

Title: “With a little help from my friends...”: The role of co-witness relationship in susceptibility to misinformation

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## Abstract

Inaccuracies in eyewitness accounts can occur when witnesses are exposed to post-event misinformation via discussion with a co-witness. The current study examined the role of co-witness relationship by comparing the memory performance of pairs of romantic couples, friends and previously unacquainted strangers with that of individuals. Ninety-six participants viewed an event and then discussed the witnessed event with a stranger, a romantic partner or a friend. One member of each pair saw a theft take place during the witnessed event. Individual group participants did not discuss the witnessed event with anyone. Results indicate that all co-witness dyads produced less accurate recall accounts than participants who did not interact with another witness. However, witnesses who were previously acquainted with their co-witness (either in a friendship or romantic relationship) were significantly more likely to report information obtained from their co-witness that they had not seen themselves. Prior acquaintance also led to an increased number of incorrect attributions of both guilt and innocence.

## Introduction

A recent survey indicated that 86% of real eyewitnesses discussed their memory with a co-witness prior to giving evidence (Paterson & Kemp, 2006). Witnesses to an event may share the same experience but their individual recall of the event may differ for many reasons including naturally occurring differences in attention paid to various details of the event or perceived differences in ability to recall those details (Gabbert, Memon & Wright, 2006). Recent research amply demonstrates that the most likely outcome when two witnesses discuss their memories is that their accounts of the witnessed event become more similar and, hence, seemingly corroborative (Gabbert, Memon, Allan, & Wright, 2004; Mori, 2003; Wright, Self, & Justice, 2000).

A witness is quite likely, in the general course of daily activity, to be in the company of someone they know when they witness a criminal or otherwise noteworthy incident in public (e.g. a robbery, mugging, assault etc.). In a survey of actual witnesses, Paterson, Chapman and Kemp (2007) report that 77% of respondents who had themselves witnessed a crime indicated that they were previously acquainted with other witnesses at the scene. Of those who reported that they knew their co-witnesses, 44% witnessed the events with friends, 33% with family members or partners, and 22% with others (e.g., co-workers, neighbours, parents' friends, frequent customers). It may be the case that recalled accounts from different 'types' of co-witness (i.e. different sources) may affect the magnitude of the co-witness effect (Betz, Skowronski, & Ostrom, 1996; Bless, Strack & Walther, 2001). Yet, to date, studies of memory conformity between co-witnesses have not systematically examined the role of the relationship between co-witnesses, and typically recruit naïve (stranger) participant dyads or employ a confederate who is not known to the

participant (e.g. Gabbert, Memon & Allan, 2003; Gabbert et al., 2004; Meade & Roediger, 2002).

This is an important limitation because recent research on co-witness influence suggests that the effect is not simply a memorial one. In line with social comparison theory, the individual witness also relies on a number of other important social cues to assess and evaluate their co-witness (Bless et al., 2001; Festinger, 1954; Gabbert, Memon & Wright, 2007). For example, several studies have manipulated the perceived accuracy, confidence and credibility of co-witnesses (e.g. Gabbert et al. 2006; Wright et al., 2000). Generally speaking, participants are most influenced by confident co-witnesses and witnesses who they believe benefited from some advantage (such as extended exposure duration). For instance Wright et al. (2000, Experiment 2) designed an experimental procedure that required co-witnesses to interact and discuss their memories of cars. Their analyses revealed that confidence ratings predicted which member of the dyad ultimately persuaded the other member of the dyad. Specifically, pairs tended to conform to the participant with the higher confidence. In a study manipulating perceived encoding duration, Gabbert et al. (2006) found that participants who believed they had viewed the target stimulus for half the length of time as their co-witness partner were significantly more likely to include (mis)information obtained from their co-witness in their own individual report. In other words, participants who believed they had experienced a shorter exposure duration than their co-witness (when in fact exposure durations were equivalent) were more likely to report errant information at test. These participants were also less accurate in reporting critical items they had seen themselves.

Finally, Kwong See et al. (2001) manipulated the credibility of the source of co-participant information by varying the age of the co-witness. Participants were

presented with a narrative described as being an account of the event as remembered by a 28 year old, or an 82 year old. In fact the narratives were the same, each including four items of misinformation. After reading the narrative participants were asked to provide their impressions of the witness by rating their perceived competence and honesty. The older witness was rated as being less competent, but more honest, than the young witness and this perceived competence was associated with greater misinformation effects. Taken together these findings (and other associated research) suggest important metacognitive and social components underpinning co-witness testimony.

