

# Psychology, Crime & Law



ISSN: 1068-316X (Print) 1477-2744 (Online) Journal homepage: http://www.tandfonline.com/loi/gpcl20

# Co-witnesses talk: A survey of eyewitness discussion

Helen M. Paterson & Richard I. Kemp

**To cite this article:** Helen M. Paterson & Richard I. Kemp (2006) Co-witnesses talk: A survey of eyewitness discussion, Psychology, Crime & Law, 12:2, 181-191, DOI: 10.1080/10683160512331316334

To link to this article: <a href="https://doi.org/10.1080/10683160512331316334">https://doi.org/10.1080/10683160512331316334</a>

	Published online: 31 Jan 2007.
	Submit your article to this journal 🗹
ılıl	Article views: 1427
a <sup>^</sup>	View related articles 🗗
4	Citing articles: 72 View citing articles 🗹



#### ORIGINAL ARTICLE

# Co-witnesses talk: A survey of eyewitness discussion

#### HELEN M. PATERSON & RICHARD I. KEMP

University of New South Wales, Sydney, Australia

#### Abstract

The objective of this study was to obtain a quantitative measure of the discussion behaviour of real evewitnesses. Undergraduate psychology students were given a questionnaire to determine if they had witnessed a serious event. Results from the questionnaire showed that the majority of respondents had witnessed a serious event at some point in their lives, and the majority of witnesses were not alone when they observed the event. Respondents who had experienced a serious event for which there was more than one witness present were invited to fill out a follow-up questionnaire. The follow-up study showed that when there is a co-witness present, most people (86%) report discussing the event with the co-witness. This is potentially problematic if the witnesses are contaminating one another's memories of the event. The results are discussed in terms of psychological research and policy implications.

**Keywords:** Eyewitness memory, co-witness, discussion, memory conformity

Co-witness information is defined as "information that one eyewitness might pass to another eyewitness regarding an event that they both observed" (Luus & Wells, 1994, p. 714). Within the legal system the ideal is that testimonies given by eyewitnesses should be independent of one another, however this is frequently not the case. As Yarmey observed, "Discussion among victims or witnesses to a crime is difficult, if not impossible to prevent" (Yarmey, 1992, p. 252). Crimes are often "remarkable" in the sense of the event's uniqueness and also in the sense that witnesses repeatedly "remark" on the event to others (Yuille & Daylen, 1998).

Legal authorities assume that dangers arise when witnesses discuss the event with one another. Two dangers of collaboration include collusion and the tainting of one witness's recollection by something he/she has heard another witness say (Heaton-Armstrong, 1985, 1987). Therefore, it is standard legal procedure to attempt to prevent eyewitnesses from discussing the crime with other observers of the incident. For example, witnesses are often prohibited from hearing the testimony of other witnesses during a trial, judges routinely instruct witnesses not to discuss the event with other witnesses, and lawyers will often question the witnesses regarding whether or not they have discussed the incident with

Correspondence: Helen M. Paterson, School of Psychology, University of New South Wales, Sydney, 2052, Australia. E-mail: hpaterson@psy.unsw.edu.au

ISSN 1068-316X print/ISSN 1477-2744 online © 2006 Taylor & Francis

DOI: 10.1080/10683160512331316334

others (Yarmey & Morris, 1998). In a recent set of guidelines concerning eyewitness evidence written by the United States National Institute of Justice (NIJ, 1999), there are numerous instructions suggesting that witnesses should be separated and directed not to discuss the event with other witnesses. There are guidelines in the UK for conducting identification parades (Home Office, 2003), which recommend that, "Where there is more than one witness, every effort should be made to keep them separate". In at least one state in Australia, police officers are instructed to discourage communication between witnesses and to keep all witnesses separated before and after an identification parade (Field Operations, 1997).

Recently, attempts were made by legal authorities to prevent co-witness discussion in the USA (Morello & Davis, 2002). After a series of sniper attacks in the Washington area, Montgomery County Police Captain Nancy Demme was reported to have warned the population that witnesses should not "contaminate" their memories by comparing notes with other witnesses.

