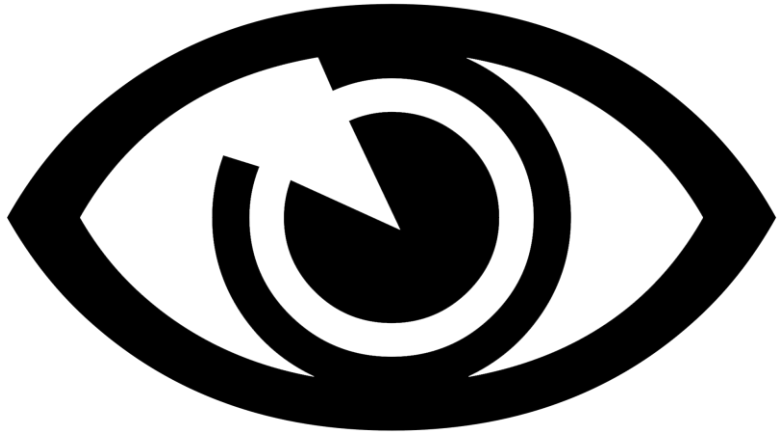

INVESTIGATING THE EFFECTS CO-WITNESS FAMILIARITY ON STATEMENT SIMILARITY.

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Inspiring tomorrow's professionals

PRESENTATION OUTLINE

- Are eyewitness reliable?
- What is co-witness influence and why does it occur?
- The significance of co-witness relationships
- The current literature
- My research
- Directions for future research

ARE EYEWITNESSES RELIABLE?

How often do eyewitnesses provide the major lead for an investigation?

36% always the major lead

51% usually the major lead

Schmechel et al., (2006)

Kebbell and Milne (1998)

ARE EYEWITNESSES RELIABLE?

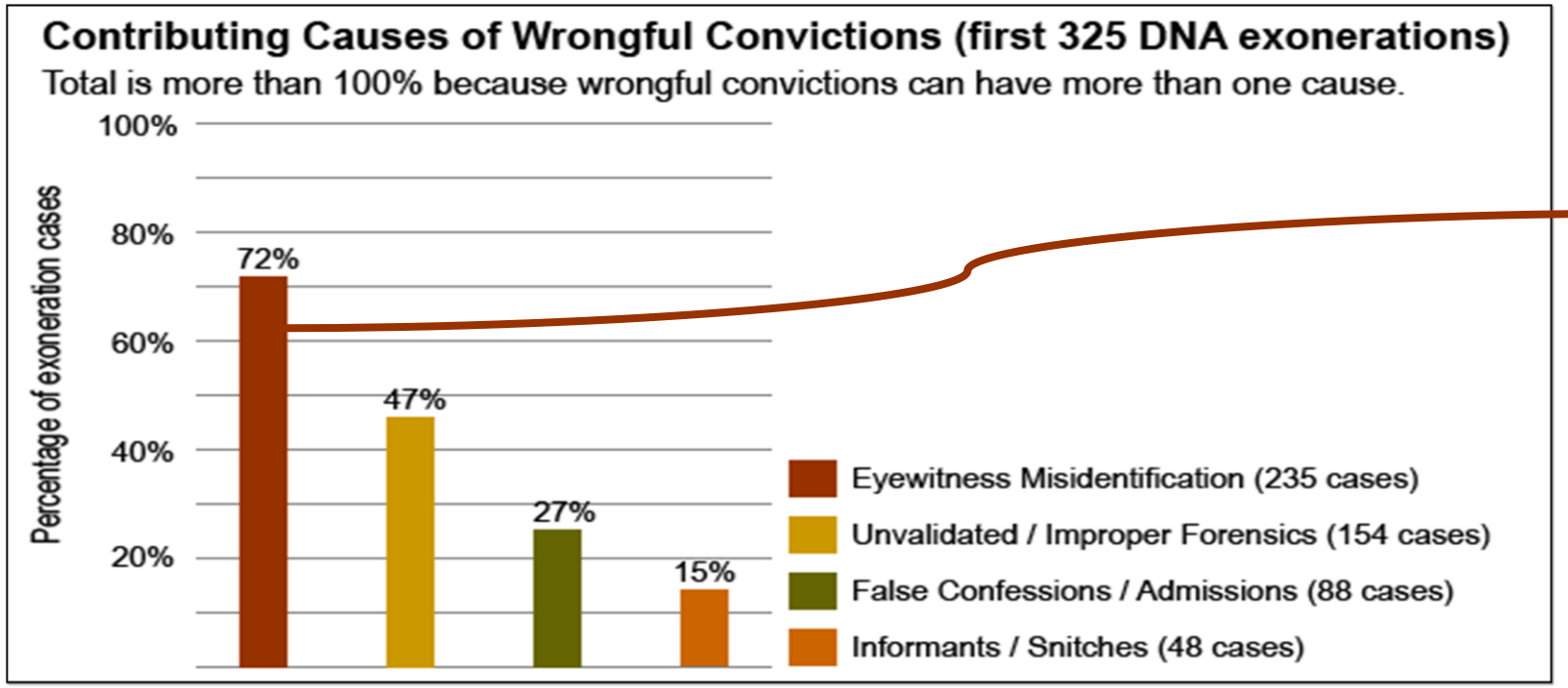


Figure 1: Contributing causes confirmed through Innocence Project research (The Innocence Project, 2015).

