

The Effects of Source, Source Credibility, and Police on Misinformation Acceptance

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Abstract

There are multiple sources from which misinformation may be presented to an eyewitness following an event. Previous studies have shown that the perception of the individual conveying misinformation can impact the likelihood that another individual will accept that false information. We examine how perceptions of source (police officer, neighbor) as well as their perceived trustworthiness (high, low) may impact the acceptance of misinformation. 125 participants watched a video of a crime and then read a report written about the crime containing misinformation (control, contradictory, additive). Each participant then completed a survey measuring the amount of misinformation accepted or rejected. Our results showed that participants were most accurate when answering questions containing control misinformation as opposed to contradictory or additive misinformation.

Misinformation Effect & Eyewitness Memory

The lack of reliability of eyewitness testimony has been studied numerous times in a broad range of scenarios (Huff & Umanath, 2018). People have difficulties in recalling certain elements of an event. Even more troubling, is the matter of susceptibility to accepting false suggested information and later reporting it as though it occurred in the event. This phenomenon is known as the misinformation effect (Loftus & Palmer, 1974). There are two sources contributing to the memory of the eyewitness: the event itself and post-event misinformation (Chambers & Zaragoza, 2001). A potential consequence of exposing a witness to misleading information is that they may come to remember certain objects, differing appearances, or an entire incident that is not in line with what they actually witnessed (Chambers & Zaragoza, 2001). Outside sources can have an effect on eyewitness memory due to the fact that it is presented post-event (Paterson & Kemp, 2006).

There are multiple sources from which misinformation may be presented to an eyewitness. Some potential sources of misinformation are news reports, co-witnesses, and police. Research has examined each of these sources and found that they all solicit misinformation effects (Paterson & Kemp, 2006; Vornik et al., 2003; Williamson et al., 2013). This is because viewing or reading new information, even if it is false, can be conflated with the original memory of that event, resulting in the misinformation effect (Paterson & Kemp, 2006). Research has examined whether the source of the misinformation impacts the amount of misinformation accepted. Co-witness misinformation has been found to have an especially strong influence on eyewitness memory (Paterson & Kemp, 2006). Research also shows that power and perceived social attractiveness can influence the amount of misinformation accepted (Vornik et al., 2003). Additionally, when a source of information is viewed as possessing more expertise, and therefore

credibility, individuals are more likely to conform their memory with that source (Williamson et al., 2013).

One possible source of misinformation in eyewitness memory is police officers. Eyewitnesses are interviewed by police to help them come to an understanding of the crime, to gather clues, and to help identify the culprit. To our knowledge no previous research has examined the impact of police officers as a source on misinformation acceptance. However, existing research has examined qualities of sources and how they impact misinformation acceptance. Authority, credibility, and trustworthiness are all important characteristics in judging a source that have been studied in relation to how they impact misinformation acceptance. Those who regard an individual as having high authority are more susceptible to misleading information (Vornik et al., 2003). Similarly, misleading information is more likely to be accepted if the source of that misinformation is viewed as being more credible or experienced in a certain field (Williamson et al., 2013). Trustworthiness also plays a role in misinformation acceptance; if misleading information is presented by a source that is thought to be potentially deceptive, that source is more likely to be viewed as not trustworthy, and misinformation is more likely to be rejected (Dodd & Bradshaw, 1980). Next, we turn to the impact of these qualities on misinformation acceptance and then we discuss general perceptions of police in America.

One study found that when the source of misinformation was viewed as a powerful figure, participants were more likely to be misled than if the individual was not viewed as a powerful figure (Vornik et al., 2003). This is especially relevant when police officers interview or present information to eyewitnesses. Because police officers are viewed as having more expertise and holding more credibility, people are more likely to conform their memory to their narrative as opposed to someone viewed as having less expertise (Williamson et al., 2013). This

becomes problematic when these professionals present an eyewitness with leading questions and false information. If people generally view police officers as more credible, the worry is that they would be more likely to accept false information given by these individuals.