Psychological research supports this notion that we should be wary of discussion between witnesses. In a series of influential studies, Loftus (e.g. 1975, 1977, 1979, 1992) has shown that exposure to incorrect information about an event after it has occurred often causes people to incorporate this misinformation into their memories. This phenomenon has become known as the misinformation effect and there is extensive laboratory evidence for its existence (e.g. Belli, 1989; Lindsay, 1990; McCloskey & Zaragoza, 1985; Tversky & Tuchin, 1989). While the majority of this research has concentrated on the effects of misleading information presented through leading questions (e.g. Loftus, 1979, Loftus & Palmer, 1974; Loftus & Zanni, 1975) and media reports (e.g. Wright & Stroud, 1998), some studies have shown that misleading information presented through discussion with a co-witness may also cause witnesses to incorporate this misinformation into their memories (e.g. Gabbert, Memon, & Allan, 2003; Gabbert, Memon, Allan, & Wright, 2004; Hoffman, Granhag, See, & Loftus, 2001; Hollin & Clifford, 1983; Paterson & Kemp, 2003; Shaw, Garven, & Wood, 1997; Wright, Self, & Justice, 2000).

Despite this desire to have witnesses who are independent of one another, it is clear that witnesses often do talk to each other about the event. Several real life instances demonstrate how co-witness information is passed from one witness to another. For example, after the Oklahoma bombing in 1995, one witness, Tom Kessinger, may have influenced several other witnesses because of his confident recollection (Memon & Wright, 1999). Kessinger reported that he had seen the suspect with an accomplice, who became known as "John Doe 2". The other witnesses did not initially report having seen an accomplice, however they, too, came to believe there was one. This prompted the Federal Bureau of Investigation (FBI) to launch an intense search for this mysterious accomplice who may never have existed. In testimony, Kessinger admitted that the witnesses had discussed their recollections of the incident prior to the arrival of the FBI.

Other examples of co-witness discussion have occurred in the UK. Peter Hain, the current Leader of the House of Commons, was falsely charged with bank robbery when he was young and one of the reasons he attributed this to was co-witness discussion (Hain, 1976). Hain also identified two other instances in which discussion between witnesses prior to individually viewing an identification parade may have contributed to wrongful convictions. In one case, an innocent man had to serve nearly 7 years in prison before being released. It is therefore apparent that co-witness discussion can lead to profound miscarriages of justice.

Whereas the previously mentioned examples illustrate anecdotal evidence suggesting that witnesses commonly discuss the event with others, the discussion behaviour of real eyewitnesses has never been measured. The purpose of this study was to measure the discussion behaviour of real witnesses.

#### Method

#### **Participants**

A Screening Questionnaire was given to 773 undergraduate psychology students (71% female). The average age of the respondents was 20.1 (SD = 4.0) years. Respondents from the Screening Questionnaire were invited to complete the Follow-up Questionnaire if (1) they had experienced a serious event, (2) there was at least one other witness present at the event, and (3) they indicated that they were willing to participate in research related to the initial questionnaire. Respondents were not aware of the conditions that would make them eligible for the Follow-up Questionnaire. The Follow-up Questionnaire was completed by 60 respondents (73% female) with a mean age of 20.9 years (SD = 5.1). A further six respondents completed the Follow-up Questionnaire, but were excluded from the analysis; three because there were no co-witnesses in the incident they described, two because they arrived after the event and did not actually witness it, and one because the event was not deemed serious enough. Respondents received credit for their psychology course upon completion of the questionnaires.

#### Materials

A Screening Questionnaire was developed for this study to identify individuals who were eligible for the Follow-up Questionnaire. Respondents were asked to indicate whether they had witnessed any of a series of events listed (homicide, attempted murder, manslaughter, physical assault, sexual assault, event/accident causing serious injury/death, abduction, property vandalism, breaking and entering, motor vehicle theft, fraud, blackmail, or extortion, arson, robbery) or a similar type of event. Respondents who indicated that they had witnessed such an event completed several questions about the event including whether anyone else had witnessed the event. If participants had witnessed more than one event, they were asked to answer the rest of the questions with regards to the most serious or personally relevant event that they witnessed. If they had witnessed a serious event for which there was at least one other witness present they were invited to complete a Follow-up Ouestionnaire.