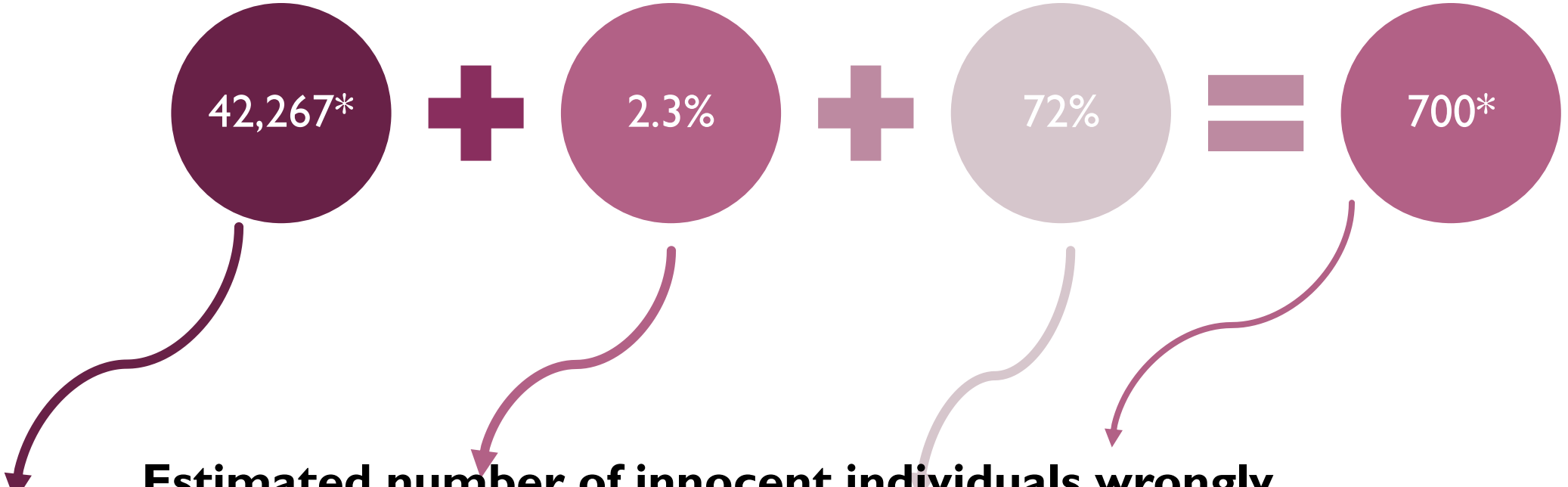
IN APPROXIMATELY 48% OF CASES OF MISIDENTIFICATION, THE REAL PERPETRATOR WENT ON TO COMMIT MORE CRIMES

Cardozo, (2009); Scheck, Nuefeld, Dwyer (2003)

(Statcan, 2015; The Innocence Project, 2015)

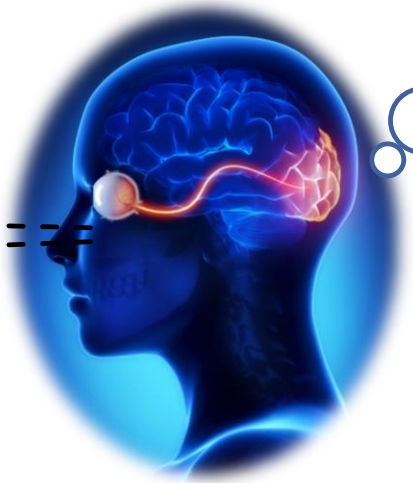
ARE EYEWITNESSES RELIABLE?

*Violent offences = Homicide; attempted murder; robbery; sexual assault; other sexual offenses; major assault; common assault; uttering threats; criminal harassment; other violent offences.



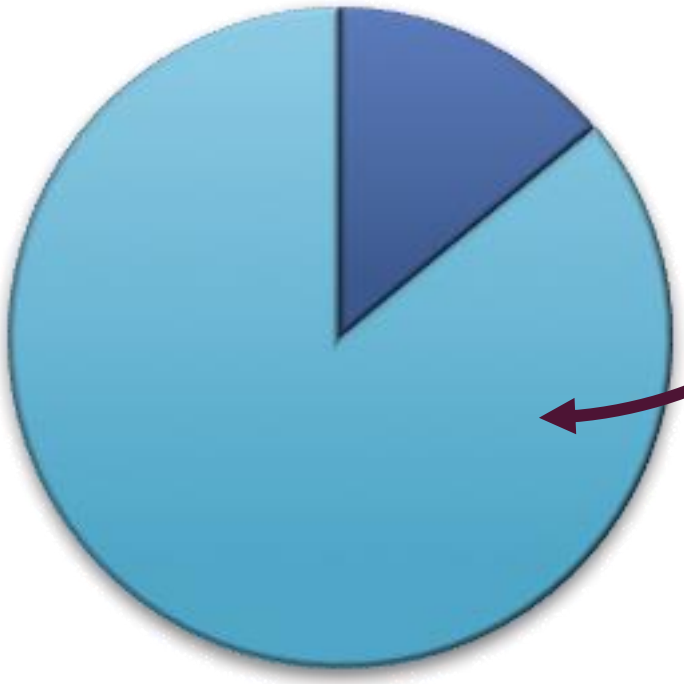
POSSIBLE CAUSES OF MISIDENTIFICATION

- Inaccurate memory encoding
- Intoxication
- Pressure to perform
- Stress induced errors
- Memory decay
- Misleading questions



(Craik et al., 1996; Deffenbacher et al., 2004; Dysart et al., 2002; Roebers & Schneider, 2000; Tuckey & Brewer, 2003; Wells et al., 2000)

