perception of crime stories as well. Sensational news stories are made even more so in the public forum (Heath, 1984). In the case of Amanda Knox, an American student living abroad in Perugia, Italy, accused of murdering her roommate, and pardoned of murder multiple times via jury trial (Yahr, 2016). However, public opinion of her in Perugia is that she is overwhelmingly guilty, despite lack of concrete evidence, due to the way she was negatively portrayed in the news (Yahr, 2016). The story grew to be about more than just discovering who had murdered Meredith Kercher, but instead on discovering everything about Amanda, even if it was not true (Yahr, 2016).

Mirroring traditional news outlets, social media news has recently become a main source of reporting on police officers in the wake of the events in Ferguson and the Michael Brown shooting (Sela-Shayovitz, 2015). In reporting these events, the news grows less confined to traditional reporters with professional equipment and, instead is now reported by anyone with a phone and an internet connection. The detriment to using this style of social media and amateur reporting is that many of its reports are short videos that document pieces of a much longer interaction and/or take information out of context.

### **Social Media as a News Source**

As social media sites have become increasingly popular, people have begun to transition away from traditional media. Social media sites have become the “go-to” place for socializing, entertainment, and even news (Turcotte et al., 2015). According to Turcotte et al., 2015, due to this shift, people have begun to distrust traditional news outlets, instead favoring sources and stories that have been recommended and shared by their friends online. Considering that there are typically shared beliefs and values between friends it is unsurprising that people tend to prefer these articles over those presented by traditional news outlets (Lönnqvist & Itkonen, 2016). Deutsch & Gerard, 1955, found that even when friends do not have the same beliefs, group and social influence can have unintentional effects on the behaviors of everyone in the group.

The effects of social influence can be detrimental in terms of misinformation in news. The spread of misinformation is more impactful when it is conveyed through social interaction (Gabbert, Memon, Allan, & Wright, 2004). Repeated information is more widely believed, and misleading information can be even more believable when it is repeated multiple times from the same person (Foster et al., 2012). In the world of social media sharing articles, videos, or even another person’s post is how news is spread. The more shares a post has, the more positively it is seen, and the more the viewer wishes to pass the information forward (Neubaum, Rösner, Ganster, Hambach, & Krämer, 2016). This sharing and valuing of popular, rather than necessarily credible, information has created the large and growing problem of the spread of misinformation online (Del Vicario et al., 2016). The problem is amplified when people intentionally only share and receive information from those who share their beliefs, ignoring information that contradicts those beliefs including possible corrections (Del Vicario et al., 2016).



### **Misinformation in the News**

Misinformation, once in the public forum, becomes part of the narrative surrounding an event. This misinformation is generally hard for the public to distinguish from accurate information (Ecker, Lewandowsky, Chang, & Pillai, 2014; Rich & Zaragoza, 2016), and even harder for news outlets to correct (Ecker, Lewandowsky, Fenton, & Martin, 2013). The difficulty of identifying and correcting misinformation is greater when a news source does not state outright what is later found out to be an error. When misinformation never directly addressed, it allows the public to develop their own narrative, which cannot be easily dissuaded with facts that do not match their imagined truth (Rich & Zaragoza, 2016). In the case of Amanda Knox, even after successfully appealing in 2011, Knox was retried and found guilty, in Italy, in 2014, based on the solely convicted party's testimony that he did not act alone in the crime (Yahr, 2016). In 2015, Knox again appealed and won, with the judge declaring that the sensationalism of the news clouded judgement during the investigation (Philipson, 2015).

Misinformation can then become part of the new social narrative surrounding an event and can impact future views of the incident later. Even after a retraction or correction has been made, the memory of the initial misinformation will be easier to remember, especially when the initial misinformation was only implied (Ecker et al., 2013). When presented with new information, people use old experiences as the measure by which to judge the new information (Delplanque, Coppin, Bloesch, Cayeux, & Sander, 2015); therefore, attempting to correct misinformation is difficult, not because of the nature of the information, but because of the difficulty in changing people's biases regarding the situation.

