

Repetition, not number of sources, increases both susceptibility to misinformation and confidence in the accuracy of eyewitnesses

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ABSTRACT

Are claims more credible when made by multiple sources, or is it the repetition of claims that matters? Some research suggests that claims have more credibility when independent sources make them. Yet, other research suggests that simply repeating information makes it more accessible and encourages reliance on automatic processes—factors known to change people's judgments. In Experiment 1, people took part in a “misinformation” study: people first watched a video of a crime and later read eyewitness reports attributed to one or three different eyewitnesses who made misleading claims in either one report or repeated the same misleading claims across all three reports. In Experiment 2, people who had not seen any videos read those same reports and indicated how confident they were that each claim happened in the original event. People were more misled by—and more confident about—claims that were repeated, regardless of how many eyewitnesses made them. We hypothesize that people interpreted the familiarity of repeated claims as markers of accuracy. These findings fit with research showing that repeating information makes it seem more true, and highlight the power of a single repeated voice.

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1. Introduction

People who witness the same event will often remember it differently: a student remembers her teacher saying that the father of psychology is Freud, while another remembers it being Wundt; one person at the parade remembers hearing shots coming from the grassy knoll while another remembers hearing shots from the book depository; an eyewitness testifies in court that the burglar fled the scene in an electrical company van—another remembers the van with a different company name. “I saw the burglar drive off in an RJ's electricians van,” Aidan mistakenly reports to Emily, who remembers it as an AJ's electricians van. These differences can even lead people to be misled about what really happened: the father of psychology becomes Freud; the shots come from the grassy knoll; and Emily's memory contains RJ's electricians (French, Garry, & Mori, 2008; Gabbert, Memon, & Allen, 2003).

We also know that repeated misleading claims do more damage to people's memories than claims made only once (Mitchell & Zaragoza, 1996; Zaragoza & Mitchell, 1996). What we do not know are the answers to two questions: Does one person who repeats misleading claims do more damage to people's memories than that same person making the claim only once? And when those misleading claims are repeated, does it matter how many people make those claims? For

instance, suppose an eyewitness (call him Aidan) tells other eyewitnesses, “The burglar drove an RJ's electrician's van.” Would Aidan's claim do more damage to another eyewitness's memory if Aidan states the claim once, or repeats it three times? By contrast, suppose that Aidan says, “The burglar drove an RJ's electrician's van.” Later, another eyewitness (Ben) also says the burglar drove an RJ's electrician's van, and still later a third eyewitness (Cheryl) says the same thing. Would Aidan, Ben and Cheryl's converging claims damage another eyewitness's memory more than if Aidan had simply repeated the same claim three times? Put another way, do claims do more damage when made by multiple sources, or is it the repetition of claims that matters? That is the question we ask here.

On the one hand, the idea that a claim does more damage when uttered by independent sources is intuitively appealing. And research supports it: when several people tell us something, we put more trust in the overlapping portion of their accounts; similarly, we put more trust in our own memories of an event when others remember it the same way (Harris & Hahn, 2009; Ross, Buehler, & Karr, 1998). That trust is justified: For instance, when multiple eyewitnesses identify the same perpetrator, they are generally more accurate than when one eyewitness does (Clark & Wells, 2008). These findings are also reminiscent of work by Bråten, Strømsø, and colleagues showing that students better comprehend multiple passages when they remember the source of each (Bråten, Strømsø, & Salmerón, 2011; Strømsø, Bråten, & Britt, 2010).

On the other hand, simply repeating information can change a person's judgments. People have come to 1) decide that repeated

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non-famous names are famous; 2) like a stock better after repeatedly viewing the same day's news reports about it from multiple TV channels; 3) be more confident that they visited a novel campus after repeatedly seeing photos of it, and 4) believe that one person's opinion better represented the population's opinion when it was repeated than when it was not (Brown & Marsh, 2008; Jacoby, Woloshyn, & Kelley, 1989; Unkelbach, Fiedler, & Freytag, 2007; Weaver, Garcia, Schwarz, & Miller, 2007). Considered as a whole, this research suggests that the number of times a claim is made might be more important than the number of people who say it.