CO-WITNESS INFLUENCE



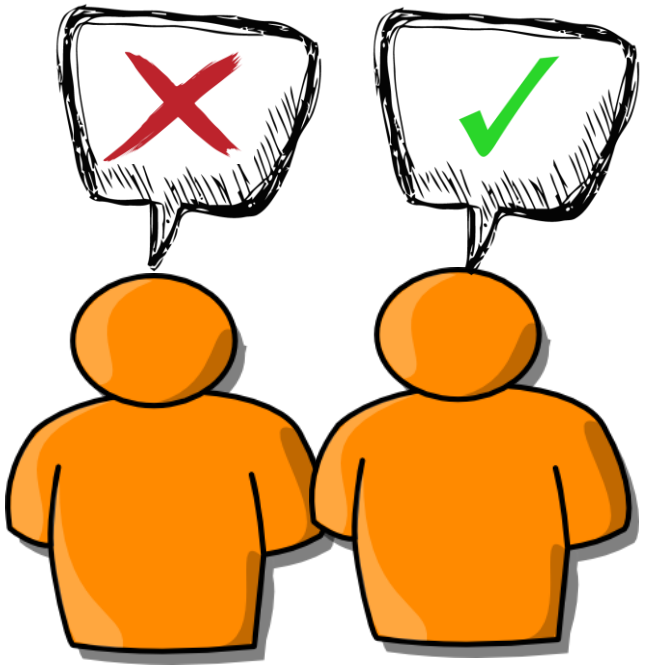
86% of real eyewitnesses discuss the event with co-witnesses, prior to giving a statement

38% of misidentification cases involved multiple eyewitnesses making a false statement.

(Paterson & Kemp, 2006a)

RESEARCH ON CO-WITNESS INFLUENCE

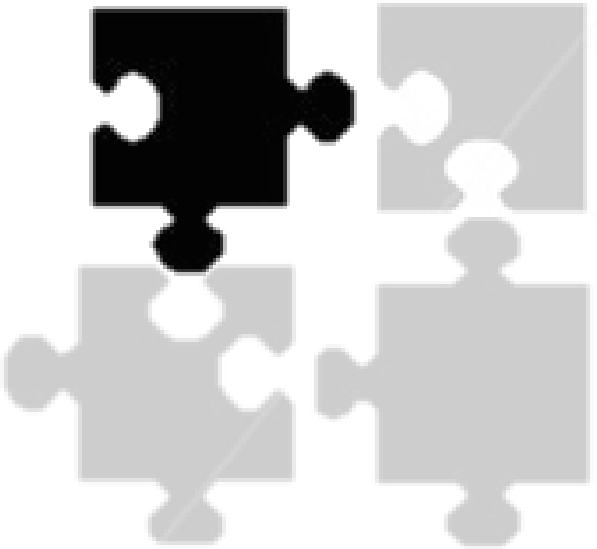
- Individuals present during the same event are likely to hold different recollections afterwards.
- If witnesses hold differing recollections, a group discussion could cause the individual statements of the eyewitnesses to become more similar.
- A large body of research (see Garry et al., 2008; Paterson & Kemp, 2006b) suggests that eyewitnesses can be influenced by co-witnesses into recalling false information from an event .
- More worryingly, Thorley (2015) demonstrated that eyewitnesses could be misled by co-witnesses into attributing blame onto an innocent bystander. A phenomenon referred to as *blame conformity*.



(French, Sutherland, & Garry, 2008; Gabbert et al., 2004; Garry et al., 2008 ; Paterson & Kemp, 2006b; Thorley, 2015)

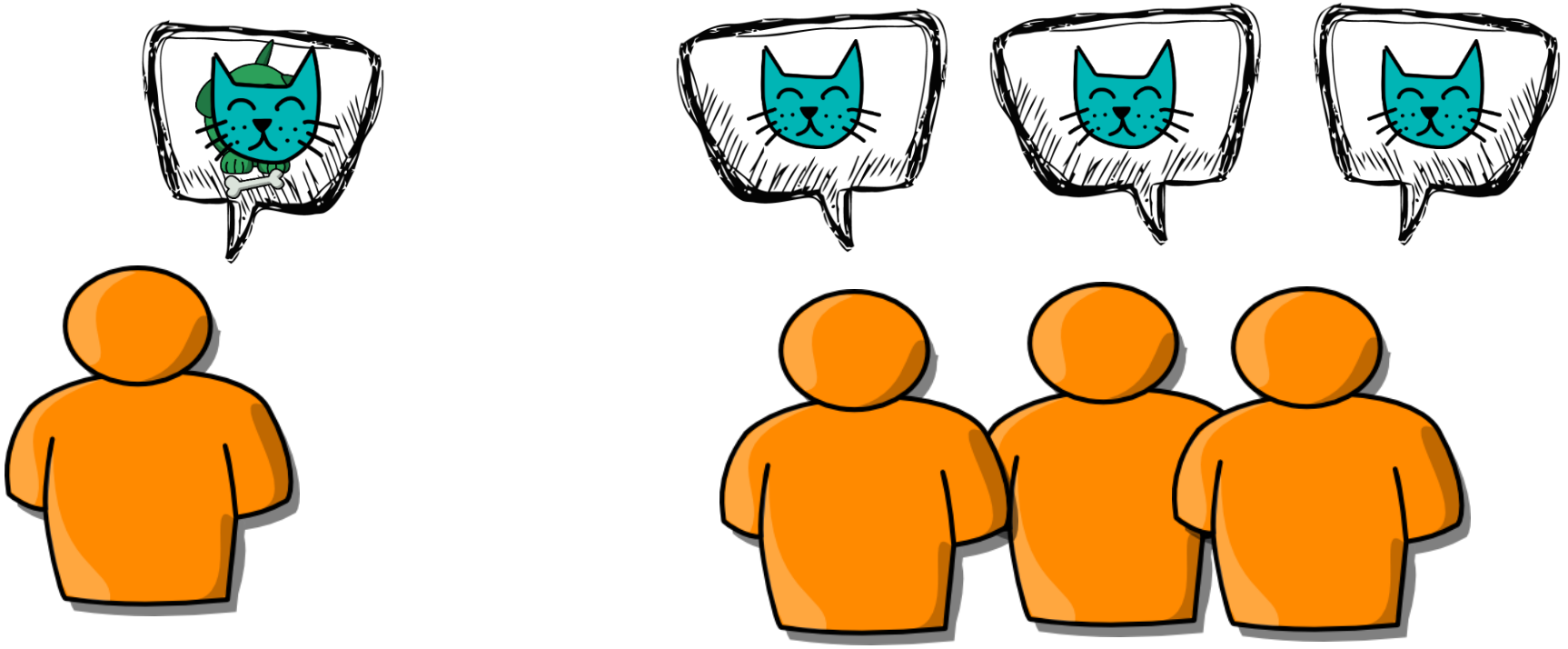
MEMORY DISTORTION

- Eyewitnesses will very rarely have a perfect recollection of the event. There will often be gaps within their memory about certain details.
- After witnessing an incident, eyewitnesses may encounter additional information about the event (post-event information).
- When giving a statement the eyewitness will attempt to retrieve as much information as they can from the event.
- Through source monitoring errors, the eyewitness may misattribute post-event information as witnessed information.