Correcting misinformation is increasingly difficult in the new climate of social media reporting where information can be shared quickly with thousands of people at the click of a

button (Del Vicario et al., 2016) and misinformation can even more easily spread into society as truth. Misinformation is further perpetuated when in-group bias influence its spread (Turcotte et al., 2015). This is a particularly prevalent problem on social media, where “friends” who are perceived as highly knowledgeable and trustworthy share information from a news source. This perpetuates the idea that the source is trustworthy as well, regardless of content. A problem develops if the content of this news source is incorrect but goes unchallenged, or if the information is shared, due to a “friends” clout, causing the misinformation to go unchallenged and biases to persist.

### **Impact of Bias**

People who are only exposed to biased perspectives on news events develop skewed expectations of how events occur in real life (Doob & Macdonald, 1979). These biases can lead to skewed perceptions of day to day interactions. Confirmation bias has a large effect on how information is viewed by individuals. Confirmation bias is the tendency to look for and prefer information which verifies previously held beliefs (Heshmat, 2015). Seeking out information which reaffirms beliefs is a common occurrence, as is disregarding information which challenges these beliefs. A study by Knobloch-Westerwick, Johnson, & Westerwick, 2015, looked at the effects of confirmation bias within the political sphere. The study found that exposing participants to information which reinforced beliefs about their candidate reinforced attitudes, while exposure to contradictory information was challenged and more difficult for participants to accept (Knobloch-Westerwick, Johnson, & Westerwick, 2015).

Individuals disregard evidence which challenges held beliefs, while reinforcing information is quickly processed and accepted (Knobloch-Westerwick, Johnson, & Westerwick, 2015). Biases affect our expectations which affect our behavior. This can then actively change

our memories of how events take place (Najdowski, Bottoms, & Goff, 2015). In Najdowski, Bottoms, & Goff's, 2015, study on the impact of stereotype threat on police interactions found that participants' anticipated threat acted as a predictor for how they would perceive future interactions with the police. This cyclical confirmation bias can cause negative interactions with police which in turn reinforce antipolice biases (Najdowski, Bottoms, & Goff, 2015).

### **Bias and the Police**

Mirroring traditional news outlets, social media news has recently focused much of its reporting on police, focusing on sensationalized events (Sela-Shayovitz, 2015). In the case of Ferguson and the Michael Brown shooting, a controversial interaction between an officer and Brown became the start of a nation-wide movement after the grand jury decision that the officer did nothing wrong (Buchanan, 2014). While police officers are no strangers to media scrutiny (Sela-Shayovitz, 2015), social media's large influence, and ability to provide nonstop coverage, has provided a different environment than has been seen in the past. While police departments are still trying to perfect their use of social media sites as their own way of reporting news any bystander can record and disseminate an event as it happens (Grimmelikhuijsen & Meijer, 2015). While this could be to perpetuate the spread of information within the bystander's group, it could also be due to their own need to seek justice or acceptance for their side (Neubaum et al., 2016). People will also distribute information, acting on what they believe are pro-social motives such as sharing videos of someone wronged as a way to right it, or to receive positive affirmation from their social group (Neubaum et al., 2016).

When presented with new information, people use old experiences as the measure by which to judge it (Delplanque et al., 2015). Despite what is known about the influence of misinformation in the media, very little research exists on the effect of dissemination of

misinformation on social media. Further, little research exists on how the perceptions of the subjects in the news stories effects perpetuation of misinformation. Utilizing an experiment and a staged video of a police interaction, the present study examines perpetuation of misinformation via social media and if this misinformation will be effected by previously held negative biases.

Hypothesis 1: Among participants who see a misleading clip before the full video, those with negative perceptions of police will be less likely to change their answers after seeing the full video.

Hypothesis 2: Participants who first see a representative clip of the full video will give more answers that are supportive of the officers' actions than those who see a misleading video clip before seeing the full video.

Hypothesis 3: Participants who view an representative clip, followed by the full video, will have more answers which are reflective of the full video clip than participants who view a misleading video clip, followed by the full video.

### **Method**

This mixed group design compares perpetuation of misleading information across multiple levels. The two levels included: 1) viewing a short misleading video clip followed by the full video, and 2) viewing a short representative video clip followed by the full video. The participants' answers after viewing the short video clip will be compared to their answers after viewing the full video clip to determine if their perception of the situation has changed. This experimental design also compared participants' self-reported attitudes toward police to rates of change of perception in order to determine how much of an effect these biases had on participants' views.