Absent from these investigations is any consideration of the role of the relationship between the co-witnesses and how this might contribute to co-witness susceptibility to information (i.e. when the source of the misinformation is a friend, romantic partner, or a stranger) in an episodic memory task. However, research concerned with the social and reconstructive nature of remembering is instructive (Bartlett, 1932; Clark & Stephenson, 1995). For instance, Hyman (1994) examined the role of social context in determining the content and structure of remembered information by requiring participants to either recall a story or describe their reactions to a story with either the experimenter or another participant. Analyses suggested that participants interacting with another participant were more likely to engage in conversational remembering and include more personal reactions and evaluations in both conditions than those participants engaging with the experimenter (see also Marsh & Tversky, 2004). These findings support the suggestion that remembering in real life contexts (such as might occur between co-witnesses) involves a greater focus on the exchange of impressions and evaluations (Dudukovic, Marsh & Tversky, 2004; Edwards & Middleton, 1986; Marsh, Tversky & Hutson, 2005; Tversky & Marsh,

2000). Hyman (1994) also argues that in such contexts participants are more likely to be following various conversational rules (such as sharing new information and avoiding repeating old or redundant information) and also establishing social bonds. In a dyad where the members are already friends or romantic partners, social bonds already exist and will likely influence the course of conversational remembering. For example, research shows that friends and couples typically develop unique ways of communicating in order to share cognitive demands and increase the chance of success in different tasks (Fleming & Darley, 1991; Fussell & Krauss, 1989). To this end, Wegner (1986) and Wegner, Erber and Raymond (1991) suggested that friends and couples develop a transactive memory system which allows for the sharing of an individual's knowledge through close social networks based on knowledge of a friend or partner's way of thinking. Indeed, research shows that individuals in close relationships outperform stranger pairs in recall tasks by means of mutual cueing and increased cue effectiveness (Andersson, 2001; Andersson & Ronnberg, 1995, 1997; Fussell & Krauss, 1989). However, it may be the case that, in certain situations or perhaps on certain types of memory tasks, relying on cues from a partner should be avoided in order to reduce inaccuracies in one's own individual recall account. This is precisely the question considered in the current study: will previously acquainted co-witnesses be more susceptible to misinformation (i.e. information they have not witnessed themselves) from their partner than co-witnesses who discuss the event with a stranger?

The current study examined both romantic couple and friendship pairs given the research evidence suggesting that individuals in committed relationships may develop what has been termed 'cognitive interdependence' (Agnew, van Lange, Rusbult & Langston, 1998). Agnew et al (1998) noted the pattern of links between

cognitive interdependence and commitment while strong for romantic partners was weaker for friendship pairs. Other research has shown that there may be dependence in both romantic relationships and friendships but that these effects tend to be stronger in romantic relationships (e.g. Rusbult, 1980; Lin & Rusbult, 1995). It is also the case that romantic relationships tend to be closer and more exclusive than friendships (Fehr, 1996). Thus, the nature of the previous acquaintance may be important given that this factor may also affect conformity. For instance, Walker and Heyns (1962) suggest that the degree of identification an individual feels with the source determines the level of conformity. Intuitively, it might be argued that individuals have higher levels of identification and liking with close friends and romantic partners. Additionally, individuals will also be more likely to trust friends and partners as a source given that trust is one of the key elements of friendship (Claes & Poirier, 1993).

However, to our knowledge, no studies have examined the effects of recalling a co-witnessed event with a friend or romantic partner on susceptibility to misinformation. Thus, the current study compares the co-witness performance of previously acquainted pairs (romantic couples, friends) and previously unacquainted strangers with that of individuals, who do not collaborate. In line with extant literature on the co-witness effect, we predict that co-witness performance will be impaired relative to individual performance. Secondly, we predict that individuals in the previously acquainted friendship or couple dyads will be more susceptible to influence from their co-witness than individuals in stranger dyads.