(Cann & Katz, 2005; Schacter, Guerin, & Jacques, 2011; Tousignant, Hall, & Loftus, 1986)

SOCIAL INFLUENCE



The act of changing ones own attitudes, beliefs or behaviour to match that of a person or groups (Cialdini & Goldstein, 2004)

DIFFERENT FORMS OF INFLUENCE

Informational

Normative

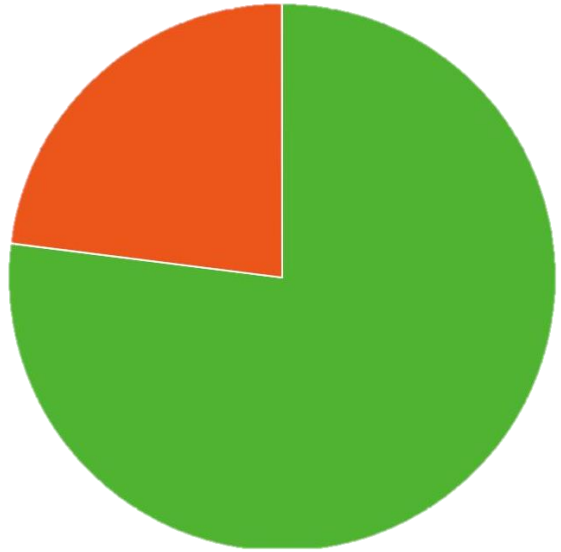
Informational influence is when an individual obtains information from a group and accepts it as accurate information about reality (Kaplan & Miller, 1987).

Normative influence is the pressure an individual faces to conform to a majority in order to gain social approval and acceptance from the group (Hagger & Chatzisarantis, 2005).

CO-WITNESS INFLUENCE

The majority of research on co-witness influence have incorporated a design where the participants were strangers to each other.

77% of eyewitnesses are likely to have a pre-existing relationship with their co-witnesses.*

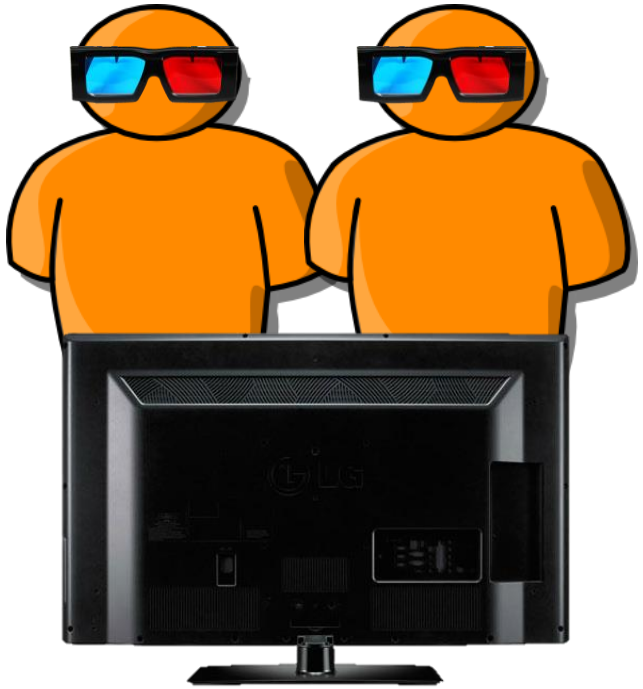


Research suggests that co-witness influence is highly dependent on the source from which the information comes from.

many relationships are maintained through compromising a shared reality. Resultantly, individuals are often more inclined to habitually accept the judgement of people they were close with, as a part of their behavioural routine (Echterhoff, Higgins, & Groll, 2005; Sorrentino & Yamaguchi, 2008).

(Gabbert et al., 2003; Hope et al., 2008; Meade & Roediger, 2002; Paterson, Chapman, & Kemp, 2007*)