### **Participants**

This study utilized a sample of 23 adults who were recruited from university classes, social media, and via email. Eligibility for this study included being able to competently read and understand spoken English, being at least 18 years old, and having access to the online survey.

The sample was composed of 48% women. Participants ranged from age 18 to 77 with a mean age of 35.8 with a standard deviation of 18.3. The majority of the sample identified as White (56.5%), with the other categories all making up less than 25% independently. The distribution of media consumption of participants was 79.2% using a type of social media, 66.7% watching TV, 16.7% reading the news both online or in print, and 54.2% using the radio as a form of media consumption (categories were not mutually exclusive). Participation in the study was completely voluntary, and the study procedures approved by the university's Institutional Review Board.

## **Materials**

**Global Attitudes Toward Police Scale.** Attitudes towards police officers were assessed using the Attitudes Towards Police Scale (Hurst & Frank, 2000). For the purpose of this study, only the subscale assessing global attitudes were used. The measure asked participants to rate their perceived feelings about how they feel about police officers in general, including satisfaction, trust, overall efficiency, and contentment (Hurst & Frank, 2000). Distractors were also added to this measure as to ensure participants were not primed for later parts of the study. Distractors included the same global attitude scale for other jobs (i.e., firefighters, bankers, teachers, and construction workers) randomly mixed with the global Attitudes Toward Police items. These jobs were chosen as it was likely participants from all backgrounds had some perception of or interaction with these professions. Self-reporting of satisfaction, trust, overall efficiency, and contentment with these five professions were rated on a five-point Likert scale.

For all items, responses ranged from 1 = *strongly disagree* to 5 = *strongly agree*. The global Attitudes Toward Police Scale has demonstrated strong internal consistency in previous research with a Cronbach alpha coefficient of .887 (Hurst & Frank, 2000).

**Media Consumption.** Participants were asked to answer questions about media consumption from social media and traditional media platforms and reported on the types of social media they used. Participants were asked to select all types of media that they use, and all the social media sites they participate in. Participants were also given the option of submitting other options, if one is not listed.

**Police Interaction Video.** Participants in all condition watched part or whole of a video of a subject's interaction with the police. The video shows a scenario in which a subject is seen after being pulled over by the police for running a stop sign. While the subject complies with the officer's request for information, he gets agitated after learning he will be receiving a ticket for running the stop sign. The subject refuses to sign the ticket. Upon the subject's refusal, the officer calls their partner to ask the subject to sign the ticket and explain the repercussions should he continue to refuse. The subject continues to refuse sign the ticket, prompting the officer to arrest the subject for failure to sign the ticket. The police officers then ask the subject to leave the car, and he does, but continues to state that he do not deserve to be ticketed nor do he deserve to be arrested. The officers continue and arrest the subject. The video ends with the subject's arrest and being placed into the back of the patrol car. The total video was 08:11 minutes.

**Post-video Impressions Survey.** The participants' attitudes towards the subject and police officer in their video condition were recorded via survey. The survey consisted of two free response questions and three questions scored on a five-point Likert scale. The first question presented to participants addressed participants' attention to the video question by asking what

they observed. The second question asked participants to report their opinions on whose behavior, in the video, they disagreed with. Responses to the second question were coded as being positive, negative, or neutral toward police and the suspect. The next three questions also addressed participants' perceptions of the police/suspect interaction, addressing if the suspect deserved to be arrested, if the officer used excessive force, or if the officer the officer violated the suspect's rights. For the perception questions, responses ranged from 1 = *definitely yes* to 5 = *definitely no*. Questions were developed for this study.

### **Procedure**

Participants were informed that their participation in the study was voluntary and that it consisted of completing a survey, consisting of demographic questions, media consumption and social media use, and measures to assess attitudes towards police. Participants were then randomly assigned to one of two conditions. In condition one, participants will view a short and misleading clip from the video. The short video clip in this condition does not accurately represent the events of the scenario, describe that it was just the arrest portion. The video is then followed by a short survey, which assesses the participants' impressions of the video. Participants will then be shown the full video from which the misleading clip was taken and again asked to complete the video impression survey again.