The Follow-up Questionnaire was primarily developed to assess the discussion behaviour of witnesses, in addition to gathering some basic demographic information. The questionnaire was divided into four main parts. First, respondents were asked to report their age, ethnicity, and sex. The second part of the questionnaire asked respondents to report details of one serious event they had witnessed. Respondents were required to briefly describe the serious event, and indicate how much they feared for their personal safety during the incident (using a six-point scale; 1 = not at all; 6 = very strongly) and the impact the event had on their life (using a six-point scale; 1 = no influence; 6 = extreme). Respondents were also asked to indicate whether they were eyewitnesses and victims of the event, or whether they were eyewitnesses, but not victims of the event. In addition, respondents were asked whether the police had investigated the event, whether they had been interviewed by the police, and if the case had gone to trial. The third part of the questionnaire investigated the respondents'

discussion with others. Specifically, the questionnaire asked to whom the witnesses talked about their experience (other witnesses, friends, family, police officers, lawyers, religious authorities, strangers, medical doctors, psychologists, or other), the amount of time spent discussing the event, and the purpose of their conversations (providing information, emotional support, advice-seeking, story-telling, or other). This information was requested for each of three separate time periods following the incident (24 hours, 1 week, and 6 months after the event). The fourth part of the questionnaire focused on discussion with other witnesses. In this section, respondents were asked to state how many others had witnessed the event, and whether they had discussed the event with their co-witnesses. They were also asked whether police or lawyers had either encouraged them or discouraged them from talking about the event with other witnesses.

#### Procedure

Respondents were given the Screening Questionnaire at the end of a psychology class, as part of a battery of questionnaires. They were under no obligation to complete the questionnaires, however those who did were awarded credit toward their psychology class. Respondents who were deemed eligible for the Follow-up Questionnaire (based on their screening questionnaire responses and willingness to participate in further research) were contacted by the experimenter by phone or e-mail. Respondents were informed that they were invited to take part in a psychology study investigating the experiences of eyewitnesses. Respondents who agreed to complete the study were asked to pick up the questionnaire and complete it at their own convenience. Respondents were instructed to return the completed questionnaire to the experimenter who would award them credit toward their psychology class. Although the respondents were required to indicate their name in order to receive credit, the questionnaires themselves were anonymous. After returning their questionnaires, respondents were fully debriefed about the purpose of the study. Contact information for a local victim support agency was also made available.

#### **Results**

### Screening Questionnaire

Statistical analysis of the Screening Questionnaire focused on three questions. First, what percentage of the respondents had witnessed a serious event? Second, what were the most frequently witnessed events? Third, what proportion of eyewitnesses reported the presence of at least one other co-witness?

The majority (75%) of the respondents who completed the Screening Questionnaire reported that they had witnessed at least one serious event. The average number of years since witnessing the event was 3.43 years (SD = 3.81).

As can be seen from Table I, the most frequently witnessed event was physical assault (47%), followed by property vandalism (38%) and events causing serious injury/death (23%). Manslaughter (2%), abduction (1%) and homicide (1%) were the least frequently witnessed events.

The majority (86%) of those who witnessed an event reported that there was at least one other witness at the event. On average, there were 6.77 (SD = 9.66) other witnesses present (median = 3; mode = 0; range = 0-100). The very large standard deviation relative to the mean suggests a non-normal distribution. A frequency distribution of this data is shown in Table II.

Table I. Type of event witnessed by screening questionnaire respondents.

Type of event	No. of respondents who have witnessed event	% Witnessed
Physical assault	360	47
Property vandalism	297	38
Event/accident causing serious injury/death	175	23
Robbery	143	19
Breaking and entering	107	14
Motor vehicle theft	89	12
Sexual assault	81	10
Fraud, blackmail, or extortion	60	8
Arson	49	6
Other	22	3
Attempted murder	18	2
Manslaughter	16	2
Abduction	10	1
Homicide	8	1

Note. N = 773; some respondents reported witnessing more than one event. Percentages have been rounded to the nearest whole number.

