Blame Conformity: Leading Eyewitness Statements can Influence Attributions of Blame for an Accident

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Summary: The present experiment examined whether attributions of blame for an incident can be shifted between individuals as a result of a leading eyewitness statement. Participants watched a video of an accident involving two men and then read either a non-leading eyewitness statement that blamed no one for the accident or a leading eyewitness statement that blamed one of the two men for the accident. Participants’ attributions of blame for the accident were then assessed either immediately or after a 1 week delay. Regardless of the time delay, just over one-third of participants who read a leading statement subsequently blamed the same person as the eyewitness. In contrast, less than 4% of participants who read a non-leading statement blamed one of the men. This research is the first to demonstrate blame conformity, where blame for an incident can be shifted between individuals as a result of a leading eyewitness statement. Copyright © 2013 John Wiley & Sons, Ltd.

The Boston Massacre was an incident on 5 March 1770, in which British Army soldiers shot at an angry mob of civilians, killing five people. The British Army soldiers were subsequently tried for murder and there was controversy over whether their commander, Captain Thomas Preston, was to blame for the massacre by ordering his soldiers to open fire. Some eyewitnesses testified they heard Captain Preston issue the order to open fire, one eyewitness was certain it was another soldier who gave the order, and several others suggested that a soldier opened fire of his own volition when he was attacked by the mob (Kidder, 1870; Zobel, 1970). Captain Preston was subsequently acquitted, but this example demonstrates how the attribution of blame by eyewitnesses for a single incident is malleable. The current research is the first to examine whether or not participants’ attributions of blame for an incident can be influenced by a leading eyewitness statement that blames one specific individual for causing it. This effect was examined when participants’ attributions of blame were assessed immediately after reading the eyewitness statement or 1 week after reading the eyewitness statement.

It is well established that when eyewitnesses encounter post-event information (PEI) that contradicts or supplements information contained within a witnessed event, they often incorporate this new information into their testimonies (Loftus, 2005, for a review). Wright and Davies (1999) described several ways in which eyewitnesses may encounter PEI (e.g. police questioning and media coverage) with the most relevant to the present research being through co-witness PEI. Co-witness PEI may be passed from one eyewitness to another ‘directly’ through conversation or ‘indirectly’ through a third party, such as a police officer, who informs one eyewitness about what another eyewitness has said (Luus & Wells, 1994). Eyewitness surveys suggest that the direct transmission of co-witness PEI may not be uncommon as there are often multiple eyewitnesses to incidents, and these eyewitnesses frequently discuss the events they have witnessed with each other (Paterson & Kemp, 2006; Skagerberg & Wright, 2008).

Laboratory research has repeatedly confirmed that co-witness PEI can alter eyewitness testimonies. For example, co-witness information can lead to memory conformity, whereby one eyewitness alters their memory report of an event to be consistent with another’s differing (and sometimes erroneous) memory report of the same event (see Wright, Memon, Skagerberg & Gabbert, 2009, for a review). There are also several documented real-world cases where erroneous co-witness information imparted during eyewitness discussions has resulted in memory conformity, meaning unreliable testimonies were subsequently provided to the police and courts (see Wright et al., 2009, and Wagenaar & Crombag, 2005, for examples). Following concerns over the negative impact that co-witness PEI can have on the reliability of subsequent testimonies, the British Psychological Society (2007) produced guidelines for the UK Home Office that recommended police officers keep multiple eyewitnesses separate, and that they establish whether or not they have spoken to each other in order to determine whether their testimonies can be classified as truly independent evidence or not.

Given the robustness of co-witness PEI in influencing eyewitnesses memory reports of events, it is possible that eyewitnesses who encounter co-witness PEI blaming someone specific for an incident (where several people could be at fault) will engage in blame conformity, whereby they align their own attributions of blame with the co-witness. To give an everyday example of blame conformity, there may be several eyewitnesses to a traffic accident involving a green and a blue car. One eyewitness may (correctly or incorrectly) blame the driver of the green car for the accident and share their attribution of blame with the co-witnesses. The co-witnesses may then adopt the view that the person in the green car was to blame and include this attribution in their subsequent testimonies to insurance companies, the police and courts.

If co-witness PEI can cause blame conformity then it is important to know if the effects also persist over time. Neubauer and Fradella (2011) point out that trials in the USA typically do not begin for at least 90 to 120 days after an arrest, but the delay between the arrest itself and the actual incident being witnessed is potentially indefinite. Studies examining the influence of co-witness PEI over time have
primarily focussed on memory conformity and found that the effects persist after 48 hours (Shaw, Garven & Wood, 1997) and 1 week (Mudd & Govern, 2004). Although blame conformity does not necessitate that memory of an event is altered, these findings do raise the possibility that the effects of blame conformity (should it occur) could persist over time.