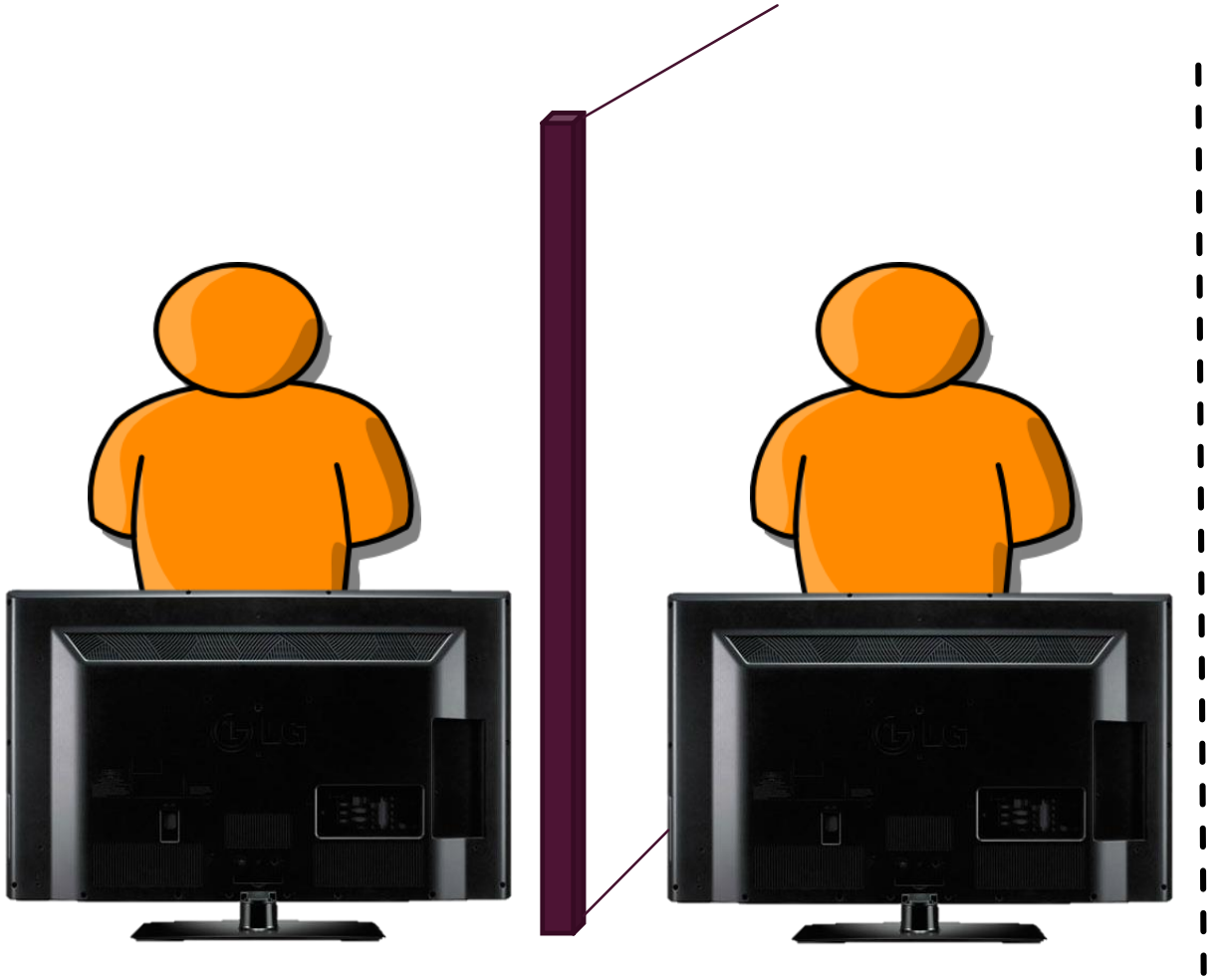
CO-WITNESS FAMILIARITY



French, Gary, and Mori (2008)

- Strangers vs Couples.
- Participant pairs watched slightly different videos on the same screen via MORI technique (Manipulation of Overlapping Rivalrous Images).
- Pairs were asked to discus the footage together before giving a statement.
- Couples were significantly more likely to recall unseen items suggested by their co-witness.

CO-WITNESS FAMILIARITY



Hope, Ost, Gabbert, Healey, and Lenton, (2008)

- Strangers vs Couples vs Friends
- Participant pairs watched slightly different videos on two different monitors and were separated by a screen.
- Pairs were asked to discus the footage together before giving a statement.
- Couples and Friends were significantly more likely to recall unseen items suggested by their co-witness.
- No difference in statement similarity between friends and couples.

NEED FOR FURTHER RESEARCH

- Majority of studies have only observed the effects of co-witness familiarity on eyewitness pairs instead of groups.
- However, during real criminal events, there are often more than two eyewitnesses present.
- Furthermore, general models of social psychology suggest that the effects of social influence would be significantly different in larger groups (Bond, 2005)

- Participants in such studies were asked to recall the event/give their answers collectively.
- Not only is this unrealistic to realistic, but such paradigms would evoke a greater level of normative influence.
- Participants may have produced different a different response if they were interviewed privately.

PRESENT STUDY

- The main aim of the present study was to observe the effects of post-event discussions between groups of co-witnesses. Moreover, the researchers were focused on identifying whether the relationship between co-witnesses would have an impact on statement similarity.
- The study attempted to build upon the previous research by investigating the effects of post-event discussions between groups, rather than pairs.
- Additionally we aimed to adopt a more naturalistic approach in observing co-witness influence.

H1 Post-event discussions would increase statement similarity.