But why does repetition lead people to make these errors? One possibility is that previous encounters make information more accessible and more fluently processed; this accessibility then leads to feelings of familiarity, which are often interpreted as truth (Alter & Oppenheimer, 2009; Arkes, Boehm, & Xu, 1991; Dechêne, Stahl, Hansen, & Wänke, 2010; Kelley & Lindsay, 1993; Lindsay, 2008; Unkelbach, 2007; Unkelbach & Stahl, 2009). As a result, repeated information feels truer than unrepeated information.

When it comes to repetition, some research suggests that source may play an important role in its effects, suggesting that the number of times a claim is made and the number of people who say it will interact. For instance, Zaragoza and Mitchell (1996) asked subjects to read misleading questions about a film, and found that subjects who were misled multiple times were more likely to incorporate that misinformation into their memory than subjects that were misled only once. But when they repeated misinformation using multiple presentation styles (written, video, audio), subjects were even more misled than when they repeated misinformation using only one presentation style (e.g., audio; Mitchell & Zaragoza, 1996). Awareness matters as well—Bacon (1979) found that people who realized information was repeated found it truer than people who did not realize it. Other research has shown that trustworthiness matters: repeated information from a trustworthy source becomes more believable than repeated information from an untrustworthy source (Begg, Anas, & Farinacci, 1992; Unkelbach & Stahl, 2009). Taken together, this research suggests that if one person repeats a claim it might make that claim more misleading than were it not repeated—but if several people all make the same claim, it might trump repetition alone, making that claim more misleading still.

1.1. Overview

We explore these issues in two experiments. In Experiment 1, we asked if repeating misleading claims changes the way people report details about a witnessed event, regardless of how many eyewitnesses repeat those claims. To answer this question, people took part in an experiment adapted from the well known misinformation paradigm: they watched an event, then read a misleading description of the event, and finally were tested on their memory for what they remembered seeing. Typically, many people report seeing the misleading details in the event (Loftus, Miller, & Burns, 1978; Mitchell & Zaragoza, 1996; Takarangi, Parker, & Garry, 2006).

People first watched a video of an electrician who stole items while doing repairs at a client's house. Later, they read three eyewitness police reports—ostensibly written over three consecutive days—about the activities of the electrician. Sometimes, all three reports misled people about what happened in the video; other times only one of the three reports misled people. To manipulate source, we told half the people that three different eyewitnesses made these reports; we told the other half that the same eyewitness made all three reports. For example, people read three eyewitness reports from Day 1, Day 2 and Day 3: for half of the people, Eyewitness 5 made the Day 1 report; Eyewitness 9 made the Day 2 report; and Eyewitness 16 made the Day 3 report. The other half read the same reports—but all three reports were attributed to Eyewitness 9. Later, we asked everyone to take a surprise memory test to tell us what they saw in the

event. In Experiment 2, we examined how these factors affect the kind of situation in which police officers, judges, and jurors find themselves: considering eyewitness reports about an event they never saw.

2. Experiment 1

In Experiment 1, we ask if repeating misleading claims changes the way people report details about a witnessed event and if the number of eyewitnesses repeating those misleading claims matters.

Some research suggests that the number of different eyewitnesses who report misleading information should not matter as much as the number of times they report that misinformation. For instance, repeated misinformation misleads people more than unrepeated misinformation; the likely explanation is that although people find repeated misinformation more familiar, they have no accompanying increase in their ability to monitor the source of that familiarity (Zaragoza & Mitchell, 1996). Indeed, feelings of familiarity are thought to be one driver of the misinformation effect: when people are exposed to misleading postevent information, that postevent information becomes familiar to them. Later, people cannot easily differentiate the sources of their feelings of familiarity. In other words, people cannot tell whether those misleading details feel familiar because they saw them, or because they heard about them later (Johnson, Hashtroudi, & Lindsay, 1993; Lindsay, 2008). These findings suggest that repeating misinformation three times should make it more familiar and more misleading, but will the number of eyewitnesses who repeat the misinformation matter?