Perceived Credibility and Acceptance of Misinformation

The credibility of the individual conveying misinformation is shown to impact the likelihood that another individual will accept that false information (Dodd & Bradshaw, 1980). An example of this is participants observing a vehicle accident through a slide show followed by answering questions given by either a neutral source or one perceived to be potentially deceptive (Dodd & Bradshaw, 1980). In this first experiment, post-event information was conveyed in the form of questions to the participant by either a lawyer representing the defendant or an unspecified source (Dodd & Bradshaw, 1980). One example of this could be a question phrased as, "Is it possible that the bushes at the corner could have interfered with the car's view of oncoming traffic?" (Dodd & Bradshaw, 1980). In this question, it is insinuated that bushes were present on the corner, even though in truth there were no such bushes present in the slides (Dodd & Bradshaw, 1980). Results showed that when these presuppositions were given by an unspecified source, participants were more likely to remember this false information while when given by a lawyer, participants were less accepting of the misinformation (Dodd & Bradshaw, 1980). In the second experiment of this study, presuppositions were read in a transcript either of an eyewitness account of the accident or from the driver who caused the accident (Dodd & Bradshaw, 1980). Similar to the results of the previous experiment, participants recalled remembering the misinformation given by the undefined eyewitness but were more likely to reject the misinformation if it was given by the driver despite the accounts being the same (Dodd & Bradshaw, 1980).

Perceptions of Police

As discussed above, the source of misinformation and global and individual information about them may impact willingness to accept misinformation from that individual. Measures of police perception in the United States, have found that perceptions of police are generally positive (Vogel, 2011). However, policing in the United States has been fraught with racism and disproportionate policing of citizens of color (Wu, 2013). When comparing attitudes towards police between White, Black, Asian, and Hispanic Americans, one study found that Hispanic, Asian, and White Americans held similar and positive views compared to those of Black Americans of police problem-solving and bias (Wu, 2013). Although people of color as a whole are less trustworthy of police, Hispanic and Asian Americans were found to be occupied between Black and White Americans in terms of satisfaction with police (Vogel, 2011; Wu, 2013). In another study with a racially diverse sample of White, Black, Asian, and Hispanic Americans most participants held positive police perceptions, with Black and Asian Americans holding police in a lower regard (Vogel, 2011). While some studies point out a general positive attitude towards police officers, others find there is a growing amount of negative perceptions circulating as police brutality and lack of justice continues (MacAlister, 2011).

In addition to this, it is important to take into account the events of 2020 related to policing and race. In 2020, two Black individuals died at the hands of police and ultimately produced a major Civil Rights movement in the United States and beyond that began in the form of protests in the summer of 2020. This movement concerned police brutality and racism, primarily against Black individuals, in policing in the United States.

Police perceptions are important when evaluating the acceptance of misinformation. Those who tend to hold more negative views of police may feel they are generally more corrupt

and may be more wary when presented with information. While someone who is more trusting of police may be more willing to accept what police present to them as truth, this could also lead to false information being accepted. Therefore, it is important to understand what factors may lead certain individuals to accept or negate information presented by police, especially if this information is misleading.

Current Study

The purpose of this study was to investigate how the source (police vs. neutral) and their trustworthiness may impact the acceptance of misinformation. In this study, participants viewed a crime take place through a video depicting a handy man stealing a few items from a home. Participants then read a report about the event that contained misinformation. Participants were told the report was written by either a neighbor or a police officer. This was done in order to test whether misinformation given by a police source would be accepted at a higher rate than misinformation given by a more neutral source. We anticipated that those who held more positive attitudes towards police would view them as possessing more expertise and would therefore accept more misinformation. Conversely, we predicted that those who held more negative attitudes towards police would likely view them as more corrupt than the neighbor, and would therefore be wary and more likely to reject misinformation presented by the officer. The participant was also told that the individual who wrote the report was either a friend of the suspect or a friend of the owner of the home whose items were stolen. This was done in order to test the impact trustworthiness of the individual could have on misinformation acceptance. Each participant was then told that the more accurate the report was, the more likely it was that the burglar was to be brought to justice. Therefore, participants were led to believe that a report given by a friend of the victim was more accurate than a report given by a friend of the suspect,

who may alter information in order to keep their friend from facing legal repercussions. The participants then took a test to assess their memory of the event. We hypothesized that the amount of misinformation accepted would be higher for those in the police source group than those in the neighbor source group. We also predicted that those in the high trustworthy group would believe the report to be more accurate and would therefore accept more misinformation.

Methods

Participants

This study used 125 participants recruited through Qualtrics Panels for approximately 4 USD. The study took around 30 minutes for participants to complete. The sample included 68 males and 57 females with a mean age of 42.5 years.

Design

This study was a 2 (source of report: police officer, neighbor) x 2 (trustworthiness: high, low) x 3 item type (contradictory misinformation, additive misinformation, control) mixed factors design with item type as a within subjects variable. Participants were randomly assigned to one level of each independent variable. Participants all received questions about misinformation that they encountered (misinformation items) and that they did not encounter (control items).

Materials

For this study we used misinformation materials (i.e., videos, summaries, and tests) created by Moore & Lampien (2016). Additionally, we used a filler task as well as the Perceptions of Police Survey (Nadal & Davidoff, 2015).