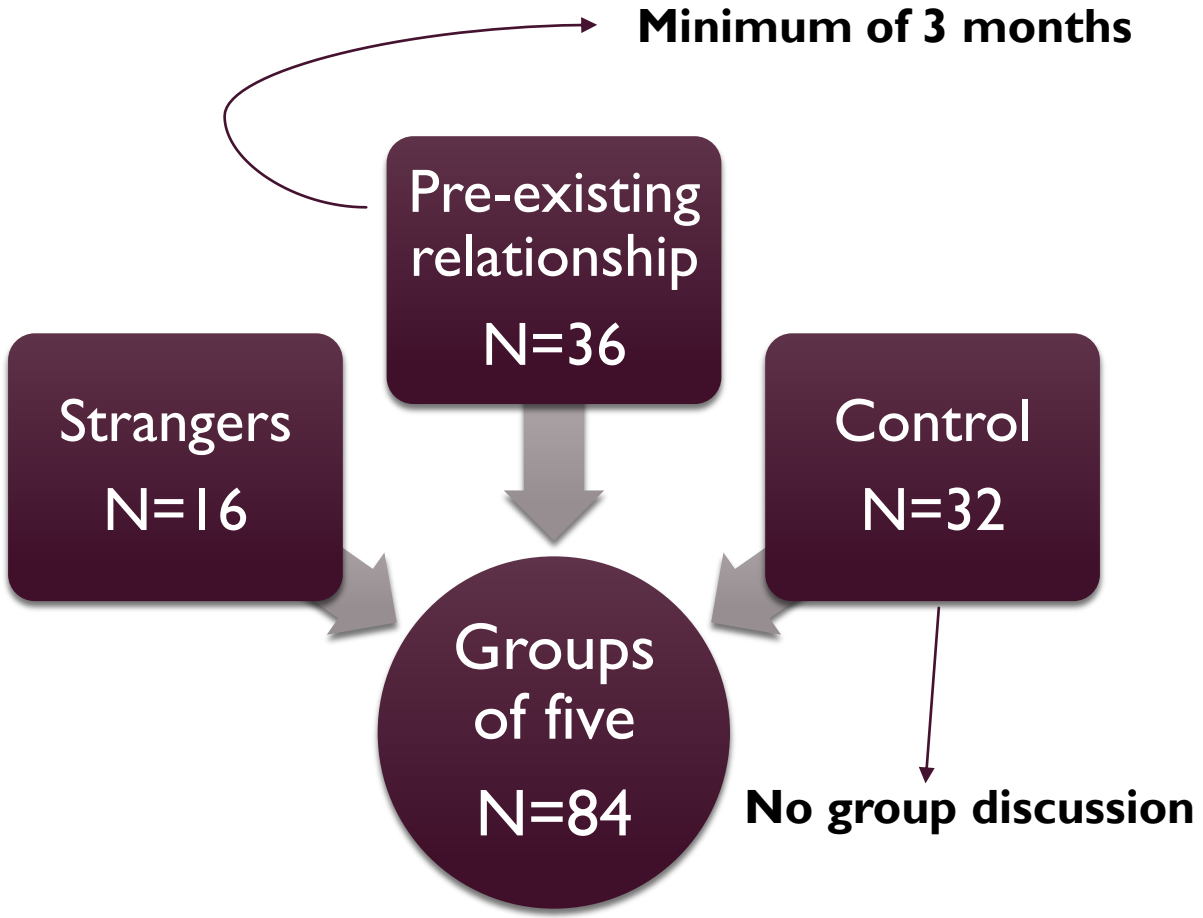
H2 Familiar co-witnesses would share the highest statement similarity

METHODOLOGY: PARTICIPANTS AND DESIGN

Age Range

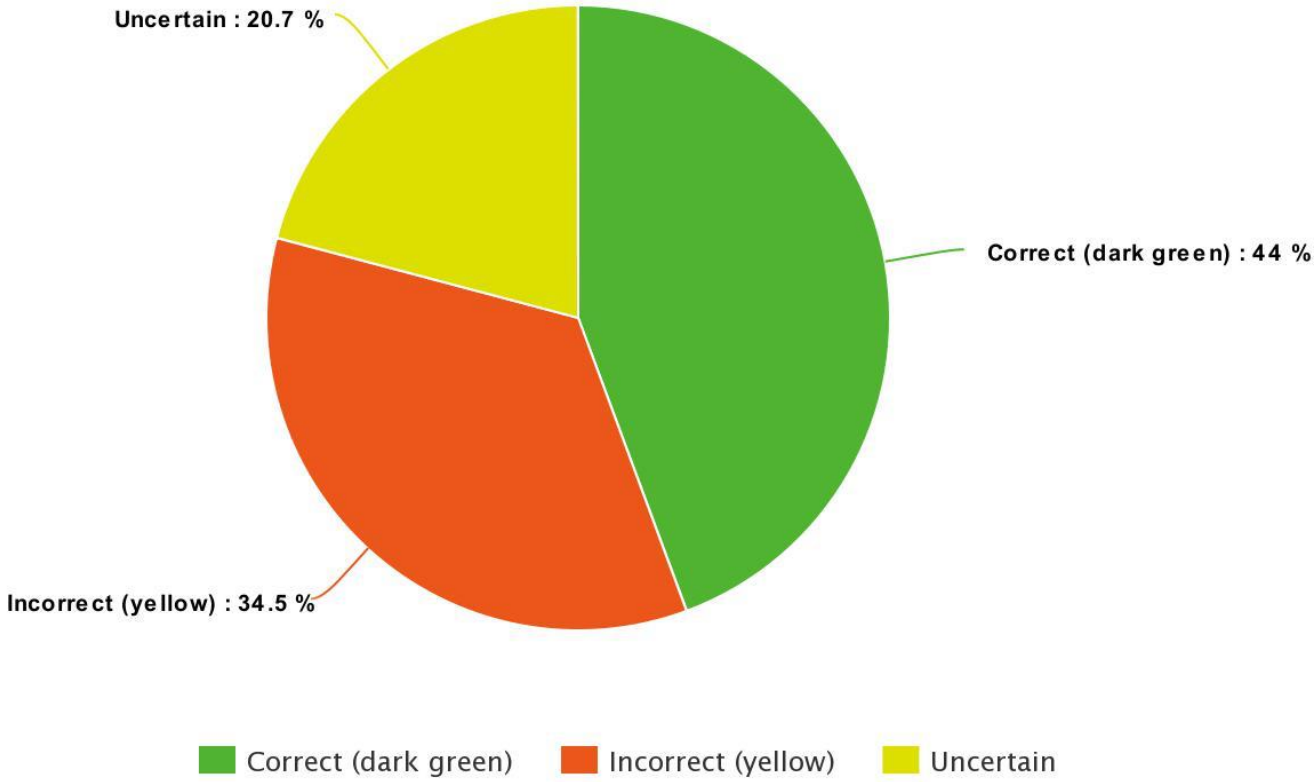
18-83

(*M* = 33.4; *SD* = 15.62)



PROCEDURE: MATERIAL

- CCTV footage of a bar fight
- Lasted approximately 1.5 mins
- Two men in distinctively different clothing (yellow and dark green).
- Man in dark green attacks man in yellow.
- Both men then engage in a physical confrontation for forty seconds, before being separated.