2.1. Method

2.1.1. Subjects

Sixty-four introductory psychology students completed the experiment as part of a course requirement.

2.1.2. Design

We used a 2 (report repetition: repeated, not repeated) \times 2 (source: one eyewitness, three eyewitnesses) \times 2 (item type: misled, control) mixed factors design manipulating repetition and source between subjects, and item type within subjects.

2.1.3. Procedure

We adapted materials from Takarangi et al. (2006). People took part in groups of no more than five; as Fig. 1 shows, the experiment proceeded in three phases.

2.1.3.1. Phase 1. In the first phase, people watched a 6 minute and 34 second video of an electrician named “Eric” stealing items from a client's house. There were two versions of the video, which were identical in all respects with the exception of eight digitally altered critical items (see Fig. 1). Video version was counterbalanced across subjects. After watching the video, people completed a 15-minute Sudoku filler task.

2.1.3.2. Phase 2. In the second phase, people read three eyewitness reports ostensibly written by subjects in a previous experiment. In fact, the experimenters had written the eyewitness reports, which described the electrician's actions. Reports were prominently labeled as: 1) the transcript of a police interview; 2) a written police statement; and 3) the transcript of a followup police interview. Each report was dated to show that they were completed across three consecutive days.

For each of the three reports, we prepared two versions: a control version and a misleading version. The control versions (indicated by the white reports in Fig. 1) described all eight critical items generically—for example, the van that Eric drove was described only as a “blue

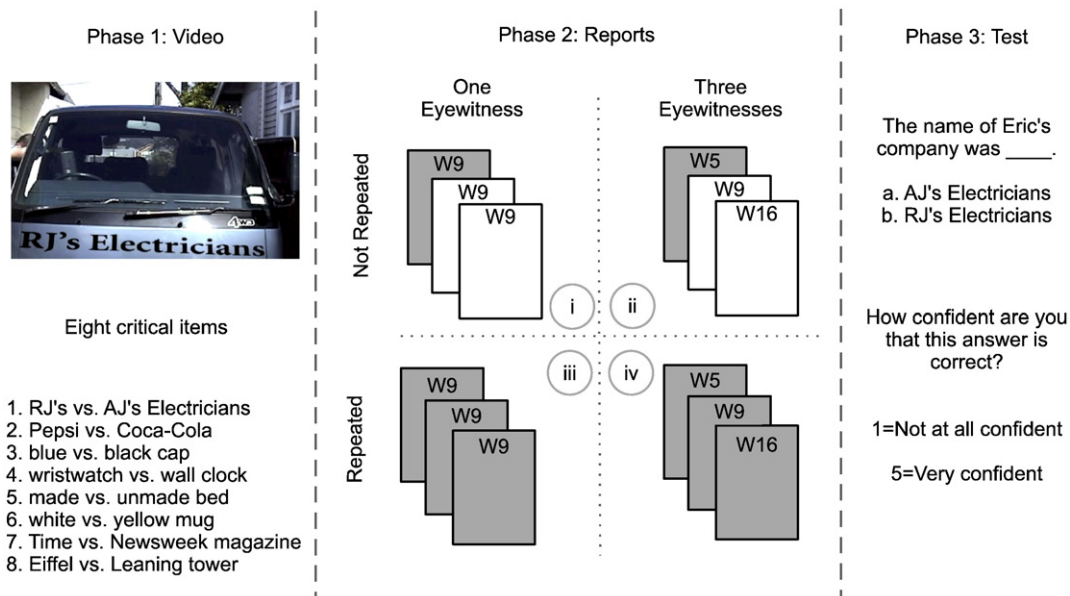


Fig. 1. Illustration of Experiment 1 methods. In Phase 1, people watched a video of a mock crime containing eight critical items that were digitally manipulated between two versions. In Phase 2, people read three eyewitness reports attributed to either one eyewitness or three different eyewitnesses. Some people read three reports with misleading details (the gray reports) while others read one report with misleading details and two control reports (the white reports) with no misleading details. In Phase 3, subjects took a surprise, two-alternative forced choice recognition test about what they remembered from the video and were asked to rate their confidence in their answer.