## Method

### *Design and Participants*

Ninety-six participants were recruited (26 male; 70 female; 18 – 58 years;  $M = 21.73$ ,  $SD = 7.01$ ) and participated in exchange for course credit. Of the 96 participants, 24 participants discussed the witnessed event (see below) with a stranger they had not met prior to participating in the current study (Stranger condition), 48 participants discussed the event with either their romantic partner (Couples condition;  $n = 24$ ) or a friend (Friends condition;  $n = 24$ ) while the remaining 24 participants did not discuss the witnessed event with anyone (Individual condition). As in previous research (e.g. Wegner et al., 1991), the recruitment criteria required friends and couple pairs to have known each other for at least 3 months prior to participating in the research. In the Friends condition, participants reported knowing each other for an average of 40.83 months ( $SD = 63.05$ ; range 4 – 234 months) while in the Couples condition, participants reported an average relationship length of 43.58 months ( $SD = 38.37$ ; range 8 - 134 months). Length of relationship did not differ significantly between the Friend and Couples conditions ( $t < 1$ ).

### *Materials*

The stimulus event depicted a girl entering an unoccupied university office to return a borrowed book. The film was shot from two different angles resulting in two video clips, each lasting one minute and 30 seconds. Both clips contained exactly the same sequence of events, but were filmed from different angles so as to simulate different witness perspectives. This manipulation allowed different features of the event to be observed from each perspective. For example, from perspective ‘A’ (but not perspective B) it is possible to read the title of the book that the girl is carrying, and also observe that she throws a note into a dustbin when leaving the room. From

perspective 'B' (but not perspective A) the girl is seen checking the time on her watch, as well as committing an opportunistic crime (sliding a £10 note out of a wallet and putting it into her own pocket). All other actions and events that occur are common to both perspectives. This event has been used in previous co-witness research (Gabbert et al., 2003).

### *Procedure*

Participants took part either individually or in a pairs (either as a pair of strangers, friends or as a couple) depending on the experimental condition. Details of the study prior to attendance were kept to a minimum. On arrival, participants were informed that they would watch a short film. In all conditions, participants were seated in front of a television monitor and watched the film on their own. Half the participants in the individual condition saw perspective A, and half saw perspective B. Participants in the co-witness conditions were led to assume they were seeing the same video clip as their co-witness whereas, in fact, each viewed a different perspective of the same event. A screen was used to obstruct the view of the other co-witness while the video was being shown (there was no sound). To reduce any suspicion that two different films had been viewed, the experimenter explained that as only one television and video combination system was available on which to show the event and that both participants needed to have a clear view each would watch the event on their own. An unrelated reaction time filler task, presented on a laptop, kept each witness occupied while the other viewed the video clip.

After the video presentation, participants completed an unrelated filler task (for approximately five minutes) and then engaged in either a memory discussion (Strangers, Friends and Couples conditions) or memory rehearsal phase (Individual condition). Instructions requested participants to imagine that they were real witnesses

waiting for the police to arrive. The questionnaire included a request for a free recall of the sequence of actions and events from the video, as well as answers to seven more specific questions about the event (e.g. 'What was the color of her bag?'). Participants in the individual recall condition completed the questionnaire alone. Those in the co-witness condition were asked to complete this task with another witness by discussing the event together and providing the most accurate collaborative notes as possible.

When the questionnaire was completed, participants were separated and engaged in a further unrelated filler task for five minutes. The main recall test was then administered in the form of a cued-recall questionnaire which all participants completed individually. Participants were instructed to think back to the event they had witnessed and to report their answers accurately as if they were real witnesses providing information for the police. Importantly, participants were provided with a specific instruction to only report what they had seen themselves ("Only report what YOU saw"). Participants were asked to provide a free recall account of the video, and to answer a further eight questions (comprising four neutral questions and four 'critical' questions). Following Gabbert et al. (2003) the critical questions comprised two questions pertaining to information that was only visible from perspective of one participant or the other. There was also a final question asking participants to state whether or not they thought the girl was guilty or innocent based on what they had seen themselves in the film clip. For each question, participants were asked to indicate how confident they were in their answers using a 7-point Likert scale (1 = Not very confident).

After completing the recall questions they were then required to rate their co-participant. The first part of the rating task incorporated several measures of liking

(e.g. What is your general impression of the other participant? How likeable is the other participant?). Each item included a 7-point scale with higher ratings indicating a more favorable evaluation (see Lakin & Chartrand, 2003). Participants then rated their co-participants on the following attributes: reliability, confidence, perceptiveness, attentiveness, trustworthiness, competence and overall accuracy. Two ratings were requested for each attribute: a straightforward rating of the other participant on that attribute (e.g. 1 = Not reliable; 7 = Very reliable) and a relative-to-self rating (e.g. 1 = Less reliable than me; 4 = Same as me; 7 = More reliable than me). Participants were then asked to indicate who they believed had provided the most accurate memory report of the witnessed event (them or their co-participant) and also asked how they believed their co-participant would evaluate them (e.g. What impression do you think your co-participant has of you? How likeable do you think your co-participant will find you? Do you think your ratings of each other will be similar?).