METHODOLOGY: PROCEDURE

Participants were individually interviewed and asked to give a statement of what they had witnessed. They were asked to identify who had thrown the first hit. Participants were asked not to guess and to state that they were uncertain if they were unsure.

METHODOLOGY: CODING

Response accuracy

- *Correct response*: Blamed man in dark green.
- *Incorrect response*: Blamed man in yellow.
- *Uncertain:* Unable to determine which suspect started the fight.
- Three participants blamed a third party (bystander who separated the fight) for starting the fight. These participants were scored as "other".

Statement similarity

- Data was was clustered with each eyewitness group representing an individual data set.
- Each group was scored on the percentage of the majority response.
- For example, if four out of five group embers blamed the suspect in yellow, the group received a similarity score of 80%.

RESULTS

- A one-way between groups analysis of variance (ANOVA) was conducted to explore the impact of the group condition on statement similarity.
- There was a statistically significant difference in statement similarity for the three experimental conditions $F\ (2, 39.49) = 3.3, p < .05$.

Table 1. Descriptive data for average statement similarity within eyewitness groups.

	N	*M*	*S.D*
Relationship	36	71.11%	19.39%
Stranger	16	65%	21.29%
Control	32	60%	16.06%

RESULTS

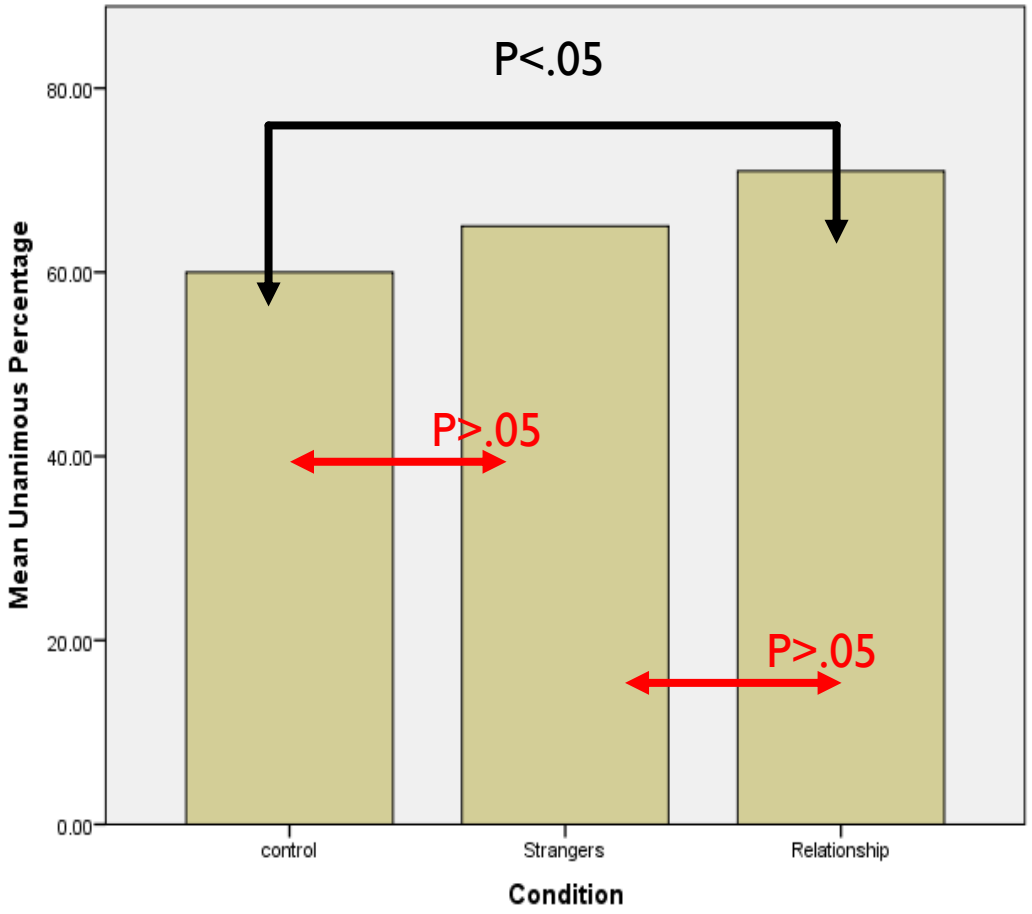


Fig. 1. Mean percentage of group statement similarity.

- Post-hoc comparisons were made using the Tuckey HSD test
- Significant difference in mean scores of statement similarity between co-witnesses with pre-existing relationships and co-witnesses in the control group.
- The difference in mean scores was medium, in accordance to Cohen (1988). The effect size, calculated using Cohen's *d*, was .62.
- No significant differences between co-witnesses with pre-existing relationships and co-witnesses with no pre-existing relationships.
- No significant differences between co-witnesses with pre-existing relationships and co-witnesses with no pre-existing relationships.

RESULTS

- Chi-squared test was carried out to see if there was an association between group condition and response accuracy.
- Results found that there was a weak significant association between the experimental conditions and eyewitness blame attribution $\chi 2$ (6, N = 420) = 19.63, p <.01, ϕc = .15.
- An examination of the standardized residuals revealed that among the participants who had a pre-existing relationship with their co-witnesses, there were significantly fewer participants stating that they were unsure than expected.

Table 2. Percentage of participant's blame attribution accuracy between conditions.

	Correct	Incorrect	Unsure	Other [a]
Relationship	53.3.%	41.7%	10.6%	0%
Stranger	40%	36.3%	23.8%	0%
Control	38.8%	36.9%	22.5%	1.9%

a = a third party blamed for committing the crime (incorrect).

DISCUSSION

Co-witness influence from strangers

- Results suggested that a co-witness discussions with strangers did not have a significant effect on statement similarity.
- The finding lays in contradiction with previous research, which suggests that eyewitnesses can be influenced by strangers (C.F. Kieckhafer & Wright, 2014).