van." The misleading versions (the gray reports in Fig. 1) described four of the eight critical items inaccurately—the van, for instance, was described as a "blue AJ's Electricians van" when people had actually seen a blue RJ's Electricians van. The remaining four critical items were described only generically. In short, misleading reports misled people on four critical items (e.g. blue AJ's Electricians van; Time magazine), while the remaining four critical items—and all eight critical items in the control reports—did not give any specific details (e.g. blue van; magazine).

We counterbalanced combinations of movie version and eyewitness reports so that—across the misleading reports—each item appeared twice as a misleading item and twice as a control item. There were therefore four versions of each misleading report, plus a control version for a total of 15 versions [3 eyewitness reports \times (4 misleading versions + 1 control version)].

The middle panel of Fig. 1 illustrates the two variables we manipulated in this phase: source and repetition. To manipulate source, we told half the people they would read three reports from three randomly selected witnesses; we told the other half that they would read three reports from one randomly selected witness. People read the reports in the same order; when everyone had finished reading a report, the experimenter handed over the next one, emphasizing that it had come from either a different witness or the same witness. Each report was clearly labeled with a random eyewitness number that either changed between each report, or remained the same on all three reports. To manipulate repetition, half of the people read two control reports and only one misleading report (to simplify the counterbalancing scheme, either the first or third report); the other half read three misleading reports.

In summary, there were four between-subjects conditions: 1) three eyewitnesses, each making the same misleading claims across the three reports (subset iv in Fig. 1); 2) one eyewitness making the same claims across the three reports (iii); 3) three eyewitnesses, only one of whom makes the claims in only one report (ii); and 4) one eyewitness who makes the claims in only one report (i). After reading the three reports, people completed a three minute pattern-completion filler task.

2.1.3.3. Phase 3. In this final phase, people completed a surprise recognition test: a two-alternative forced choice recognition test asking

about details from the movie. We instructed them that the questions were about their memory for the video. For the eight critical items, they chose between the correct and misled option; the remaining 12 items served as fillers. People circled their responses and rated their confidence on a five-point scale (1 = Not at all Confident, 5 = Very Confident). Afterwards, they were debriefed.

2.2. Results and discussion

2.2.1. Memory

Did repeating misleading claims change the way people reported details about the event—and if so, did the number of eyewitnesses repeating those claims matter? To address these questions, we calculated each person's mean accuracy for the eight critical items. We classified these data first by whether they were control or misled details, second according to the number of eyewitnesses, and third according to how many reports contained those misled critical details. These results appear in Fig. 2.

Fig. 2 shows three important findings. First, the white bars show that when people were not exposed to misinformation, they were accurate at remembering how the crime unfolded. Second, the comparison between black bars on either side of the dashed line show that repetition mattered: when misleading claims were repeated, people were less accurate than when misleading claims were not repeated. Third, people were no less accurate about repeated misleading claims from three eyewitnesses than they were about repeated misleading claims from a single eyewitness. These results tell us that it was the repetition of misleading claims that mattered, not how many sources the repeated misinformation came from.

In other words, a 2 (report repetition) \times 2 (source) \times 2 (item type) ANOVA revealed a significant interaction between item type and report repetition, $F(1,60) = 5.35$, $p = .02$, $\eta_p^2 = .08$. Followup t -tests revealed that regardless of how many eyewitnesses made the reports, repetition decreased accuracy in misleading claims ($M = 0.49$, $SD = 0.22$) relative to unrepeated misleading claims ($M = 0.63$, $SD = 0.22$), $t(62) = 2.53$, $p = .01$, Cohen's $d = 0.64$. No tests of source were significant (all F s < 1.21).