The number of co-witnesses reported by the respondents who were interviewed by the police or who testified in court, is similar to that reported by the sample of all respondents. Of the 91 respondents who reported being interviewed by the police, 80% stated that there was at least one other witness present at the event. On average, they reported 3.83 other witnesses being present (SD = 5.33). Of the nine respondents who reported testifying in court, 78% stated that there were co-witnesses present with an average of 1.22 other witnesses present at the event (SD = 0.44).

#### Follow-up Questionnaire

Analyses on the Follow-up Questionnaire concentrated on the following questions: First, what were the most frequently witnessed events? Second, with whom did witnesses report discussing the event – in particular, what proportion of eyewitnesses report discussing the event with co-witnesses? Third, what were the primary motivations for their discussions? Finally, did legal authorities either encourage or discourage witnesses from discussing the event with one another?

As can be seen in Table III, the most frequently witnessed events were physical assault (30%), an event causing serious injury or death (27%) and robbery (18%). These percentages broadly reflect those of the sample who filled out the Screening Questionnaire.

Table II. Number of co-witnesses reported by Screening Questionnaire respondents.

Number of co-witnesses	Frequency of times reported	Per cent of times reported
0	69	16
1	52	12
2	62	14
3–5	104	23
6-10	94	21
11 or more	64	14

*Note*. N = 445. Percentages have been rounded to the nearest whole number.

Table III. Type of event witnessed by Follow-up Questionnaire respondents, and per cent who discussed event with co-witnesses.

Type of event	Number (and per cent) of respondents who witnessed the event	Number (and per cent) who discussed event with co-witnesses
Physical assault	18 (30)	16 (89)
Event/accident causing serious injury/death	16 (27)	13 (81)
Robbery	11 (18)	10 (91)
Other	5 (8)	3 (60)
Sexual assault	2 (3)	2 (100)
Arson	2 (3)	2 (100)
Motor vehicle theft	2 (3)	1 (50)
Breaking and entering	1 (2)	1 (100)
Property vandalism	1 (2)	1 (100)
Fraud, blackmail, or extortion	1 (2)	1 (100)
Attempted murder	1 (2)	1 (100)
Abduction	0 (0)	n/a
Manslaughter	0 (0)	n/a
Homicide	0 (0)	n/a

Note. N = 60. Percentages have been rounded to the nearest whole number.

In the follow-up questionnaire, there were no witnesses to abduction, manslaughter, or homicide. The average number of years since witnessing the event was 3.31 years (SD = 4.02).

On a scale of 1-6 (1 = not at all; 6 = very strongly), the average fear the respondents reported for their personal safety was 3.4 (SD = 1.90).

On a scale of 1-6 (1=no influence; 6=extreme), the average impact the event had on the participant's life was 3.17 (SD=1.38). When asked about their involvement in the event, 30% of the respondents indicated that they were victims of the event and 70% of the respondents indicated that they witnessed the event, but were not victims of it.

Respondents were asked when they had first spoken about the event. The majority of the 60 respondents (63%) reported that they spoke about it "immediately". The second most common answer selected by 22% of the respondents was "later the same day". Only 7% of the respondents indicated that they had never spoken about the event. Some respondents (28%) reported that they actively avoided talking about the event with others at some point.

The majority of respondents (86%) reported discussing the event with a co-witness. In order to ascertain whether this discussion pattern is typical of respondents who were more closely affected by the event (as opposed to bystanders who were the majority of respondents), a series of chi-square analyses were conducted. There was no association between the level of fear for personal safety reported (classified as either high,  $\geq 4$  or low, <4) and whether or not the respondent reported discussing the event with a co-witness ( $\chi^2(1, N=58)=0.43$ , p=0.51). Similarly, there was no association between the reported impact of the event (i.e. high or low impact) and whether or not the co-witnesses discussed the event ( $\chi^2(1, N=58)=0.28$ , p=0.59). Respondents who were victims were equally likely to discuss the event with their co-witnesses as were respondents who witnessed the event but were not victims ( $\chi^2(1, N=58)=0.08$ , p=0.77). Finally, witnesses who were interviewed by the police were equally likely to discuss with their co-witnesses as those not interviewed by the police ( $\chi^2(1, N=57)=0.33$ , p=0.57).

