

Memory conformity during co-witness discussions: Issues and considerations

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Criminal investigations often rely upon eyewitnesses to help drive investigations forward and convict offenders. Witnesses can assist investigators by identifying suspects, through identification parades; and by providing detailed accounts about the incident, through their statement. However, research suggests that witnesses will not always produce reliable evidence. Witness inaccuracies can be due to various dispositional and circumstantial factors, however for the purpose of the current discussion, the author focuses on the malleability on the suggestibility of eyewitnesses during co-witness discussions.

Keywords: conformity; eyewitness; memory; misinformation; suggestibility

There is an expectation placed within the criminal justice system that witness accounts are independent and not based on information encountered post-event (Deffenbacher & Loftus, 1982). However, this is not always the case. After witnessing an incident, witnesses may encounter post-event information about the incident from external sources (Gabbert et al., 2012) which may conflict with their personal recollections or provide additional details about the event that they may have previously been unaware of (French et al., 2006; Gabbert et al., 2006). Witnesses can encounter post-event information from various sources, most typically through other co-witnesses (Gabbert, 2004), interviewers (Jack et al., 2013) and media reports (Gabbert et al., 2012). However, research has shown that most influential source of post-event information are other co-witnesses (Paterson and Kemp, 2006a). Interviewers will usually encourage witnesses to only recall information that they remember seeing. However, research suggests that many eyewitnesses who encounter misleading post-event information may then incorporate the misinformation into their personal statements (Mojtahedi, 2017; Mojtahedi et al., 2017).

Co-witness discussions are common occurrences (Skagerberg & Wright, 2008). Survey results from Paterson and Kemp (2006b) suggest that on average, public crimes will involve 6.77 co-witnesses and approximately 86% of witnesses will engage in a post-event discussion with their co-witnesses after the incident. If co-witnesses hold differing recollections of the event, a group discussion could cause the individual statements of the eyewitnesses to become more similar (Gabbert et al., 2004; Mojtahedi et al., 2018a). This process of co-witness contamination is frequently referred to as *memory conformity* (Carlucci et al., 2010; Davis & Meade, 2013; Paterson et al., 2012). A notable case of memory conformity was the investigation of the 1995 Oklahoma bombing incident. Three eyewitnesses had reported having seen the suspect come into the store they worked at to rent the vehicle that was used for the attack. Initially, two of the witnesses had correctly reported only seeing McVeigh get inside the truck, but the third witness mistakenly believed that a second accomplice was present. After discussing the event with each other, all three witnesses agreed that a second accomplice had been present during the incident (Memon & Wright, 1999; Schacter, 2001). This collaborative error caused police officers to exhaust their time and resources looking for a non-existent second suspect – in what is considered to be one of the most expensive manhunts in US history (Skagerberg & Wright, 2008).

Researchers have been able to emulate and examine the effects of memory conformity through an experimental design commonly referred to as the *misinformation paradigm* (see Ayers & Reder, 1998 for review). Participants first witness an incident (either on screen or in person). After witnessing the event, they are then exposed to misleading post-event information from a co-witness, either directly (using other participants or confederates) or indirectly (e.g., written statements from previous participants). Finally, participants are individually questioned by the interviewer about the event. Responses are then compared to a control group of participants who have not been exposed to the misinformation to determine whether exposure to misinformation influenced the participants' memory reports (e.g., Mojtahedi et al., 2018b). Research using this paradigm has demonstrated the vulnerability of human memory to contagion, with evidence showing that individuals are susceptible to co-witness influence when recalling an incident (Davis & Meade, 2013), describing a suspect (Loftus & Greene, 1980), making an identification (Zajac & Henderson, 2009) or attributing blame (Mojtahedi et al., 2019).