Taken together, these results suggest that the number of people who made a claim did not matter as much as the number of times the claim was made. That is, if Aidan repeatedly tells Emily the

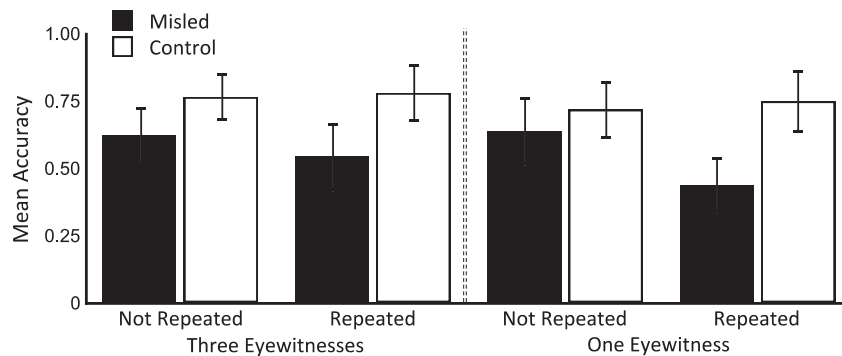


Fig. 2. Mean accuracy of misled and control claims by repetition and number of sources in Experiment 1. Error bars represent a 95% confidence interval.

incorrect name of the burglar's electrical company, Emily will be more misled than if Aidan had told her only once. Interestingly, if that claim were repeated, it would make little difference if Aidan said it, or if Aidan, Ben, and Cheryl each had made the same claim once: either way, Emily hears it three times and is similarly misled.

2.2.2. Confidence

People were more confident about their responses to misled items ($M = 3.81$, $SD = 0.66$) than control items ($M = 3.55$, $SD = 0.66$), a finding well documented in the misinformation effect literature (e.g., Takarangi et al., 2006). But their confidence did not depend on the number of times misinformation was repeated or the number of eyewitnesses. In other words, a 2 (source) \times 2 (repetition) \times 2 (item type) ANOVA revealed a main effect of item type, $F(1,60) = 6.74$, $p = .01$, $\eta_p^2 = .10$. There were no other effects (all $F_s < 1.35$).

2.2.3. Counterexplanations and criticisms

One counterexplanation for our results is that people paid little attention to whether one or three eyewitnesses repeated the statements. If so, our results might reflect the fact that they attended to the misleading claims, but not to who reported those claims. To address this hypothesis, we examined the data from people who read the misleading claims in only one report ($n = 32$). When reports were attributed to three eyewitnesses, people were similarly accurate about specific claims appearing in the third ($M = 0.66$, $SD = 0.19$) and first ($M = 0.59$, $SD = 0.23$) reports $t(14) = 0.60$, $p = .56$, $d = 0.16$. However, when reports were attributed to one eyewitness, people were marginally less misled for misleading claims appearing in the third ($M = 0.75$, $SD = 0.19$) rather than the first ($M = 0.53$, $SD = 0.25$) report, $t(14) = 1.99$, $p = .07$, $d = 0.99^1$. This finding fits with the idea that when a single eyewitness made all three reports, a claim appearing for the first time in the third report seemed less trustworthy. The finding also suggests that people noticed whether repeated claims were made by one or three eyewitnesses, yet noticing the source of these claims did not affect people's accuracy.

A critic might suggest that because people read about control claims three times, repetition improved memory for those items. In other words, reading "blue van" three times cued people who saw a blue AJ's van to remember—correctly—that they had indeed seen a blue AJ's van. Such a mechanism, which is reminiscent of the testing effect (Roediger & Karpicke, 2006), would serve to make control performance unusually high. But even if the critic were correct, repeated

references to control claims should have no effect on how well people remember misled claims.