Table IV. Mean reported frequency of discussion with others	Table IV.	Mean :	reported	frequency	of	discussion	with	others.
---	-----------	--------	----------	-----------	----	------------	------	---------

	Time of discussion				
Discussed event with:	24 hours after event	1 week after event	6 months after event		
Other witnesses	3.0 (2.2)	1.8 (1.4)	1.3 (0.62)		
Friends	4.0 (2.4)	3.0 (1.7)	2.0 (1.1)		
Family	3.5 (2.2)	2.2 (1.4)	1.4 (0.83)		
Police officers	1.3 (0.64)	1.1 (0.43)	1.0 (0.14)		
Lawyer	1.0 (0)	1.0 (0)	1.0 (0)		
Religious authority	1.0 (0.19)	1.0 (0.19)	1.0 (0.14)		
Stranger	1.3 (1.0)	1.1 (0.23)	1.1 (0.27)		
Medical doctor	1.3 (1.0)	1.1 (0.41)	1.0 (0.28)		
Psychologist	1 (0)	1.0 (0.14)	1.2 (0.63)		
Other	1.1 (0.83)	1.1 (0.55)	1.0 (0)		

Note. Scores range from 1 (never) to 8 (almost continuously). Standard deviations are in parentheses.

Table IV indicates how frequently respondents report discussing the event at three different time periods: 24 hours, 1 week, and 6 months after the event. Respondents were asked to report how frequently they discussed the event on an eight-point Likert scale (1 = never, 2 = once or twice, 3 = infrequently, 4 = occasionally, 5 = often, 6 = frequently,7 = very frequently, 8 = almost continuously). Respondents most commonly reported discussing the event with friends, family, and other witnesses. Up to 24 hours after the event, respondents, on average, reported discussing the event with other co-witnesses "infrequently" (M = 3.0, SD = 2.2). One week after the event, respondents report talking about the event with a co-witness "once or twice" on average (M=1.8, SD=1.4). Six months after the event, respondents report talking about the event with co-witnesses almost "never" (M = 1.3, SD = 0.62). However, when interpreting these results some caution should be exercised because there may be some variation in how participants interpret the scales used.

Table V indicates the reasons respondents gave for discussing the event with co-witnesses. Respondents were asked to list any of the following purposes that applied to their conversations (emotional support, advice-seeking, providing information, story-telling) or state an alternative purpose. Up to 24 hours after the event, the most frequent response, given by 44% of respondents, was "providing information". This was the most frequently stated reason for discussing the event with a co-witness at this time. One week after the event, this number fell to 12% and 6 months later it fell to 8%.

Table V. Reasons stated for discussing event with co-witnesses.

Purpose of discussion	24 hours after event $(n=34)$	1 week after event $(n=17)$	6 months after event $(n=12)$
Emotional support	14 (41)	8 (47)	3 (25)
Advice-seeking	6 (18)	3 (18)	3 (25)
Providing information	15 (44)	2 (12)	1 (8)
Story-telling	7 (21)	5 (29)	3 (25)
Other purpose	6 (17)	3 (18)	2 (17)

Note. The values represent the number (and percentage) of respondents who reported having discussions for the listed reasons. The numbers vary according to how many respondents report having discussions at the various time intervals. Respondents may have stated more than one reason for the discussions. Percentages have been rounded to the nearest whole number.

Twenty-one respondents reported that there was a police investigation of the event. Of these, 24% reported that the police had *encouraged* them to discuss the event with other witnesses. Respondents were asked to elaborate on how the police had encouraged discussion, and one participant reported that she had been told, "it may help us to cope if we discussed it". Another participant stated, "we all talked to attending police in a group" and a third participant stated, "to confirm what had happened (if what I saw was what they saw, etc.)". When asked whether the police had ever *discouraged* them from discussing the event with other witnesses, 14% reported that they had been discouraged. Respondents were asked to describe why the police had discouraged them, and one reported that talking about the event could "obscure facts from our view" and another reported that it could "contaminate the story in our heads".

Ten respondents reported that there were legal proceedings following the event. When asked whether they had ever been *encouraged* to discuss the event with other witnesses during the legal proceedings, all of the respondents reported that they hadn't. When asked whether they had ever been *discouraged* from discussing the event with other witnesses during the legal proceedings, two respondents reported that they had been discouraged.