The primary aim of the present research was to determine whether or not blame conformity can occur, whereby participants’ own attributions of blame for an incident are influenced by a leading eyewitness statement that blames one specific individual for its occurrence. To assess this, participants watched a video where two men accidentally bumped into each other when crossing a road. The participants then received co-witness PEI in the form of an eyewitness statement that summarised the accident and blamed either no one or one of the two men for it. Participants’ attributions of blame for the accident were then assessed via a single critical forced-choice question that asked them if they felt anyone was at fault for the accident. This critical question was administered as part of a larger 10-item forced-choice recognition test that was presented to participants either immediately after reading the eyewitness statement or after a 1 week delay.

Given the robustness of PEI effects generally, it was anticipated that blame conformity would be observed in the present experiment, meaning there will be a significant association between who the eyewitness statement blames for the accident and who the participants blame for the accident. It is anticipated that these effects will be observed when participants’ attributions of blame are assessed both immediately and after a 1 week delay.

A secondary aim of the present experiment was to examine whether or not participants ability to remember the accident video influences their attributions of blame. This was carried out as it is possible that any participants who succumb to blame conformity are doing so as they do not remember the accident very well. This was assessed by having participants answer nine forced-choice questions about the accident video, and the proportion of correct answers was examined. As several researchers have found no relationship between an adult’s ability to remember studied events and whether or not they succumb to PEI (Gabbert, Memon & Allan, 2003; Thorley, In Press; Zhu et al., 2010), no such relationship is expected here. As event memory decays over time (Schacter, Norman & Koutstaal, 1998), with the largest amount of forgetting taking place in the first week after witnessing an event (Burke, Heuer & Reisberg, 1992), it is expected that veridical remembering will be lower after a 1 week delay.

METHOD

Participants and Design

There were 156 participants in total (M Age = 22.18; SD Age = 5.17; 103 women), all of whom were staff and students at Edge Hill University. All were recruited via volunteer sampling or participated for course credit. The present experiment had a between-subjects design, with 26 participants each being randomly allocated to one of six conditions.

These six conditions were differentiated by two factors. The first factor was the eyewitness statement type. This was either a control statement (where no one was blamed for the accident), a brown-to-blame statement (where a man in a brown t-shirt was blamed for the accident), or a grey-to-blame statement (where a man in a grey t-shirt was blamed for the accident). The second factor was the delay between participants reading the eyewitness statement and having their attributions of blame and memory of the accident video assessed. Participants were tested either immediately after reading the eyewitness statement or after a 1 week delay.

Stimuli

There were four main types of stimuli in this study: (i) a video of an accident involving two men; (ii) an eyewitness statement about the accident from a woman who observed it; (iii), a 10-item forced-choice recognition test relating to information in the accident video; and (iv) two filler videos that participants watched between tasks.

The accident video was filmed on the Edge Hill University campus. It is 31 seconds long and contains two men who are involved in an accident and a woman who witnesses it. All actors were in their early 20s and students at the University. The film begins with the female eyewitness exiting a campus building and pausing briefly in the doorway. She notices two men, about 10 m away, walking in her direction, but on opposite sides of the road to each other. Both men are of a similar height and build. One man is wearing a brown t-shirt with navy blue jeans, whereas the second is wearing a grey t-shirt and navy blue jeans. As they walk along the road towards a zebra crossing, one man is visibly fixated on his MP3 player whereas the other is visibly fixated on his mobile phone. As they approach the zebra crossing, both men quickly look up for traffic before returning their attention back to their electronic devices and crossing the road. As they cross the road, the two men bump into each other, drop their electronic devices, pick them up again without apologising, and continue walking across the road. Throughout the accident, the video pans over to the female eyewitness so that any participants watching the video will be aware that she witnessed the entire accident. Figure 1 displays three stills from the video. The male characters’ age, build, dress and actions were kept as similar possible so that participants who watched the video (without encountering any leading information) would not perceive one man as being more responsible for the accident than the other.