Of course, it is one thing if repeating misinformation three times makes people less accurate about what they saw. Years of research on the misinformation effect has shown that people make these errors because of an inability to differentiate the sources of what they originally saw and what they later heard (Johnson et al., 1993; Lindsay, 2008)—repeating misinformation may simply add more opportunities for people to make these types of errors. In other words, trying to distinguish between four sources—the original event and misleading information presented three times—may be more difficult than trying to distinguish between two sources—the original event and misleading information presented only once.

But it would be another thing if repeating that information changed people's beliefs about what happened when they never saw the crime unfold in the first place. On the face of it, judging what happened when you didn't see the crime would appear to be qualitatively different than remembering what happened when you did see the crime. Indeed, the source confusion thought to drive the misinformation effect should play little role in altering people's beliefs about what really happened because they did not see the crime; by definition, there is no original source with which to confuse the eyewitness reports. But a different kind of source monitoring error might lead people to put more stock into a single eyewitness who repeats his claims than if he were to make the same claim only once. In one study, when one group of people read a New Jersey homeowner's repeated opinions about preserving open spaces, they thought his views more representative of the wider population of homeowners than another group who read his opinion only once (Weaver et al., 2007). The idea is that repeating claims makes them seem more familiar, more available, and more true (Kelley & Lindsay, 1993; Unkelbach, 2007). If a similar mechanism applies to people's confidence in eyewitness claims, we should see that the repeated claims of one eyewitness are more credible to people who never saw the crime than if that eyewitness simply states them once. We addressed this issue in Experiment 2.

3. Experiment 2

In Experiment 2, people read the same three eyewitness reports from Experiment 1, but did not witness the event. Thus, they could not know if claims about how the crime unfolded were true. After they read the eyewitness reports, people reported their confidence that each claim was true.

3.1. Method

3.1.1. Subjects

Ninety six introductory psychology students participated for a course requirement.

¹ This finding may also explain why people who read misleading claims attributed to one eyewitness but only in one report (the third set of bars in Fig. 2) showed no misinformation effect. When people read misleading claims in the third report, they were not misled; when other people read those misleading claims in the first report, they showed the typical misinformation effect. Averaging these data together, there was no overall misinformation effect.

3.1.2. Design

We used a 2 (report repetition: repeated, not repeated) \times 2 (source: one eyewitness, three eyewitnesses) \times 2 (item type: specific, control) mixed factors design, manipulating repetition and source between subjects, and item type within subjects.

3.1.3. Procedure

The procedure described below was the same as Experiment 1 with three exceptions: 1) people did not complete Phase 1—we omitted the video and the respective 15 minute filler task; 2) we changed the filler task between the reports and testing phases to 7 min; and 3) in the testing phase, people reported their confidence that the claim was true.

Because the reports no longer corresponded to a witnessed video, what we described as misleading claims in Experiment 1 were no longer misleading in Experiment 2. As such, we call those claims *specific* claims in Experiment 2, because they specifically describe a critical detail.

People began the experiment by reading the three eyewitness reports, following procedures identical to those in Experiment 1. After reading all three eyewitness reports, people worked on a filler task for 7 min. In the *testing phase*, they completed a 20 item test to assess what they thought had occurred during the crime. Each item claimed that a specific detail or action had occurred, and was followed by this question: “How confident are you that this statement is correct?” Four of the eight critical test items were the same as the specific detail mentioned in the eyewitness reports. For example, people who read that Eric was driving an “AJ’s Electricians van” were asked how confident they were that “the name of Eric’s company was AJ’s Electricians”. The remaining four critical test items still asked about the specific version of the claim (“AJ’s Electricians”), although people had read only about the control version of the claim in the reports (a blue van). Thus, we would expect people to have lower confidence about control claims relative to higher confidence about specific claims. Afterwards, they were debriefed.

3.2. Results and discussion

3.2.1. Confidence in repeated claims

Did repeating claims make people more confident that they really happened—and if so, did the number of eyewitnesses repeating those claims matter? To address this question, we calculated each person’s mean confidence that specific details or actions had taken place. We classified these data first according to whether the critical items were described in a specific or control level of detail in the reports, second according to how many eyewitnesses the reports were attributed, and third according to how many reports contained critical items in a specific level of detail. These results appear in Fig. 3.