Video

Each participant watched a single video consisting of photo stills of a handyman arriving at a house, doing various tasks around the house, and stealing a few items. We used six videos that changed slightly depending on the 9 critical items. These critical items included differing drinks, magazines, foods, and pieces of jewelry featured in the video. In some of these videos, the man tried on a black cap while in others, the man tried on a red cap or no cap at all. The critical items were used for additive and contradictory misinformation. Each video lasts 1 minute and 33 seconds.

Narratives

We used six different versions of a written narrative for this study. These narratives are said to be a detailed written account of the events depicted in the video. Each narrative differs from one another depending on the nine critical items. Some parts of the narrative will be consistent with what was in the video (i.e., accurate information) and other parts will contain misinformation. The misinformation in the narratives consists of both additive and contradictory misinformation. Additive misinformation supplements the original content, adding details that were not present, while contradictory misinformation alters details from the original event (Huff & Umanath, 2018). These narratives contain misinformation (either additive or contradictory) about items such as where the handyman found the key to the house, what he ate from the fridge, and what kind of jewelry was taken. For example, in the video the handyman read a People magazine while in the narrative the handyman read a Time magazine.

Test

We used a 24-question multiple choice test with three options for each question including yes, no, and prefer not to respond. The test also consisted of a four-point confidence scale for each question ranging from not at all confident to very confident. Out of the 24 questions, 9

corresponded to critical items while the others served as filler questions. There are two versions of this test and each participant is given one version.

Filler Task

To replicate real world situations in which there is time between witnessing a crime and giving a report on a crime, this study used two different filler tasks. The first filler task is a tic tac toe game that appears after the video of the burglary. The second filler task is a matching game that appears after the participant has read another's report on the burglary. Both of these tasks require the participant's attention and last for five minutes.

Perceptions of Police Scale

The Perceptions of Police Scale is a questionnaire used to measure a person's attitudes and views towards police officers regarding performance, efficiency, helpfulness, and reliability (Nadal & Davidoff, 2015). This tool includes 12 statements with a five-point scale ranging from strongly disagree to strongly agree. Participants are asked to rate how much they agree with each statement regarding police. Advancements of this scale have allowed researchers to better compare individual minority groups' perceptions of police, allowing for a more accurate representation of how different groups feel about police (Nadal et al., 2017). Because this scale has been found to accurately reflect peoples' attitudes towards police, we used it in this study. Some of the statements of this questionnaire include the police are friendly, police officers protect me, and the police do not discriminate.

Procedure

Participants began by watching one of the six videos depicting a handyman committing burglary. After this, the participant engaged in a filler task to simulate the time that usually takes place in between witnessing a crime and giving a report on the crime. Before reading the

narrative, participants received randomly assigned information about the source of the narrative and the relationship the source held (i.e., friends with burglar or neighbor). Participants then read one of six written accounts of the burglary either given by a police officer or a neighbor. This was followed by another three-minute filler task. Participants were then asked to complete their assigned version of the test regarding the video they watched depicting the crime. After this test, participants were asked about how accurate they believed the written report was and then asked a few questions about the potential bias of the police officer or neighbor. Participants then answered a variety of self-report questions about the study. Lastly, participants were asked to fill out their demographic information. Each participant filled out the Perceptions of Police Scale either before or after the misinformation paradigm.

Results

We analyzed the data of 125 participants and ran a mixed-factors ANOVA with item type. We found that there was a main effect of item type (control, additive, and contradictory) $F(2,242)= 38.15, p < .001, \eta p^2 = .240$. Control item accuracy ($M = .70, SE = .03$) was higher than additive item accuracy ($M = .41, SE = .03$) and contradictory item accuracy ($M = .46, SE = .03$), $p's < .001$. Contradictory item accuracy ($M = .46, SE = .03$) was not significantly higher than additive item accuracy ($M = .41, SE = .03$) $p = .380$. These results indicate that a misinformation effect was established for both types of misinformation.

The mixed-factors ANOVA between-subjects showed that the main effect of source (police officer, neighbor) was not significant, $F(1,121) = .58, p = .447, \eta p^2 = .005$ (See Table 1). These results indicate that, contrary to our hypothesis, there was no difference in the amount of misinformation accepted between the police officer source group and the neighbor source group. The main effect of trustworthiness (high, low) was not significant, $F(1,121) = .06, p = .800$,

$\eta p^2=.001$. Contrary to our hypothesis, the amount of misinformation accepted was not higher for the high trustworthiness group than the low trustworthiness group. Finally, the mixed-factors ANOVA between-subjects showed that there was no significant interaction between source (police officer, neighbor) and trustworthiness (high, low) $F(1,121)=.05, p=.821, \eta p^2<.000$.