Three versions of the eyewitness statement were created. Each eyewitness statement was written from the first-person perspective of the female eyewitness. An example of the control statement (where no blame was attributed) is in the following text:

I was just leaving my halls when I saw two students who both looked to be in their early twenties. Both students were of an average height. I’d say around 5’ 11” and of medium build. Both students had short hair and were clean shaven. One of them wore a grey t-shirt and jeans and the other wore a brown t-shirt and jeans. The one with the grey t-shirt was walking on the same side of the road as me and was heading
point but I think it was the guy in the brown t-shirt’s fault. In the grey-to-blame statement, the penultimate sentence read I was not close enough to hear if they apologised at this point but I think it was the guy in the grey t-shirt’s fault. These additional statements were included to determine whether participants would later attribute blame for the accident to the same man as the eyewitness.

The 10-item forced-choice questionnaire contained nine general questions regarding the accident and one critical question regarding who was to blame. The questions were presented one at a time on a PowerPoint display with a choice of four possible answers beneath them. The nine general questions related to different aspects of the video such as the colour of the bag the eyewitness was carrying and the number of traffic cones in the video. Only two questions related to the men in the video, with one being about the shoe colour of the man in the grey t-shirt and one being about the hair colour of the man in the brown t-shirt. One question was asked about each man to ensure one did not receive more attention than the other when completing this task. The critical question appeared 8th and asked ‘Who do you feel was to blame for the collision and dropping of the items in the video?’. The four possible answers were (i) the man in the grey t-shirt; (ii) the man in the brown t-shirt; (c) both men; and (d) neither of the men. This critical question was deliberately worded so that it was clear to the participants that their own opinion as to who was to blame was being sought and that they were not being asked if the female eyewitness blamed someone.

Two videos were also used in this study as fillers. These videos were all from a television documentary series about the British coastline and lasted 5 minutes each. They were selected as the content does not in any way overlap with that from the accident video, meaning they should not provide any additional PEI that could be incorporated into the participants’ memory of the accident.

Procedure

The procedure for the conditions in which participants answered the forced-choice questions immediately after reading the eyewitness statement are described first. Differences between these conditions and the conditions in which participants answered the forced-choice questions after a 1 week delay are highlighted at the end of this section.

Participants were tested within single-person, partitioned, computer booths with headphones attached to the computers. Onscreen instructions informed the participants that they would be required to watch three short videos, read some information about one of the videos, and complete a memory test for information contained within the videos. It was also explained that each of the videos, the written narrative, and memory test would follow on from each other automatically once the experiment had begun. The final onscreen instructions asked participants to place their headphones on so that they could hear the audio in the videos.

The accident video was presented first as part of a PowerPoint presentation. When the accident video finished, there was a 5-second pause, during which there was a warning that the second video (a filler video) was about to start. After this
second video, the PowerPoint display moved on to show one of the three eyewitness statements. Participants were given 2 minutes to read through the statement. Once the 2 minutes had elapsed, there was a 5-second pause, during which there was a warning that the third video (a filler video) was about to start. Once this video had finished, the first of the 10-item forced-choice questions appeared. Onscreen instructions informed participants that they could navigate through the 10 questions at their own pace using the downward arrow key on the keyboard and that they must select a single answer. Their answers were to be written on a response sheet that was provided by stating whether they were choosing answer a, b, c, or d. After this, participants were debriefed, thanked for their time and politely asked to refrain from disclosing the aims of the experiment to other potential participants. The participants were also asked if they were aware of the true aims of the study (in an effort to capture any demand characteristics that may be occurring) and none claimed awareness.

The delayed forced-choice recognition test conditions were identical to those described earlier, except that the participants left the laboratory after reading the eyewitness statement and were asked to return exactly 1 week later. The following week, the participants watched the second filler video (to ensure all participants in the experiment were exposed to the exact same stimuli) and then answered the 10 forced-choice questions.

RESULTS

Attribution of blame analyses

Two separate $3 \times 4$ Exact Pearson Chi-Square tests were used to determine if there was an association between who the eyewitness blamed for the accident in their statement (control statement, brown-to-blame statement, grey-to-blame statement) and who the participants subsequently blamed for the accident (both men, neither men, the man in the brown t-shirt or the man in the grey t-shirt). The first test examined participants’ attributions of blame immediately after they read the eyewitness statement, whereas the second test examined participants’ attributions of blame 1 week after they read the eyewitness statement. Separate Exact Chi-Square tests were favoured over other data analysis techniques as screening revealed that several contingency table cells had expected counts of less than 5.