Fig. 3 shows three important findings. The first is unsurprising: the white bars show that when people read only control claims in the reports, they were not very confident that the crime had unfolded in the

specific way asserted in the test. Second, the comparison between black bars on either side of the dashed line show that repeating claims mattered: when people heard the same specific claim repeated, they were more confident that those claims were correct than when the claims were not repeated. Third, people were similarly confident about repeated claims regardless of the number of eyewitnesses who made those claims. More specifically, people were no more confident about claims repeated by three different eyewitnesses than they were about claims repeated by a single eyewitness.

In other words, a 2 (report repetition) \times 2 (source) \times 2 (level of detail) ANOVA revealed a significant interaction between level of detail and report repetition, $F(1,92) = 11.50$, $p < .01$, $\eta_p^2 = .11$. Moreover, regardless of how many eyewitnesses made the reports, people were more confident about repeated specific claims ($M = 4.44$, $SD = 0.63$) than unrepeated specific claims ($M = 3.80$, $SD = 0.75$), $t(94) = 4.50$, $p < .01$, $d = 0.92$. No tests of source were significant (all $F_s < 1$). Taken together, these results suggest that the number of people who made a claim did not matter as much as the number of times the claim was made.

3.2.2. Counterexplanation

As in Experiment 1, we tested the counterexplanation that people paid little attention to whether statements were made by one or three eyewitnesses; the pattern of the data was consistent with that in Experiment 1. When reports were attributed to three eyewitnesses, people were similarly confident about specific claims in the third ($M = 3.94$, $SD = 0.85$) and first ($M = 3.67$, $SD = 0.63$) reports $t(22) = 0.89$, $p = .38$, $d = 0.36$. However, when reports were attributed to a single eyewitness, people were less confident when specific claims appeared in the third ($M = 3.46$, $SD = 0.77$) rather than the first ($M = 4.15$, $SD = 0.64$) report, $t(22) = 2.38$, $p = .03$, $d = 0.97$. These findings suggest that people did pay attention to whether repeated claims were made by one or three eyewitnesses, yet noticing the source of these claims did not affect people’s confidence.

4. General discussion

In two experiments, we asked if one person who repeats claims yields more influence on memory and confidence than that same person making the claim only once. The answer is yes. Across both experiments, the data converged on the important role of repetition. In Experiment 1, the misleading claims of a single eyewitness were more damaging to people’s memories when that eyewitness repeated them; in Experiment 2, the claims of a single eyewitness were more credible when that eyewitness repeated them. In both experiments, one eyewitness’s repeated claims were as influential as three eyewitnesses each making the same claims once. These findings fit with research showing that repeating information makes it more available—and seem more familiar, true, or even representative of a population (Kelley & Lindsay, 1993; Unkelbach, 2007; Weaver et al., 2007).

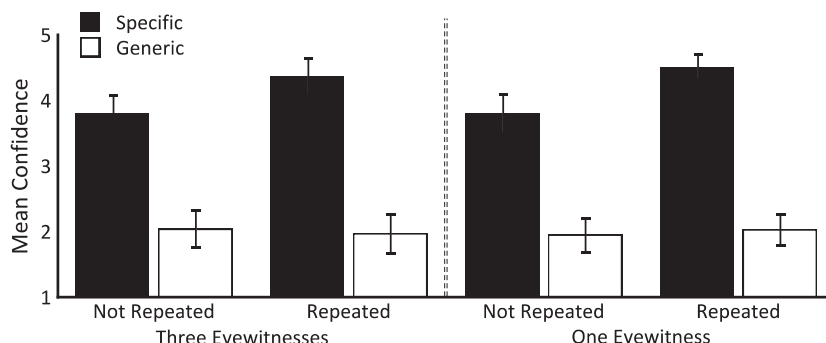


Fig. 3. Mean confidence ratings of specific and control claims by repetition and number of sources in Experiment 2. Error bars represent a 95% confidence interval.