In a post-test manipulation check participants were asked if they had been suspicious as to the purpose of the study. None of the participants indicated that they had been aware of the manipulation.

### *Coding*

Using Gabbert et al.'s (2003) 39-item coding checklist, each item of free-recall data was scored as a correct item of information, an incorrect item of information, or an 'extra' item of information obtained from a co-witness.

## Results

Data analyses focused on the following issues. Firstly, we sought to establish, in line with previous research, whether co-witness performance was impaired relative to

individual performance as a result of post event information encountered in the discussions. Secondly, we examined whether witnesses who discussed the event with a co-witness already known to them were more likely to include information acquired from that co-witness in their own reported recall of the event compared to witnesses who discussed the event with strangers. Thirdly, we examined whether the nature of the relationship with the co-witness played any role in the degree of any susceptibility to misinformation observed. Finally, we investigated whether perceptions of co-witness accuracy differed according to the nature of the relationship between the witnesses.

#### *Event recall*

Free recall data was coded as either correct or incorrect to determine which participants produced the most accurate overall account of the witnessed event. Accounts were coded with respect to the version of the event that was viewed by the participants (i.e. details which could not have been seen by that participant but were reported in their individual account following discussion with a co-participant were scored as incorrect). There were no significant differences between conditions for the number of correct details provided in the free recall phases. However, consistent with our first hypothesis, there was a significant difference in total recall errors provided by condition ( $F(3, 95) = 6.28, MSE = 6.21, p = .001, \eta_p^2 = .17$ ). Post hoc tests revealed that participants in the individual condition made significantly fewer errors than those in the friends and couples condition. However the error rate for participants in stranger dyads did not differ from that of individuals or from friends or couples dyads. The number of recorded errors did not differ between friends and couple dyads (see Table 1).

Additional coding indicated that there was no significant difference in the recall errors once items of misinformation included in the paired conditions were excluded. Thus, the main source of recall error was misinformation obtained from a co-witness.

In terms of overall susceptibility to misinformation (i.e. likelihood of incorporating misinformation in a subsequent recall account) friends and couple pairs did not appear to differ from each other. In fact, for both pairings, 58% of participants included misinformation obtained from their co-witness. Thus, to determine whether a prior relationship with the co-witness was associated with increased susceptibility to misinformation, a new variable was created signifying whether or not the co-witnesses had an existing relationship (Friends and Couples conditions combined) or not (Strangers condition). Chi squared analysis revealed that prior acquaintance (stranger vs. friend/couple) was significantly associated with the incorporation of misinformation (yes vs. no) from that co-witness,  $\chi^2(1) = 5.45, p = .02, \phi = .28$ . Overall, 58% of participants who discussed the event with a co-witness already known to them included at least one item of misinformation obtained from their co-witness in their own individual free recall account compared to 29% of participants who interacted with a stranger.

#### *Attributions of guilt*

All participants were asked whether the girl took money from a wallet (i.e. the most forensically relevant critical question). Chi squared analysis revealed a significant association between witness condition (individual; stranger; friend; couple) and whether the participant reported that the girl took the money (yes; no);  $\chi^2(3) = 10.89, p < .01, \phi = .48$ . While none of the participants in the Individual witness condition reported unseen information, half the participants in the Friends condition (50 %) and the Couples condition (50 %), and 17 % of participants in the Stranger condition

reported that the girl took money from a wallet even though they had not seen this in their version of the event.

In order to see whether participants who had not seen the theft themselves would produce unfounded guilt attributions as a consequence of discussions with their co-witness, participants were asked whether or not the girl was guilty based on what they had seen on the video. Overall, 72% of participants reported that the girl was guilty. For participants who had not actually seen a crime occur (video Version A), 54% reported that the girl was guilty. As shown in Table 2, Stranger pairs were least likely to make unfounded attributions of guilt (42%), participants in the Individual and Friends conditions were equally likely to make guilty attributions (50%) while participants in the Couples condition were most likely to attribute guilt (75%). There was no overall significant association between guilt attribution and condition. In order to examine the effects of prior relationship, a new variable with two levels (1 = strangers; 2 = friends and couples) was computed which excluded participants in the Individual condition. This revealed a significant effect of prior acquaintance on unfounded attributions of guilt emerged with participants paired with strangers less likely to believe that guilty information had been presented than participants paired with a friend or romantic partner,  $\chi^2(1) = 4.27, p = .04, \phi = .29$ .