In the immediate testing conditions, only one participant (or 3.8% of all participants) who read the control statement attributed blame to a single individual, whereas nine participants (or 34.60%) who read the brown-to-blame statement and 10 participants (or 38.50%) who read the grey-to-blame statement attributed the same blame as the eyewitness. This implies that just over one-third of the participants who read the leading eyewitness statement succumbed to blame conformity. The full range of observed frequencies can be seen in Table 1. There was a significant association between the blame attributed by the eyewitness and the blame attributed by the participants $\chi^2$ (8, $n=78$) = 37.11, exact $p = .001$, Cramer’s $V = .69$. The standardised residuals from the Exact Chi-Square were examined to determine which cells contained frequencies that differed from those expected if there was no association between who the eyewitness blamed and who the participants blamed. After reading the brown-to-blame statement, the participants blamed the man in the brown t-shirt significantly more often than expected ($z = 3.50, p < .001$). Likewise, after reading the grey-to-blame statement, the participants blamed the man in the grey t-shirt significantly more often than expected ($z = 3.30, p < .001$). No other cells contained values that significantly differed from those expected (all $p’s > .05$).

In the delayed testing conditions, no participants who read the control statement attributed blame to a single individual, whereas nine participants (or 34.60%) who read the brown-to-blame statement and 10 participants (or 38.50%) who read the grey-to-blame statement attributed the same blame as the eyewitness. As in the immediate testing conditions, just over one-third of the participants succumbed to blame conformity. The full range of observed frequencies can be seen in Table 1. There was a significant association between the blame attributed by the eyewitness and the blame attributed by the participants $\chi^2$ (8, $n=78$) = 41.20, exact $p = .001$, Cramer’s $V = .73$. The standardised residuals revealed that after reading the brown-to-blame statement, the participants blamed the man in the brown t-shirt significantly more often than would be expected ($z = 3.50, p < .001$). Similarly, after reading the grey-to-blame statement, the participants blamed the man in the grey t-shirt significantly more often than would be expected ($z = 3.70, p < .001$). No other cells

<table>
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<tr>
<th>Eyewitness blame</th>
<th>Participant blame</th>
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</thead>
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<td>38.50</td>
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<tr>
<td>Grey-to-blame</td>
<td>34.60</td>
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</tbody>
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Table 1. Percentage of trials on which participants attributed blame for an accident to either both men, neither man, to the man in brown, or to the man in grey after reading an eyewitness statement where blame was attributed to either no one specific (Control), to the man in brown (Brown-to-blame), or to the man in grey (Grey-to-blame). Testing occurred immediately after reading the eyewitness statement or after a 1 week delay.
contained values that significantly differed from those expected (all $p's > .05$).

Three separate $4 \times 2$ Exact Pearson Chi-Square tests were conducted for each of the statement types (control, brown-to-blame, grey-to-blame) to assess whether participants’ attributions of blame (both men, neither man, the man in the brown t-shirt or the man in the grey t-shirt) differed according to the time of testing (immediate or delayed). There were no significant associations between blame and time of testing for participants who read the control statement $\chi^2 (3, n = 52) = 1.51$, exact $p = .58$, Cramer’s $V = .17$, the brown-to-blame statement $\chi^2 (3, n = 52) = .47$, exact $p = .84$, Cramer’s $V = .09$ or the grey-to-blame statement $\chi^2 (3, n = 52) = .78$, exact $p = .74$, Cramer’s $V = .10$.

The combined results from the attribution of blame analysis suggest that just over one-third of participants who read the brown-to-blame and grey-to-blame statements succumbed to blame conformity. These effects were similar irrespective of whether participants’ attributions of blame were assessed immediately or 1 week after they read the leading eyewitness statement.

**Memory of the accident analysis**

The second set of analyses aimed to determine whether or not those participants who succumbed to blame conformity had worse memories of the accident (when answering the nine forced-choice questions about the accident video) than those who did not succumb to blame conformity. If they did, then the blame conformity effects observed may have been a result of them simply not being able to remember the video very well. To assess this, a $2 \times 2$ between-subjects analysis of variance was conducted, comparing those who did and did not succumb to blame conformity on the immediate and delayed tests. There was no difference in the number of questions answered correctly by those participants who succumbed to blame conformity ($M = 5.31$) and those who did not ($M = 5.40$), $F(1, 100) = .07$, $MSE = .02$, $p = .79$, $\eta^2_p = .01$. Participants did, however, correctly answer more questions when tested immediately after reading the eyewitness statement ($M = 5.76$) than after a 1 week delay ($M = 4.86$), $F(1, 100) = 13.57$, $MSE = .02$, $p < .05$, $\eta^2_p = .12$. Finally, there was no interaction between whether participants succumbed to blame conformity or not and the time at which their memory of the accident was tested, $F(1, 100) = 1.46$, $MSE = .02$, $p = .23$, $\eta^2_p = .01$. These combined results suggest that the ability to remember the accident video was not an important factor in determining whether participants engaged in blame conformity or not. Memory of the accident did, however, decline over time.