First

- Within the present study, the participants were likely to encounter both confirmatory and disconformity feedback.
- Research shows that individuals are more likely to favor confirmatory feed back over disconfirmatory feedback.

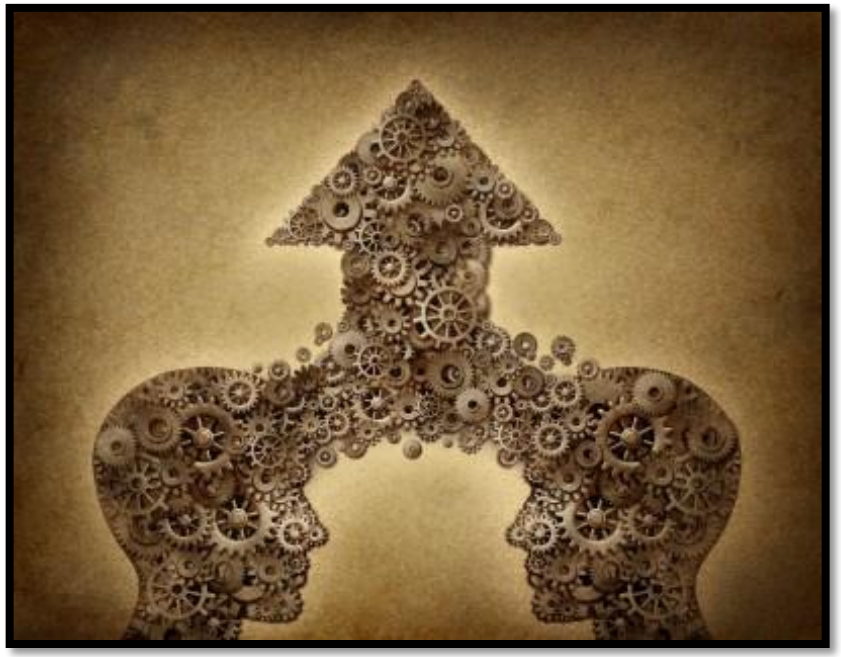
Second

- Walther et al., (2002): Group influence decreases when multiple dissenters are present.
- Dissenters provide the individual with an independent view of the event, which can increase their own confidence in their recollection of the event.

DISCUSSION

Co-witness influence from family and peers

- The findings suggest that a post-event discussion with familiar co-witnesses could increase the risk of statement similarity, as suggested by previous research (French, Gary, & Mori, 2008; Hope Ost, Gabbert, Healey, Lenton, 2008; Skagerberg & Wright, 2008).
- Individuals will have more information about their peers to gauge the accuracy of their judgment's (Forgas, 2001; Festinger, 1954; Gabbert, Memon, & Wright, 2007). This would suggest that within an eyewitness setting, an eyewitness would be more likely to believe that a co-witness was correct if they had a pre-existing knowledge of their cognitive skills
- Hope, Ost, Gabbert, Healey, Lenton (2008) also explained that eyewitnesses are likely to spend less time evaluating the reliability of a co-witness's judgement, if they find the individual more likeable. Resultantly, co-witnesses may be less aware of the inaccuracies of their acquaintances and would therefore be more likely to accept their information as reality.



DISCUSSION: RESPONSE ACCURACY

- The results suggest that the balance between inaccurate and accurate statements remained relatively constant across all conditions .
- The results did however, suggest that eyewitnesses were significantly less likely to be uncertain, after discussing the event with familiar co-witnesses. The findings suggest that eyewitnesses who are more uncertain about an event will be significantly more susceptible to being influenced by others around them.
- This inference is supported by previous research that has identified a positive relationship between uncertainty and susceptibility to informational influence (Smith, Hogg, Martin, & Terry, 2007; Walther, Bless, Strack, Rackstraw, & Wagner, 2002).

LIMITATIONS AND DIRECTIONS

- Although a distinct criterion was set for recruiting eyewitness groups with pre-existing relationships, the nature of each relationship; as well as the duration; was not considered in the analysis .
- participants were not issued a filler task to complete after witnessing the event. The absence of a filler task could have allowed the participants to possess an unrealistically accurate recollection of the event.
- Surprisingly, post-hoc tests indicated that there were no significant differences in statement similarity between participants who discussed the event with strangers and participants who discussed the event with familiar-co-witnesses. The results suggest that a possible interaction of effect may exist between co-witness familiarity and post-event discussions. However, within the present study, only unfamiliar eyewitness groups were included in the control condition. Through incorporating a 2x2 design, where both familiarity and group discussion could be manipulated, future research should aim to identify if statement similarity is predominately caused by informational influence or similarities in the way familiar co-witnesses remember events.

CONCLUSION

- The findings present evidence suggesting that co-witnesses with pre-existing relationships are at risk of contaminating each other's statements.
- Kieckhaefer & Wright (2014) emphasised the importance for police officers to identify if eyewitnesses had discussed the event with others prior to giving their statements. The present study supports this argument, by establishing if any post-event discussion had occurred, officers will be able to form a better assessment of the statements given.
- Additionally, in agreement with French, Garry, & Mori (2008), the authors argue that police officers should attempt to identify if co-witnesses who discussed the event had a pre-existing relationship and for this information to be taken into consideration by both investigators and those within the judicial system.
- Through reinstating any post-event discussions, police officers can attempt to assist eyewitnesses from differentiating between witnessed information and post-event information.
- It must be noted that although inferred, there is no evidence indicating an effective intervention technique for helping eyewitnesses improve their source attribution skills when giving an eyewitness statement. Therefore, on a more practical implication of the present study's findings and the next direction for future research will be to identify effective intervention techniques in reducing the rate of misinformation recall from co-witnesses.

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THANK YOU

- Any Questions