In condition two, participants will view a short and accurate clip from the video. The short video clip in this condition will accurately represent the events of the scenario, describe what it contains. The video is then followed by the video impressions survey. Participants will then be shown the same full video as participants in condition one, and will be asked to complete the video impression survey again. Following the completion of the videos and the video

impressions survey, all participants will be taken to a demographics questionnaire including items regarding gender, age, ethnicity, and previous relationships and interactions with police. Upon completing the survey or opting out, participants will see a debriefing page explaining that they may contact the author if they wish to see the results.

### **Results**

To investigate differences in perceptions of video clips before seeing the full video, an independent-samples t-test was calculated comparing the mean video perception scores of participants who saw the representative clip to participants who saw the misleading clip. No difference was found ( $t(21) = -0.096, p < .05$ ). The mean of participants who saw the representative clip who gave answers that were reflective of the full video ( $m = 3.82, sd = 1.18$ ) was not significantly different from the mean of participants who saw the misleading clip ( $m = 3.86, sd = 0.958$ ). There is no significant difference in the answers of participants who saw the misleading video clip and the answers of participants who saw the representative clip (see Table 1).

In order to discover if there was a difference in participants' perceptions after viewing the full video, an independent-samples t-test was calculated comparing the overall video perception mean scores after seeing the full video of the answers given by participants who saw the representative clip to the mean scores of the answers given by participants who saw the misleading clip. A marginally significant difference was found ( $t(21) = 2.484, p = .041$  (see Table 1). The mean of participants who saw the representative clip, after seeing the full video ( $m = 4.67, sd = 0.46$ ) was slightly different from the mean of participants who saw the misleading clip ( $m = 4.03, sd = 1.02$ ).



To assess the effect of participants' perceptions of police on seeing the misleading video, a Pearson correlation was calculated examining the relationship between participants' negative perceptions of the police and perceptions of the final video among those who saw the misleading clip. A weak non-significant correlation was found ( $r(10) = 0.255, p < .05$ ) (see Figure 1). Participants with a negative perception of the police, who viewed the misleading clip, were not less likely to change their answers.

### **Supplemental Analysis**

Upon finding no significant difference between the answers of participants after being exposed to the full video, a paired samples t-test was used to assess the change in answers of those who first saw the misleading clip followed by the full video. No significant difference was found ( $t(11) = -1.593, p < .05$ ). The mean of participant's answers after viewing just the misleading clip ( $m = 3.86, sd = 0.96$ ) was not significantly different from their answers after viewing the full video ( $m = 4.03, sd = 1.02$ ). Participants' answers after seeing the misleading video were not different after seeing the full video (see Table 1).

When no significant change in answers was found within the group that saw the misleading clip, a paired samples t-test was conducted, assessing the change in answers within the group which saw the representative clip (see Figure 2). A significant difference was found ( $t(10) = -3.220, p = .009$ ). The mean of participant's answers after viewing the representative clip ( $m = 3.82, sd = 1.18$ ) was significantly different from their answers after viewing the full video ( $m = 4.67, sd = 0.45$ ). Participants' answers after seeing the representative video changed to be more positive after seeing the full video (see Table 1).

After a significant relationship was found within the representative group, a Pearson correlation was calculated looking for the effects of police bias on participants' answers. A

negative correlation was found ( $r(9) = -0.576, p = .064$ ). This correlation showed that participants with more positive views of the police were less likely to change their answers, after seeing the full video, while, participants with more negative views of the police, were more likely to change their answers (see Figure 3).

After a significant negative correlation was found between participants with negative views of police who saw the representative video, a relationship was looked for between perceptions of the police and answers given after viewing the full video. A Pearson correlation was calculated and a positive correlation was found ( $r(21) = 0.638, p = .001$ ). Participants with negative perceptions of the police gave more negative answers after viewing the full video (see Figure 4).