Our results do not, however, fit with those of Mitchell and Zaragoza (1996). When Mitchell and Zaragoza gave subjects misleading information in three presentation styles (written, video, audio), subjects were more misled than when they were given repeated misleading information in only one presentation style (e.g., audio). Their findings do not fit with ours as their source manipulation interacted with repetition, while our source manipulation did not.

But three important differences between the methods of this study and those of Mitchell and Zaragoza (1996) may explain this discrepancy. First, although Mitchell and Zaragoza used a source test—asking people to state whether they remember the information from the video or the postevent information—we used a standard recognition test, asking people to choose between the original and postevent information. Indeed, research on the effects of repetition have shown that people are more likely to use source information when engaged in deliberate—recollective based—processes, such as during a source test, than when using faster—recognition based—decision making such as during a recognition test (Begg et al., 1992; Unkelbach & Stahl, 2009). Second, when Mitchell and Zaragoza manipulated presentation style, it may have interacted with repetition not because the source of the information became more trustworthy, but because it became more salient. By contrast, we manipulated only the generic name of the source (for instance, Witness 5 vs. Witnesses 5, 9 and 16). It may be that salience is what drove Mitchell and Zaragoza's subjects to be more misled. Finally, we embedded our misinformation in a narrative, whereas Mitchell and Zaragoza embedded their misinformation in questions. Although both approaches lead people to misremember the original event, they differ in a number of qualitative characteristics that may affect people's ability to do good source monitoring (Zaragoza & Lane, 1994). But clearly, the question of why broadly similar methods produced different patterns of results is an important one worthy of future research.

Why would one eyewitness repeating a claim become just as credible as three eyewitnesses? Two possible mechanisms may explain these surprising results. On the one hand, it may be that a single eyewitness repeating claims is seen (correctly) as highly consistent—an attribute that makes the eyewitness appear more credible (Brewer & Burke, 2002). By comparison, when multiple eyewitnesses all converge on the same claim, the claim may become credible simply because many people made it (Harris & Hahn, 2009; Ross et al., 1998). In other words, one eyewitness repeating a claim may make the claim more credible for a different reason than three eyewitnesses each stating the same claim once does. Indeed, non-significant trends in our data lend support for this possibility: a closer inspection of Figs. 2 and 3 suggests that people were slightly more misled by, and more confident about, claims repeated by a single eyewitness than those repeated by three eyewitnesses.

On the other hand, it may be that people do not account for the number of eyewitnesses stating a claim. That is, when people determine the credibility of a claim, they might rely on heuristically driven monitoring processes—using the familiarity of the claims to determine their credibility—while forgoing more effortful monitoring processes that would help them scrutinize the source of the claims instead. Future research could disentangle the effects of these two mechanisms by manipulating the credibility of the eyewitness, or focusing subjects on the sources of the information before determining the credibility of the claim.

Of course, in the real world, multiple eyewitnesses provide richer source information than we provided here. In court, for example, three different eyewitnesses who take the stand will vary on myriad dimensions, all of which triers-of-fact could use to distinguish among their claims later. But would people actually use these richer source cues, and show different patterns of remembering when information is repeated by one eyewitness or by three eyewitnesses? That question is still one to be answered by additional experimentation, with Mitchell and Zaragoza's (1996) findings and ours suggesting

different, albeit tentative, hypotheses. In addition, the claims in our study were relevant and believable claims coming from neutral sources. Would less relevant, hard to believe claims, or trusted and untrusted sources of those claims show these same effects of repetition? This, too, is an intriguing question for future research.

Speaking of the real world, roughly 10% of DNA exonerees have been convicted because at least three eyewitnesses were mistaken (Innocence Project, 2010). Our data suggest that the repeated, inaccurate, claims of even a single eyewitness can lead jurors and other eyewitnesses to put more faith in those claims than they should, and highlight the power of a single repeated voice.

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