For participants who saw a crime take place (video Version B), 100% of participants in the Individual and Strangers conditions reported that the girl was guilty, whereas 17% in the Friends condition and 25% in the Couples condition reported that she was not guilty (contrary to what they had seen) following discussions with their co-witness who had not witnessed a crime (see Table 2). There was a significant overall association between condition and guilt attribution for participants viewing this version of events,  $\chi^2(3) = 7.77, p = .05, \phi = .35$ . In order to

examine the effects of prior relationship a second analysis was conducted, again excluding participants in the Individual condition. This revealed a significant association between perceived guilt and prior acquaintance, such that participants in the previous acquaintance conditions were more likely to make unwarranted *innocence* attributions than those who were not previously acquainted with their co-witness or worked alone,  $\chi^2(1) = 5.58, p = .02, \phi = .34$ .

#### *Co-witness Evaluation*

Preliminary exploration of the data revealed that similar ratings were given in the Friend and Couple conditions. Thus, again, the new prior relationship variable (combining Friends and Couples conditions) was used in the analyses. For all co-witness evaluation items, participants with a pre-existing relationship (friend or couple) provided a significantly more positive evaluation of their co-witness (see Table 3). To further investigate the relationship between co-witness liking, susceptibility to misinformation and co-witness relationship, a univariate ANOVA was conducted with rated liking as the dependent measure. As expected there was a main effect of relationship on rated liking such that participants sharing a pre-existing relationship with their co-witness rated them as more likeable,  $F(1, 68) = 18.28, p < .01, \eta_p^2 = .21$ ). Participants who incorporated misinformation from their co-witness also gave higher ratings of likeability,  $F(1,68) = 10.52, p < .01, \eta_p^2 = .13$ ). However, this was qualified by a significant interaction where participants who incorporated misinformation only rated their co-witness as more likeable if they were not previously acquainted,  $F(1,68) = 6.07, p < .05, \eta_p^2 = .08$  (see Figure 1). Interestingly, there was a significant association between perceived accuracy and relationship such that 79% of participants who were paired with a stranger (no pre-existing relationship) indicated that they believed they were more accurate than their

co-witness while only 46% of participants who witnessed the event with a friend or romantic partner believed they were the more accurate witness of the pair,  $\chi^2(1) = 7.25, p < .01, \phi = .32$ ).

## Discussion

The aim of the current study was examine whether prior acquaintance with a co-witness played a role in the co-witness effect. Specifically, we were interested in whether the nature of the prior acquaintance would be associated with increased susceptibility to misinformation from that co-witness. Results indicated that, in line with previous research, all co-witness dyads were susceptible to misinformation from their co-witness and, as a consequence, produced less accurate recall accounts than participants who did not interact with another witness (see also Gabbert et al., 2004; Mori, 2003; Wright et al., 2000). However, witnesses who were previously acquainted with their co-witness (as a friend or romantic partner) were significantly more likely to incorporate information obtained solely from their co-witness into their own accounts. There did not appear to be any systematic difference in the recall of between previously acquainted pairs (friend or couple dyads) in the current sample or the number of items of misinformation included. Participants in a friend or couple co-witnessing dyad were more likely to assert that the target took money from a wallet following discussions with a co-witness who had viewed a theft (even though they themselves had not seen that particular scene). Similarly, participants who discussed the event with a previous acquaintance who did not view a theft (even though they themselves had seen it) were less likely to attribute guilt to the target.

Unsurprisingly, individuals in relationships (friendship, romantic partners) rated their co-participants significantly more positively than those who were not

previously acquainted with their co-participant, and were less likely to believe they would be more accurate than their co-participant. Finally, there was an interaction between accepting misinformation and the degree of prior acquaintance on ratings of co-witness liking, such that co-witness liking was higher when misinformation had been incorporated, but only when the co-witness dyad consisted of strangers. Thus, it appears that the existence of a previous acquaintance or relationship between co-witnesses can have a detrimental effect of the veracity of subsequent accounts, as a result of enhanced susceptibility to misinformation from a known co-witness.