### **Discussion**

This study sought to find the effects of misinformation in social media and how bias affects the perpetuation of misinformation. Analysis found that negative bias played an influential role only after participants had been exposed to the full video, not before as was hypothesized. Those participants who were exposed to a misleading video clip, then the full video clip, demonstrated almost no change in answers after being exposed to the full video clip. However, participants exposed to a representative video clip, followed by the full video clip, showed a significant change in response. This is significant as results demonstrated no significant difference between the answers of participants who saw the misleading video clip and of the participants who saw the representative clip, before they were exposed to the full video clip. While further comparing, the group exposed to first a misleading clip, then the full video, and the group exposed to a representative clip, then the full video, no significant difference was found between their answers. The data, however, shows a trending difference between the two

conditions. While looking at the correlation between participants with a negative perception of the police, who viewed the misleading clip, and those with positive or neutral perceptions of the police, who viewed the misleading clip, a weak negative correlation was found.

The first hypothesis compared the answers of participants who were exposed to a misleading video clip to the answers of those who were exposed to a representative video clip. This intended to examine the difference between the two conditions. As no significant difference was found, it is possible that the video clips did not have a large enough difference in content. It is also possible that the videos presented a scenario in which there was not an extreme enough conflict. The video exposed participants to a scenario in which a subject was stopped and issued a ticket for a traffic violation, the subject was eventually arrested for refusing to sign and take the ticket. Generally, traffic stops are short interactions, where the individual is informed of their infraction, issued a ticket, and sent on their way. It is rare that traffic stops develop into a longer or more severe incident ending in an arrest. In this case, though the incident ended in arrest, it did not become violent, nor did the situation step outside a documentable police procedure.

The second hypothesis compared the answers of participants who were exposed to a misleading video clip followed by the full video to the answers of those who were exposed to a representative video clip followed by the full video. This was hypothesized due to past research on the perpetuation of misinformation showing that misinformation is incredibly difficult to correct, as the first information becomes enduring (Rich & Zaragoza, 2016). News outlets and social media attempt to attract viewers by presenting relevant events as soon as information is available (Turcotte et al., 2015). Reporting in this way means that information can come out before being thoroughly fact checked, and thus often corrections, or updates, must be made later. While comparing the difference in answers between those who saw a misleading video clip

followed by the full video, to the answers of those who saw a representative video clip followed by the full video, a marginally significant difference was found.

In order to further investigate the change in participants' answers, two supplementary analyses were conducted looking at the change in answers within the conditions. One analysis looked for a relationship within the group who saw misleading clip and the other looked for a relationship within the group who saw the representative clip. No significant difference was found between participants' answers after seeing the misleading video and after seeing the full video. However, there was a difference in participants' answers after seeing the representative video after seeing the full video. Participants' who saw the representative video changed their answers to be more positive after viewing the full video.

Finally, a correlation was looked for between negative views of the police and the change in answers between video clips and the full videos. Bias plays a large role in the perception of events (Eker et al., 2013). Per past research, those who had negative perceptions of the police before being exposed to the misleading video, should have had correspondingly negative answers about the misleading video, as it would have confirmed their negative perception of the police (Najdowski, Bottoms, & Goff, 2015). The participants in this scenario also should have had a difficult time giving positive answers after viewing the full video, as this would force them to challenge their negative bias. A weak negative correlation was found; however, it was not significant.

However, two supplementary analyses were conducted comparing police attitudes to the change in answers within the representative group, and to the perception of the of the full video, respectively. Analysis found that participants with negative views of police who saw the representative video were more likely to have positive perceptions of police after viewing the

full video. This shows further the effect that positive videos can have on negative perceptions of a group of people (Brown, 1991). The second analysis found that participants with negative perceptions of the police gave more negative answers after viewing the full video. This shows the expected difficulty is changing negative views, regardless of the information presented. However, when taken into consideration with the previous analysis shows ease of confirming a positive view in contrast to challenging a negative one, showing how confirmation bias is harder to change than personal beliefs.

In order to improve this study, several methodological areas could be addressed. Though the study was posted widely on various social media platforms, there was uniform ethnic demographics, resulting in a participant pool of 56.5% white, with the next highest majority identifying with two or more ethnicities. The study would have also benefited from a larger participant pool. This could have been improved by finding a way to lower the drop-out rate, including shortening the survey length.