#### Discussion

#### Screening Questionnaire

Results from the Screening Questionnaire suggest that the majority of the undergraduate population sampled had witnessed a serious event at some point in their lives. Furthermore, the majority of those who witnessed a serious event reported that there was at least one other witness present (median = 3), with only 14% reporting that they were the sole witness. Even if we examine only the 91 eyewitnesses in our study who were interviewed by the police, still only 20% stated that they were sole witnesses. This finding is compatible with a study by Wright and McDaid (1996) who found that only approximately 17% of police line-ups involve a lone witness.

However, these results differ slightly from the conclusions drawn by Yuille and Tollestrup (1992) who state, "For the crimes directly witnessed (robbery, sexual assault, and non-sexual assaults) 71% of the cases involved the victim as the only witness. Thus, the modal witness to a crime of violence is not a passive observer but rather a victim of that crime" (p. 205). A possible explanation for the discrepancy is that although Yuille and Tollestrup's results suggest that the typical crime has only one witness (the victim), this is different from their conclusion that the typical witness is the only witness to a crime. For example, in the Yuille and Tollestrup study, six homicides were investigated of which four had no witnesses, one had a single witness, and one had 16 witnesses. Whereas the typical homicide (83%) in Yuille and Tollestrup's study may not have had multiple witnesses, the typical witness (94%) had many co-witnesses. Therefore, the typical experience of witnesses is to be in the presence of co-witnesses.

## Follow-up Questionnaire

The Follow-up Questionnaire surveyed only respondents who reported having witnessed a serious event in which there was at least one other witness present. The results from this questionnaire show that the vast majority of respondents discuss the event with a co-witness when there is one present. Furthermore, up 24 hours after the event the most frequently stated reason for discussing the event with a co-witness was "providing information" about

it. This could be problematic if the witnesses are contaminating one another's memories of the event. Some research has shown that misleading information presented through discussion with a co-witness may cause witnesses to incorporate this misinformation into their memories (e.g. Gabbert et al., 2003; Gabbert et al., in press; Hoffman et al., 2001; Hollin & Clifford, 1983; Paterson & Kemp, 2003; Shaw, Garven, & Wood, 1997; Wright et al., 2000). However, other research suggests that group discussion prior to individual testimony can be beneficial to memory (Basden, Basden, & Henry, 2000; Stephenson, Abrams, Wagner, & Wade, 1986; Warnick & Sanders, 1980; Weldon & Bellinger, 1997; Yuker, 1955). Because the conclusions drawn from past literature are inconsistent, it is important that co-witness discussion be studied in more detail. Furthermore, relatively little is known about the mechanisms responsible for memory conformity in this situation and whether it is possible to reduce any possible negative effects of co-witness discussion. For these reasons, it is vital that effects of co-witness discussion be investigated more thoroughly.

In order to decrease the amount of co-witness discussion, it may be beneficial for police officers to instruct witnesses not to discuss details of the event with one another. In the jurisdiction where the survey was conducted, police guidelines exist for the conduct of identification parades, however there are no similar guidelines for interviewing eyewitnesses. Only 14% of the respondents in this questionnaire reported that the police had discouraged them from discussing the event with other witnesses. Furthermore, it is notable that a larger percentage of the respondents (24%) reported that the police had encouraged them to discuss the event with other witnesses.

This study also suggests that lawyers are more likely to warn witnesses not to discuss than are police officers. When the witnesses were asked whether they had ever been discouraged from discussing the event with other witnesses during the legal proceedings, 20% reported that they had been discouraged. None of the respondents reported that they had ever been encouraged to discuss the event with other witnesses during the legal proceedings. However, a lawyer may not talk to a witness until months after the event, and even police officers may not arrive for several minutes or even on the same day, depending on the location and nature of the event. Therefore even if a warning is given and adhered to by eyewitnesses, it may be too late to prevent co-witness contamination of memory from occurring.