Table 1				
<i>Mixed-factors ANOVA results using source and trustworthiness as the criterion</i>				
Author	<i>df</i>	<i>F</i>	ηp^2	<i>p</i>
Source	1	0.58	.005	.447
Trustworthiness	1	0.06	.001	.800
Source x trustworthiness	1	0.05	.000	.821
Error	121			

Note. Source is represented by either a police officer or neighbor. Trustworthiness is represented by either friend of suspect or friend of victim.

The mixed-factors ANOVA within-subjects revealed that there was no significant interaction between item and source (police officer, neighbor) $F(2,242)=1.11, p=.331, \eta p^2=.009$ (see Table 2) or for item and trustworthiness (high, low) $F(2,242)=1.95, p=.145, \eta p^2=.016$. Additionally, there was no significant interaction between item, source (police officer, neighbor), and trustworthiness (high, low) $F(2,242)=1.53, p=.218, \eta p^2=.013$.

Table 2				
<i>Mixed-factors ANOVA results comparing item, source, and trustworthiness</i>				
IVs	<i>df</i>	<i>F</i>	ηp^2	<i>p</i>
Item	2	38.15	.240	.000**

Table 2 *Mixed-factors ANOVA results comparing item, source, and trustworthiness (continued).*

Item x source	2	1.11	.009	.331
Item x source x trustworthiness	2	1.95	.016	.145
Item x source x trustworthiness	2	1.53	.013	.218
Error	242			
<i>Note.</i> Item is represented by control, additive, or contradictory misinformation. **p < .01				

Discussion

In this study, we examined how perceptions of police versus a neutral source could influence the acceptance of misinformation. In addition to this, we investigated how the author of the report's trustworthiness may have impacted their credibility, and thus, the participant's willingness to accept misinformation. We did this by first telling participants the report they read was written by either a police officer or a neighbor. We then told participants that the author of the report was either a friend of the suspect or a friend of the victim. We predicted that the amount of misinformation accepted would be higher for those in the police group than in the neighbor group. We also predicted that the amount of misinformation accepted would be higher for those in the high trustworthiness group than those in the low trustworthiness group. Finally, we predicted that those who scored lower on the Perceptions of Police Survey would be less likely to accept misinformation.

Our results showed that participants were more accurate in their answers when faced with the control item type as opposed to contradictory and additive misinformation, signifying that we found misinformation effects for both types of misinformation. However, there was no

significant effect for the source of misinformation. These results do not support our hypothesis that misinformation would be accepted at higher rates when presented by a police officer. Additionally, our results are not consistent with the conclusions of Vornik et al. (2003) that the amount of power one is regarded as having can affect suggestibility to misinformation. These results also do not support the findings of Williamson et al. (2013) that credibility in the form of expertertise can lead to greater acceptance of misleading information. Furthermore, our results did not support our hypothesis that those in the high trustworthy group would accept more misinformation than those in the low trustworthy group. This conflicts with the findings of Dodd et al. (1980) which indicated that misinformation was accepted at lower rates if it was presented by a source perceived to have ulterior motives.

One limitation of this study was the number of participants, with only 125 being used for the current study. This was only a portion of our intended sample size. This means that the study was underpowered and that we may find meaningful differences once we are able to collect our full sample size. It is possible that there was no significant effect for trustworthiness (low, high) because participants may have viewed both relationships (friends with suspect, friends with victim) as biased. We predicted that those who read a report written by a friend of the suspect may have presumed that the author modified information in order to protect their friend from facing legal repercussions. It could also be that participants who read a report written by the friend of the victim believed that the author altered information in order to further implicate the suspect. This dual bias could also explain why we did not find a significant effect for source group (police, neighbor). If participants viewed the source as being biased either towards the suspect or the victim, it is possible that the credibility or authority of the source did not matter, as both may have been viewed as equally untrustworthy. In future studies, it may be beneficial to

create another trustworthy group in which the author of the report has no relation to any parties involved in the crime.

Conclusion

In conclusion, the misinformation effect has been thoroughly studied, but there is little information as to how police may influence suggestibility to misinformation. Research shows that credibility in the form of expertise as well as perceived power can lead to a greater amount of misinformation acceptance (Williamson et al., 2013; Vornik et al., 2003). However, our results did not show a significant effect for source (police officer, neighbor) or trustworthiness (high, low). Our results did, however, show that participants were more accurate in their answers when faced with control items as opposed to contradictory and additive misinformation. These results indicate that the type of misinformation an individual is faced with can affect the likelihood that it will be accepted.

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