Another methodological limitation was within the videos. The videos would have benefited from being piloted before being used in the survey in order to insure that there was a difference in elicited response between the misleading and representative video. To prevent unnecessary psychological harm, the topic of the video was kept neutral. The video showed a traffic stop which did not get violent, on either side, and avoided escalation (screaming, cursing, use of derogatory language) during interaction between the subject and the officers. Video of any human rights violation were purposely avoided. The topic of a traffic stop was chosen to be the most relatable, as approximately 41 million drivers receive a traffic ticket every year making this a common issue (Quoted, 2015). Within the study's participants, 61% reported receiving a traffic

ticket at some point (Quoted, 2015). Had a more polarizing topic been chosen, personal bias might have had a greater impact on participant's response.

Conducting this research brought up many question for future research. Firstly, there was a question of whether introducing a more negative situation would create a more dramatic difference in perceptions between a misleading scenario and a representative scenario. As stated previously, the videos used in this study focused on an interaction during a traffic stop. Had the videos presented a more violent scenario, such as creating the question of the violation of the subjects' rights, previous research on violence in television shows that the participants would have had a more intense reaction to the video, based on their condition (Doob & Macdonald, 1979). This is because people can develop a relationship with those they see in videos, which could allow them to imagine themselves in the role of the subject, and thus empathize with their situation (Mittell, 2010). If this relationship is formed, according to Doob & Macdonald, 1979, putting the subject into a violent and unwanted situation should provoke a more intense reaction from participants, especially if they were only exposed to partial information.

The second question that concluding this study brought up was whether positive videos cause a more positive perception, regardless of previously held biases. Previous research says that positive videos can have a positive impact on shaping people's views (Brown, 1991). Previous research has also looked into the effect of the group dynamic and how people socialize online, as well as researching the function of social media as a reward system for confirming behaviors (Del Vicario et al., 2016; Neubaum et al., 2016). However, the majority of these studies focus on the negative influences of social media. Studies have shown that the internet is following a similar developmental trend and has been seen to have a similar impact as television (Kraut, Patterson, Lundmark, Kiesler, Mukopadhyay, & Scherlis, 1998). With this in mind, the

study of the influence of social media should be not be treated as studying a new system, but replicate studies done on the influence of television.

As with television, the effect of social media on its users will only grow over time. Focusing on the increased influence of social media lead to a third question of if social media videos could have a positive impact, such as that found in educational television and prosocial entertainment television. Studies have found that educational and prosocial entertainment can have a positive effect, especially when viewed by children (Friedrich & Stein, 1975). According to Mares & Pan, 2013, *Sesame Street*, a children's television show which focuses on diversity and inclusion can be influential as a supplemental learning tool for children, and can help them develop more positive attitudes towards outgroups. Social media is generally seen a negative tool. However, within social media, there are prosocial messages and "pages" which users have access to. In a series posted to both YouTube and Facebook, SeriouslyTV host Dylan Marron uses his platform to discusses stereotypes against people of different communities and then has people from those communities respond to the stereotype (Seriously TV, 2017). A study looking into the effect of positive and diverse messages on social media would help understand the potential influences of social media.

### **Conclusion**

The intention of this study was to see if a previously held bias would affect the correction of misinformation in a social media setting. Though bias was found to have no effect on the correction of misinformation, this study did find confirmation bias to play a large role in the success of correcting misinformation. While this study utilized the condition of a traffic stop, future studies should consider creating a more polarizing scenario from which to create the misleading and representative scenarios. Data from this study also showed how positive

messages can have a positive impact despite previously held biases. Future studies should explore this possible relationship between previously held bias and exposure to positive messages. With society's growing reliance on technology, it is also important to explore the influence of positive messages and their prevalence on social media.