Psychological explanations of memory conformity

It is generally accepted that the memory conformity can operate outside of a witness's awareness (Morgan et al., 2013), such that some witnesses will recall post-event information with the belief that they had witnessed the information (Scoboria et al., 2006). This unintentional acceptance of misinformation can be a result of source attribution errors, a psychological process where post-event information is misattributed as witnessed information during memory reconstruction (Cann & Katz, 2005; Schacter et al., 2011). Co-witness conformity can also occur intentionally as a result of

informational influence (Blank, 2009; Gabbert et al., 2007), the process of conforming to others to obtain the correct answer (Deutsch & Gerard, 1955). Due to the significant implications that are associated with giving evidence to the police, many witnesses will feel pressured to provide accurate information. However, a heightened pressure to perform can motivate an eyewitness to report newly learnt misinformation, if they perceive the source to be accurate (French et al., 2011; Williamson et al., 2013).

Individual differences and memory conformity

Research on memory conformity has consistently found that not all participants conform to their co-witnesses. The literature suggest that some eyewitnesses may possess certain dispositional attributes that put them at a higher risk of being influenced by co-witnesses, relative to others (Goodwin et al., 2012). Alternatively, some co-witnesses may also possess certain attributes that make them more influential to other co-witnesses, than others (Mojtahedi et al., 2019).

Wright et al., (2009) reported that participants with social anxiety were more vulnerable to being influenced by a co-witness during memory recall, due to a greater fear of negative evaluation making them more susceptible to normative influence. Cooperativeness and reward dependence were also associated with a greater susceptibility to misleading post-event information (Zhu et al., 2010). Doughty et al., (2017) found that participants who scored lower on measures of openness, extraversion and neuroticism were significantly more susceptible to memory conformity, relative to higher scoring participants. Further, Liebman et al., (2002) found that eyewitnesses with a high external locus of control, low memory efficacy and/or high levels of neuroticism were significantly more vulnerable to interrogative suggestibility.

In relation to the source of the misinformation, research suggests that the characteristics of an information source can affect their level of influence over their co-witnesses (Forgas & Williams, 2001). More specifically, it is the way in which the information source is perceived by their co-witnesses that affects their level of informational influence (Skagberg & Wright, 2009; Williamson et al., 2013). Research has shown that a co-witness's perceived credibility (e.g. memory accuracy) can determine their level of influence over other co-witnesses. Thorley (2015) found that participants were susceptible to conforming to their co-witness's false blame attribution, after reading their erroneous statement, but only when the unfamiliar co-witness was a young adult. The study found that when the co-witness was an elderly woman, participants were significantly more likely to reject her statement. Additionally, Thorley (2015) found that participants were more likely to conform to co-witnesses that were perceived as having better memory over co-witnesses that they deemed as being more reliable.

Eyewitnesses are also more likely to conform to the memory reports of co-witnesses that they share a pre-existing relationship with, relative to unfamiliar co-witnesses (French et al., 2008; Mojtahedi et al., 2018a). This is because individuals are better equipped at assessing the credibility of an acquaintance in comparison to a stranger. Thus, there would be more reason to accept information from a familiar source. However, if the individual perceives a familiar co-witness as being incompetent or untrustworthy, this could motivate them to disregard their co-witness's report (Skagerberg & Wright, 2009). Another reason why eyewitnesses are more likely to be influenced by familiar co-witnesses than by strangers is due to an increased level of likability towards the co-witness. Research on social cognition suggests that the likeability of an information source can moderate the level of social influence they have (Burger et al., 2001).

CONCLUSION

Within the past two decades, research has demonstrated how misleading information from co-witnesses can influence an individual to falsely report seeing items that were not present, get the characteristics of certain details incorrect (e.g., suspect's hair colour), and even misidentify the wrong suspect from an identification parade. However, when assessing the real-world applicability of such research, one must acknowledge that the observations made within laboratory settings will not be replicated by all eyewitnesses after a real incident. In addition, the ecological validity of the laboratory-based observations is not completely exemplary, therefore, caution must still be taken when interpreting the findings and using them to assess the reliability of an eyewitness's statement.

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