Why might co-witnesses be more likely to accept misinformation (i.e. information they have not seen directly themselves) from a friend or partner as opposed to a stranger? The source of the misinformation is clearly very important and previous research has demonstrated that source credibility is an important component of the co-witness effect (Kwong See et al., 2001; Smith & Ellsworth, 1987; see also Lampinen & Smith, 1995). In the current study, participants were most influenced by co-participants they had a relationship with which fits well with classic conformity theories predicting that the degree of identification determines level of conformity (Walker & Heyns, 1962). Furthermore, participants with existing relationships rated their co-participants most positively in terms of liking and other relevant attributes. Taken together it might be argued that - as we tend to engage in relationships with others whom we identify with or like - it is not altogether surprising that we will be most influenced by friends or romantic partners. One possible explanation is that in certain contexts heuristic processing guides responses and may lead to increased compliance (i.e. if we like and identify with our co-witness, we spend less time engaging in cognitively demanding evaluations of information obtained from them). Drawing on the social cognition literature, there is considerably support for this line

of argument (e.g. Burger, Soroka, Gonzago, Murphy & Somervell, 2001; Chaiken, Liberman, & Eagly, 1989; Cialdini, 2001; Frenzen & Davis, 1990). Increased compliance has also been associated with the use of heuristics such as incidental similarity (Burger, Messian, Patel, del Prado, & Anderson 2004; Emswiller, Deux, & Willits, 1971), physical attractiveness (Reingen & Kernan, 1993) and previous interaction (Burger, Horita, Kinoshita, Roberts, & Vera, 1997; Dolinski, Nawrat, & Rudak, 2001). However, compliance, as measured in these studies, has not tended to be memorial in nature.

The current findings also suggest that where no previous relationship exists, participants who provide more positive 'liking' ratings for their co-participants are also more likely to accept misinformation from their co-witness. Liking has been shown to be independently associated with compliance irrespective of previous relationship (Goei, Lindsey, Boster, Skalski, & Bowman, 2003). However, because measures of liking were recorded after the recall sessions, it is not possible to determine whether participants who liked each other were more likely to accept misinformation from each other or whether accepting another's version of events makes one more likeable. Furthermore it was not possible to ascertain whether this effect was due to a generalized reciprocity of liking effect (Kenny, 1994; see also Eastwick, Finkel, Mochon & Ariely, 2007). Future research should therefore seek to determine the causal structure underpinning this effect through manipulating likeability of the information source in a co-witness interaction.

In some respects our results run counter to findings in the transactive memory literature which tend to suggest that individuals in close relationships outperform stranger pairs in recall tasks by means of mutual cueing and increased cue effectiveness (Andersson, 2001; Andersson & Ronnberg, 1995, 1997; Fussell &

Krauss, 1989). However, the task of the current study, to produce an *accurate* recall account as opposed to the *fullest* possible account based on collaborative remembering, is rather different to the type of task typically explored in investigations of transactive memory. In the present study dyads were deliberately shown an event filmed from different perspectives in order to assess the extent to which they would incorporate misinformation from the other person. This is unlike many transactive memory tasks where there is typically no intention to mislead.

Previous investigations of the co-witness effect have not considered the role played by any extant relationship between the co-witnesses. Our results suggest that a relationship between co-witness enhances susceptibility to misinformation. In addition to furthering our understanding of memory conformity, these data provide further support to work which has demonstrated that misinformation should not be seen as a purely cognitive phenomenon (e.g. Clark & Stephenson, 1995; McCloskey & Zaragoza, 1985) and has demonstrated that the social context in which remembering and recall occur can markedly effect that quality of the ‘memory’ that is produced. Specifically, as argued by Bartlett (1932), a key determinant of what is remembered in any given situation is the relationship between the ‘narrator’ and his or her ‘audience’ (Bartlett, 1932; see also Hyman, 1994; Ost & Costall, 2002). As demonstrated in the current study, the co-witness conformity effect is indeed modified by the nature of that relationship – in this case a prior acquaintance between the members of the dyad. As the present study did not set out to examine in detail the nature of the relationship or interactions, many questions remain. Are there, for example, qualitative differences between the ways in which acquaintances and non-acquaintances discuss events they have jointly witnessed? Do acquaintances and non-acquaintances use different cues to judge the validity of the claims made by their co-

witness? What role does the nature of the acquaintance play in susceptibility to misinformation? At present, it is unclear exactly what is driving the effects observed in the current study and this remains an important avenue for future research

The ‘guilt attributions’ made by participants in the current study suggest that other contextual factors may also play an important role in eyewitness error. Despite the instruction to only report what had been seen in the original stimulus event (i.e. “only report what YOU saw”), there appeared to be a tendency to display what might be deemed a crime expectancy bias. For instance, in the Individual condition, 50% of participants who did not see a crime made an invalid attribution of guilt, suggesting some expectation that a crime had taken place. Given the important applied implications, future research should focus on examining how biases of this type are affected when confirming evidence is provided by a trusted partner.