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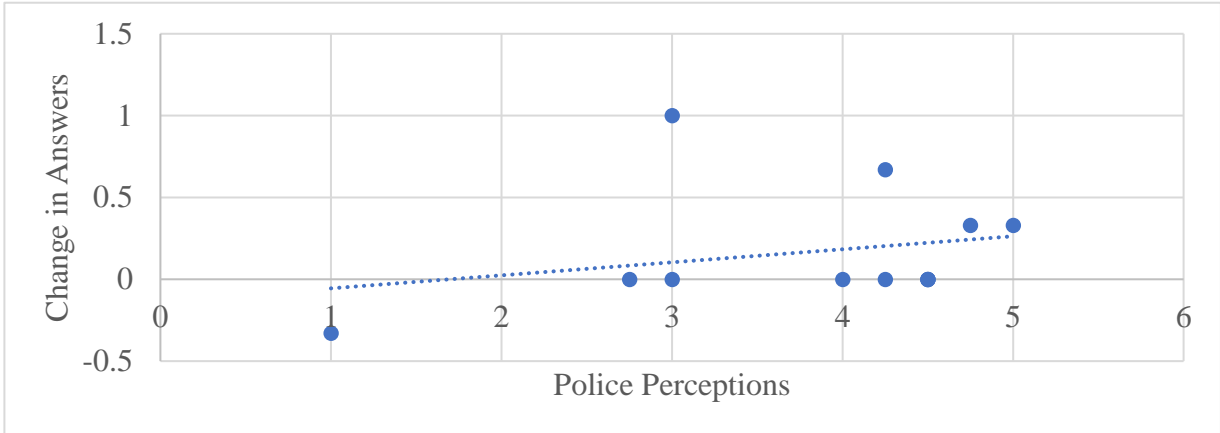


Figure 1. Correlation between participants within misleading group and perception of police.

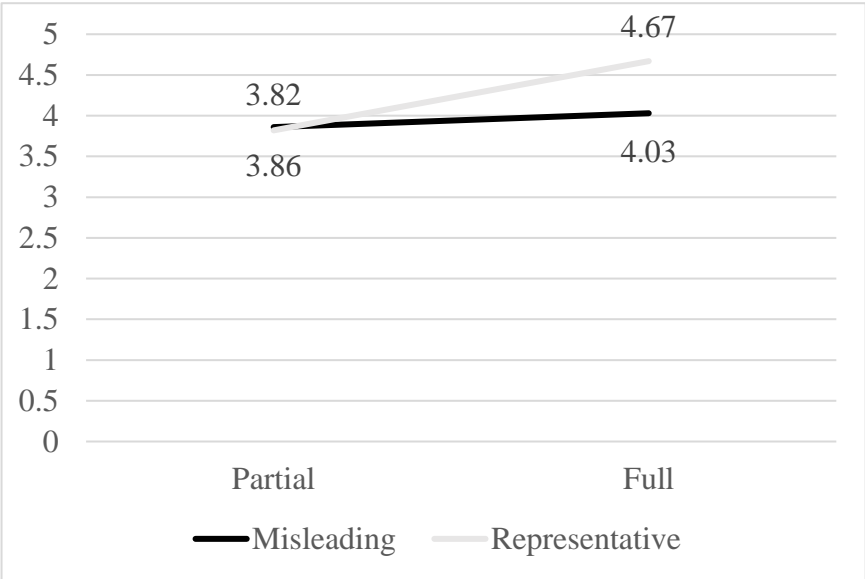


Figure 2. Paired samples t-tests comparing change in answers within misleading group to change in answers within representative group.