**DISCUSSION**

The present experiment is the first to demonstrate blame conformity, whereby blame for an accident can be shifted between individuals as a result of a leading eyewitness statement. It was found that just over one-third of participants who read an eyewitness statement blaming an individual for an accident subsequently blamed the same person for its occurrence. In contrast, less than 4% of participants who read an eyewitness statement where no blame was attributed for an accident subsequently blamed an individual for its occurrence. These effects were consistent regardless of whether participants’ attributions of blame were assessed immediately after reading the eyewitness statement or after a 1 week delay.

The blame conformity observed in the present experiment is unsurprising given that co-witness PEI has previously been shown to influence eyewitness testimonies (see Wright et al., 2009, for a review). The persistence of blame conformity after a 1 week delay is also consistent with previous research demonstrating that co-witness PEI can continue to influence testimonies after 7 days (Mudd & Gove, 2004). This past research, however, primarily focussed on memory conformity, whereby participants altered their memory reports of events to be consistent with a co-witness. This is the first experiment to explicitly demonstrate that attributions of blame can be influenced by co-witness PEI and that these effects persist over time.

Participants in this study are unlikely to have engaged in blame conformity as they did not remember the accident video very well. Those participants who did and did not succumb to blame conformity answered the same number of forced-choice questions about the accident correctly. These results are to be expected as previous research (e.g. Gabbert et al., 2003; Thorley, In Press, Zhu et al., 2010) also found no relationship between memory ability and susceptibility to PEI. Participants’ memory of the accident did decay over time, which is consistent with the finding that largest extent of forgetting take places in the first week after witnessing an event (Burke, et al, 1992).

Future research could be directed at determining why participants engaged in blame conformity. Deutsch and Gerard (1955) differentiated between two motivations for conformity, namely informational and normative social influence. Informational influence occurs when a person agrees with the PEI as a result of uncertainty with regards to whether it is accurate or not. Normative influence occurs when a person knows that the PEI is inaccurate but agrees with it regardless as they wish to avoid publically disagreeing with the source of it (e.g. another eyewitness). As participants in the present experiment made their attributions of blame privately, and the PEI was presented in the form of an eyewitness statement only, it can be speculated that blame conformity occurred because of informational influence. Future blame conformity studies could ask participants to privately report their reasons for attributing blame in order to help clarify this.

Future research could also examine whether the actions of people blamed for incidents are remembered accurately. Research by Remijn and Crombag (2007) suggests that when people are held accountable for incidents, memory of their actions can be distorted. In their study, participants watched a video of a homeless man being evicted from a police station by an officer, during which the homeless man fell. Those who blamed the police officer for the fall judged him to be more forceful than those who did not blame him. This raises the possibility that, in the present research, those who did and did not succumb to blame conformity had different memories of the two men’s actions. This could be assessed in future blame conformity studies by asking participants to describe the actions of the people involved in incidents.
The current research has important legal implications. Previous research by Paterson and Kemp (2006) and Skagerberg and Wright (2008) has demonstrated that multiple eyewitness frequently discuss events they have witnessed. If multiple eyewitnesses to an incident were to discuss it shortly after it occurred, and one was to either accidentally or deliberately blame an innocent person at the scene for causing it, then the other eyewitnesses could later report that this innocent person was to blame. Likewise, if an eyewitness was to encounter other eyewitnesses could later report that this innocent person for an incident they had witnessed, then they could also come to agree that this person was to blame.

Referring back to the Boston Massacre, Captain Preston was confronted with eyewitnesses who both supported and refuted his claim that he had not given orders to open fire. In the days that followed the Boston Massacre, there were various forms of propaganda distributed by supporters of the people who died and the supporters of the British soldiers. Depending on who published this propaganda, it contained depositions from people who either blamed or exonerated Captain Preston (Davidson, 1941; Zobel, 1970). It is conceivable that eyewitnesses in Captain Preston’s trial read these depositions and were in influenced by them, leading to the conflicting testimonies over whether Captain Preston was to blame for the massacre or not. Whilst the truth of this matter may never be known, the findings from the present experiment raise some interesting questions that bear both historical and contemporary legal relevance.

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REFERENCES