This study is limited by the fact that a relatively homogeneous student sample was used. Students may be more likely to witness certain crimes and more likely to talk about them than the general population. Furthermore, additional limitations of the survey are that it relies on self-report and respondents were somewhat self-selected. Only those who were willing to complete the survey did so, and the possibility exists that the respondents may not be representative of all eyewitnesses. For example, it may be that the respondents who volunteered to answer questions about their experiences were the ones who were also more likely to discuss the events with co-witnesses. An additional limitation of this study is that the number of respondents who were interviewed by the police and/or consulted by a lawyer is relatively small. For this reason, care should be taken when drawing conclusions about the advice respondents reported receiving from police and lawyers. Furthermore, the fact that not many of the respondents were interviewed by the police may indicate that they were peripheral to the event. The possibility exists that more distant, bystander witnesses may be more numerous and may behave differently from those more closely involved in the event. However, our research suggests that this is probably not the case because witnesses who were interviewed by the police were equally likely to discuss the event with a co-witness to those who had not been interviewed by legal authorities. Furthermore, self-report measures

of fear for personal safety, involvement in the event, and impact of event on life were not significantly associated with whether or not witnesses reported engaging in co-witness discussion, further suggesting that peripheral and central witnesses do not differ in this respect.

While this survey has some limitations, it does provide valuable insights into the discussion behaviour of real eyewitnesses. This survey has revealed that the majority of respondents had witnessed a serious event at some point during their lives, that most eyewitnesses indicated that there was at least one other witness present at the event, and that they commonly discussed details of the event with their co-witnesses. These findings provide a justification for the need to undertake further research on the effects of co-witness discussion on eyewitness memory, and suggest that the laboratory research investigating the non-victim witness may be a valid methodology for studying this issue.

# Acknowledgements

Some of the findings from this paper have been presented at the Australian Psychological Society Conference in the Gold Coast, 2003 and at the Psychology and Law Conference in Edinburgh, 2003.

#### References

Basden, B. H., Basden, D. R., & Henry, S. (2000). Costs and benefits of collaborative remembering. Applied Cognitive Psychology, 14, 497–507.

Belli, R. F. (1989). Influences of misleading postevent information: Misinformation interference and acceptance. *Journal of Experimental Psychology: General*, 118, 72–85.

Field Operations (1997). Procedures for the Evidence Act. Retrieved Nov. 28, 2004 from http://www.policensw.com/pdf/evidproc.pdf.

Gabbert, F., Memon, A., & Allan, K. (2003). Memory conformity: Can eyewitnesses influence each other's memories for an event? *Applied Cognitive Psychology*, 17, 533-543.

Gabbert, F., Memon, A., Allan, K. & Wright, D. B. (2004). Say it to my face: Examining the effects of socially encountered misinformation. *Legal and Criminological Psychology*, 9, 215–227.

Hain, P. (1976). Mistaken identity: The wrong face of the law. London: Quartet Books.

Heaton-Armstrong, A. (1985). Police officers' notebooks, The Criminal Law Review, 781-784.

Heaton-Armstrong, A. (1987). Police officers' notebooks: Recent developments, The Criminal Law Review, 470–472.

Hoffman, H. G., Granhag, P. A., See, S. T. K., & Loftus, E. F. (2001). Social influences on reality-monitoring decisions. *Memory & Cognition*, 29, 394-404.

Hollin, C. R., & Clifford, B. R. (1983). Eyewitness testimony: The effects of discussion on recall accuracy and agreement. *Journal of Applied Social Psychology*, 13, 234–244.

Home Office (2003). Police and Criminal Evidence Act 1984: Code D. (Version 1.4.2). Retrieved Nov. 28, 2004 from http://www.homeoffice.gov.uk/docs/pacecoderevised703.pdf

Lindsay, D. S. (1990). Misleading suggestions can impair eyewitnesses' ability to remember event details. Journal of Experimental Psychology: Learning, Memory Cognition, 16, 1077–1083.

Loftus, E. F. (1975). Leading questions and the eyewitness report. Cognitive Psychology, 7, 560-572.

Loftus, E. F. (1977). Shifting human color memory. Memory & Cognition, 5, 696-699.

Loftus, E. F. (1979). Eyewitness testimony. Cambridge, MA: Harvard University Press.