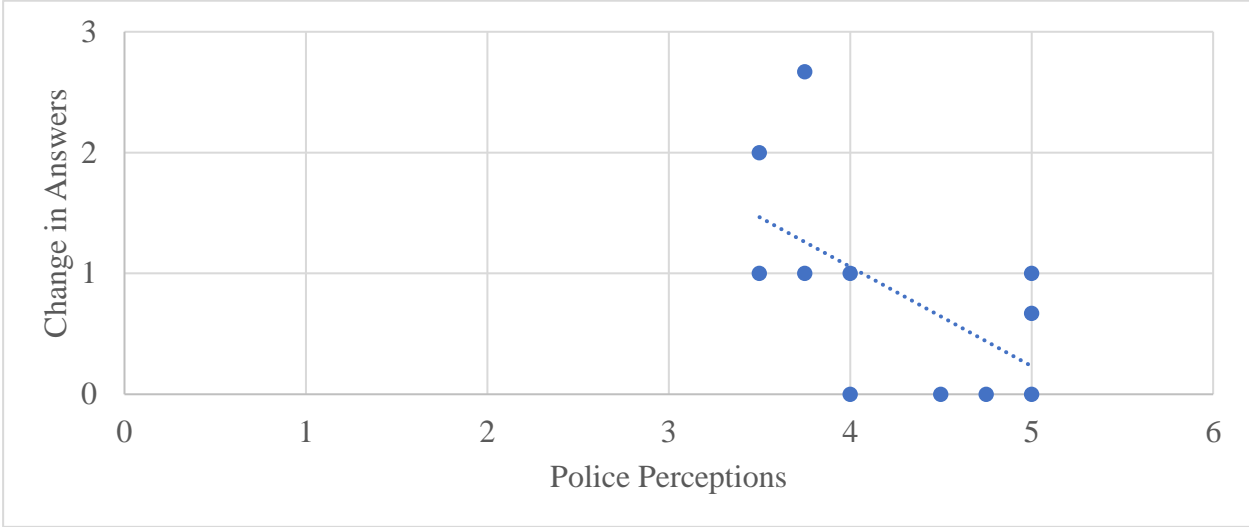


Figure 3. Correlation between participants within representative group and perception of police.



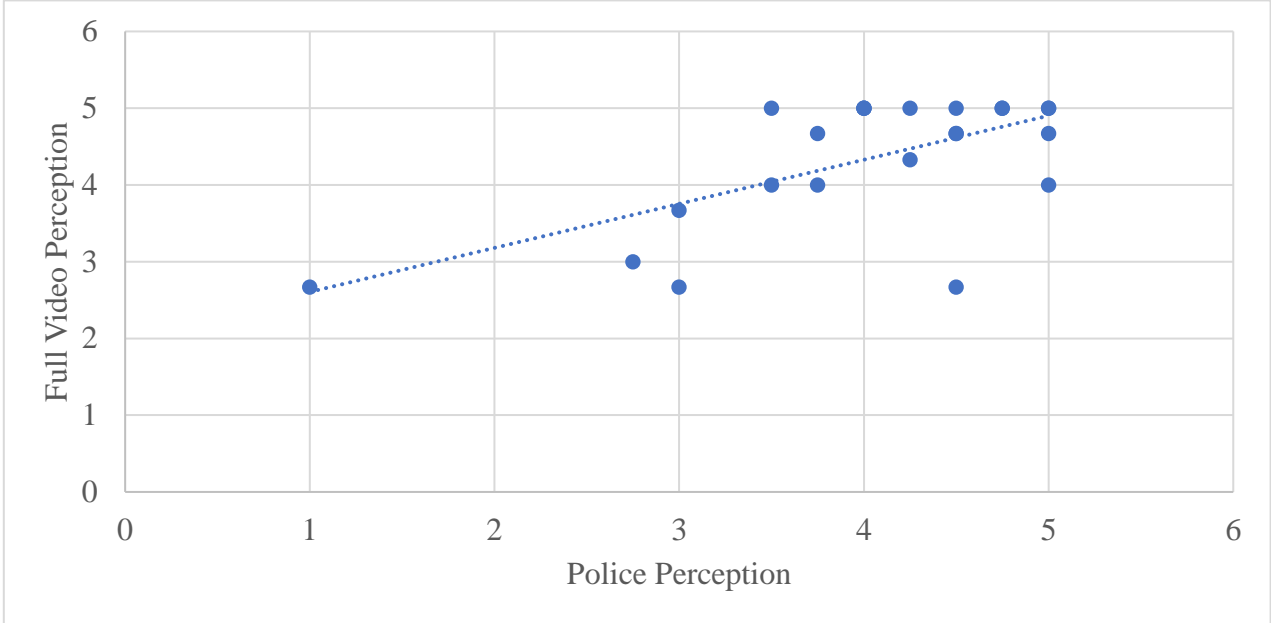


Figure 4. Correlation between perceptions of full video and perception of police.

Table 1.

*Sample independent and paired samples t-tests with descriptives*

	Independent	M <sub>before</sub>	SD <sub>before</sub>	Independent	M <sub>after</sub>	SD <sub>after</sub>	<b>Paired</b>	M <sub>change</sub>	SD <sub>change</sub>
	Sample <i>t</i>			Sample <i>t</i>			Sample <i>t</i>		
	<b>-0.096</b>			<b>2.484*</b>					
Representative		3.82	1.18		0.85	0.87	<b>-3.220**</b>	4.67	0.45
Misleading		3.86	0.958		0.17	0.36	<b>-1.593</b>	4.03	1.02

*Note.* \* $p < .05$ , \*\* $p < .01$ .