There are a number of limitations associated with the current study. Although consistent with criteria in associated literature, there was considerable variation in the length of relationships reported by both friends and couples (although these did not differ significantly from each other between conditions). It may be the case that co-witnesses in more established relationships will perform and influence each other differently to those in shorter relationships. However, there is some evidence to suggest that length of relationship (for friends and couples) is not associated with performance in collaborative tasks while quality of relationship (although not explored in the current study) may be (Johansson, Andersson, & Rönnerberg, 2005). Also, the gender combination in participating dyads was not controlled in order to retain naturally occurring pairings for either friendship or romantic partners. However, previous research does not appear to have identified particular patterns of influence associated with gender within collaborative groups (i.e. female, male and

mixed groups (Andersson, 2001; Weldon, Blaire, & Huebsch, 2000) although there is limited evidence that female participants may be more susceptible to certain kinds of source monitoring errors (Crombag, Wagenaar & van Koppen, 1996). Future research might also incorporate a longer delay between initial encoding and the recall task to better reflect the likely experience of actual witnesses.

To summarise, the present study demonstrated that previously acquainted co-witness produce less accurate individual accounts than both non-acquainted co-witnesses, and witnesses who do not discuss the incident with anybody else. To the best of our knowledge, these are novel findings with considerable applied consequences. In real life eyewitness situations, participants are highly likely to discuss the events they have seen with those around them (Paterson & Kemp, 2006). Given that in many such situations, those other people are likely to be friends or romantic partners, the current findings have important implications for how the testimony of such witnesses should be considered.

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Table 1. Mean number of correct, incorrect and misinformation items included in free recall by condition

	Total Correct		Total Incorrect		Misinformation Items only	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Individuals	17.42	4.20	.54	.72	.54	.72
Strangers	18.72	2.32	1.21	1.22	.63	.77
Friends	18.00	2.98	1.50	1.10	.67	.82
Couples	17.50	3.86	1.71	1.71	1.08	.65

Table 2: Percentage of participants making incorrect attributions of guilt or innocence by condition

	Valid Attributions of Guilt	Invalid Attributions of Guilt
	<i>Proportion</i>	<i>Proportion</i>
Individuals	1.00	.50
Strangers	1.00	.42
Friends	.83	.50
Couples	.75	.75

Table 3: Ratings of co-participant by prior relationship

	Pre-existing relationship		No pre-existing relationship		<i>t</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Overall, what is your general impression of your co-participant (1 = Negative; 7 = Positive)**	6.56	(.65)	5.33	(1.31)	-4.35	-1.01
Overall, how would you rate your co-participant? (1 = Not at all likeable; 7 = Very likeable)**	6.67	(.59)	5.25	(1.57)	-4.28	-1.02
Memory reliability (1 = Not reliable; 7 = Very reliable)**	5.37	(1.04)	4.29	(1.12)	-4.04	-0.97
Confidence (1 = Not confident; 7 = Very confident)**	5.37	(1.21)	4.54	(1.17)	-2.77	-0.66
Perceptive (1 = Not perceptive; 7 = Very perceptive)*	5.25	(.91)	4.71	(.95)	-2.34	-0.56
Attentive (1 = Not attentive; 7 = Very attentive)**	5.44	(1.30)	4.62	(1.01)	-2.67	-0.64
Trustworthy (1 = Not trustworthy; 7 = Very trustworthy)**	6.47	(.71)	5.08	(1.17)	-5.34	-1.89
Competent (1 = Not competent; 7 = Very competent)**	6.04	(.97)	5.21	(1.14)	-3.25	-0.78
Accurate (1= Not accurate; 7 = Very accurate)*	5.04	(1.05)	4.42	(1.05)	-2.37	-0.57

\* $p < .05$ . \*\*  $p < .01$

Figure 1: Ratings of co-witness liking as a function of prior relationship and susceptibility to misinformation from a co-witness