Loftus, E. F. (1992). When a lie becomes a memory's truth: Memory distortion after exposure to misinformation. *Current Directions in Psychological Science*, 1, 121–123.

Loftus, E. F., & Palmer, J. C. (1974). Reconstruction of automobile destruction: An example of the interaction between language and memory. Journal of Verbal Learning & Verbal Behavior, 13, 585-589.

Loftus, E. F., & Zanni, G. (1975). Eyewitness testimony: The influence of the wording of a question. *Bulletin of the Psychonomic Society*, 5, 86–88.

Luus, C. A. E., & Wells, G. L. (1994). The malleability of eyewitness confidence: Co-witness and perseverance effects. Journal of Applied Psychology, 79, 714-723.

- McCloskey, M., & Zaragoza, M. (1985). Misleading postevent information and memory for events: Arguments and evidence against memory impairment hypotheses. Journal of Experimental Psychology: General, 114, 1-16.
- Memon, A., & Wright, D. B. (1999). Eyewitness testimony and the Oklahoma bombing. Psychologist, 12, 292-295.
- Morello, C. & Davis, P. (2002). Shooter's description still vague. The Washington Post, 17 October 2002, p. A01. National Institute of Justice (1999). Eyewitness evidence: A guide for law enforcement. Retrieved Nov. 29, 2004, from http://www.gp.usdoj.gov/mj/pubs-sum/178240.htm
- Paterson, H. M., & Kemp, R. I. (2003). Co-witness contamination: The effects of witness discussion on subsequent recall and recognition. In F. Gabbert (Chair), Memory conformity: How do people influence each other's memories? Symposium conducted at the Society for Applied Research in Memory and Cognition, Aberdeen, Scotland, July 2003.
- Shaw, J. S., III, Garven, S., & Wood, J. M. (1997). Co-witness information can have immediate effects on eyewitness memory reports. Law & Human Behavior, 21, 503-523.
- Stephenson, G. M., Abrams, D., Wagner, W., & Wade, G. (1986). Partners in recall: Collaborative order in the recall of a police interrogation. British Journal of Social Psychology, 25, 341-343.
- Tversky, B., & Tuchin, M. (1989). A reconciliation of the evidence on eyewitness testimony: Comments on McCloskey and Zaragoza. Journal of Experimental Psychology: General, 118, 86-91.
- Warnick, D. H., & Sanders, G. S. (1980). The effects of group discussion on eyewitness accuracy. Journal of Applied Social Psychology, 10, 249-259.
- Weldon, M. S., & Bellinger, K. D. (1997). Collective memory: Collaborative and individual processes in remembering. Journal of Experimental Psychology: Learning, Memory Cognition, 23, 1160-1175.
- Wright, D. B., & McDaid, A. T. (1996). Comparing system and estimator variables using data from real line-ups. Applied Cognitive Psychology, 10, 75-84.
- Wright, D. B., Self, G., & Justice, C. (2000). Memory conformity: Exploring misinformation effects when presented by another person. British Journal of Psychology, 91, 189–202.
- Wright, D. B., & Stroud, J. N. (1998). Memory quality and misinformation for peripheral and central objects. Legal & Criminological Psychology, 3, 273–286.
- Yarmey, A. D. (1992). The effects of dyadic discussion on earwitness recall. Basic & Applied Social Psychology, 13, 251 - 263.
- Yarmey, A. D., & Morris, S. (1998). The effects of discussion on eyewitness memory. Journal of Applied Social Psychology, 28, 1637-1648.
- Yuille, J. C., & Daylen, J. L. (1998). The impact of traumatic events on eyewitness memory. In C. Thompson, D. Herrmann, D. Read, D. Bruce, D. Payne, & M. Toglia (Eds.), Eyewitness memory: Theoretical and applied perspectives (pp. 155-178). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Yuille, J. C., & Tollestrup, P. A. (1992). A model of the diverse effects of emotion on eyewitness memory. In S. Christianson (Ed.), The handbook of emotion and memory: Research and theory (pp. 201-215). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Yuker, H. E. (1955). Group atmosphere and memory. Journal of Abnormal & Social Psychology, 51, 17-23.