

Edith Cowan University
Research Online

Theses : Honours

Theses

1996

The Effect of Expert Testimony on Juror Decision Making in Eyewitness Identification Cases

Pamela J. Sullivan
Edith Cowan University

Follow this and additional works at: https://ro.ecu.edu.au/theses_hons

 Part of the [Evidence Commons](#)

Recommended Citation

Sullivan, P. J. (1996). *The Effect of Expert Testimony on Juror Decision Making in Eyewitness Identification Cases*. https://ro.ecu.edu.au/theses_hons/727

This Thesis is posted at Research Online.
https://ro.ecu.edu.au/theses_hons/727

Edith Cowan University

Copyright Warning

You may print or download ONE copy of this document for the purpose of your own research or study.

The University does not authorize you to copy, communicate or otherwise make available electronically to any other person any copyright material contained on this site.

You are reminded of the following:

- Copyright owners are entitled to take legal action against persons who infringe their copyright.
- A reproduction of material that is protected by copyright may be a copyright infringement. Where the reproduction of such material is done without attribution of authorship, with false attribution of authorship or the authorship is treated in a derogatory manner, this may be a breach of the author's moral rights contained in Part IX of the Copyright Act 1968 (Cth).
- Courts have the power to impose a wide range of civil and criminal sanctions for infringement of copyright, infringement of moral rights and other offences under the Copyright Act 1968 (Cth). Higher penalties may apply, and higher damages may be awarded, for offences and infringements involving the conversion of material into digital or electronic form.

**THE EFFECT OF EXPERT TESTIMONY ON JUROR DECISION MAKING
IN EYEWITNESS IDENTIFICATION CASES**

By

Pamela J. Sullivan

A Thesis Submitted in Partial Fulfilment of the
Requirements for the Award of
Bachelor of Arts (Psychology) Honours
at the Faculty of Health and Human Sciences
Edith Cowan University.

Date of Submission : 31st October, 1996.

USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.

Abstract

The provision of expert testimony for the defence has been demonstrated to sensitise jurors to the variables that may reduce the reliability of an eyewitness identification (Cutler, Dexter, & Penrod, 1989). However, research examining the variables that reduce identification reliability has revealed conflicting findings (Yuille & Cutshall, 1986). Given this disparity in psychological opinion, a situation may arise where opposing expert testimony for the prosecution and the defence is delivered within the same criminal trial. This thesis examined the effect of each form of expert testimony about eyewitness identification issues on the decision of the individual juror. The decision making process was divided into three stages. The first stage was defined as the ability to draw accurate inferences about the credibility of the eyewitness, the accused, and the strength of the case for the prosecution and the defence. The second stage was defined as the ability to critically evaluate information that is presented about the eyewitness identification. The third stage was defined as the ability draw accurate judgements in relation to the reliability of the identification, and the verdict. Participants (N=104) constituted a sample of eligible jury members within the general population. A trial transcript was delivered whereby the accused was charged with the armed hold-up of a service station. The crucial evidence constituted the positive identification of the accused by the victim of the crime. Witnessing and identification conditions were described as being conducive to a false identification. The expert witness for the prosecution submitted empirical evidence that portrayed the identification as reliable. The expert witness for the defence delivered equivalent information that portrayed the identification as lacking in reliability. Findings demonstrated that alternative modes of expert testimony failed to influence the type of decision formed by the

individual juror. Despite this finding of no difference, all subjects demonstrated an inability to form accurate inferences in relation to the credibility of the accused, and the strength of the case for the prosecution. Furthermore, all subjects failed to demonstrate evidence for the critical evaluation of information presented in relation to witnessing and identification conditions. As a consequence, subjects were unable to form an accurate judgement in relation to the reliability of the identification. It is submitted that the provision of expert testimony for the prosecution, and the provision of expert testimony for the defence, facilitates a juror scepticism effect. It is concluded that where evidence of a scepticism effect exists, the probability of wrongfully acquitting an otherwise guilty individual will substantially increase.

DECLARATION

"I certify that this thesis does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any institution of higher education; and that to the best of my knowledge and belief, it does not contain any material previously published or written by another person except where due reference is made in the text."

Signed.....

Dated 19.2.97.....

Acknowledgments

I would like to thank my supervisor (Prof. Don Thomson) for all the assistance and support throughout the year. I would also like to thank both Adele Hills and Daniel Reidpath for all the assistance with statistics. I would also like to thank my friends and family for all the emotional and practical support throughout the whole year.

Table of Contents

	Page
.....	
Title Page	i
Abstract	ii
Declaration	iv
Acknowledgments	v
Table of Contents	vi
List of Tables	ix
CHAPTER ONE - LITERATURE REVIEW	1
Introduction	1
The Nature of the Problem	2
A Solution to the Problem - The Provision of Expert Testimony for the Defence	4
Early Research - Expert Testimony for the Defence	6
Current Research - Expert Testimony for the Defence	10
The Australian Courts and Expert Testimony for the Defence	20
Experimental Design	22
CHAPTER TWO - METHOD AND RESULTS	26
Participants	26
Materials	26
Procedure	31

	Page
Results	31
Juror Inference	32
Juror Evaluation	38
Juror Judgement	46
Missing Data	53
A Word of Caution	53
CHAPTER THREE - DISCUSSION	54
Juror Inference	54
Juror Evaluation	60
Juror Judgement	64
Implications and Conclusions	67
REFERENCES	70
APPENDICES	74
A.	74
B.	75
C.	76
D.	77
E.	78
F.	79
G.	81

.....	Page
H.	82
I.	83

List of Tables

	Page
.....	
Table 1	24
Experimental Conditions	
.....	
Table 2	32
Descriptive Statistics - Credibility of the Eyewitness	
.....	
Table 3	33
Distribution of Scores - Eyewitness Credibility	
.....	
Table 4	34
Descriptive Statistics - Accused Credibility	
.....	
Table 5	35
Distribution of Scores - Accused Credibility	
.....	
Table 6	35
Descriptive Statistics - Strength of the Prosecution Case	
.....	
Table 7	36
Distribution of Scores - Strength of the Prosecution Case	

.....		Page
Table 8	.....	37
Descriptive Statistics - Strength of the Defence case		
Table 9	.....	38
Distribution of Scores - Strength of the Defence Case		
Table 10	.....	39
Descriptive Statistics - Prosecution Expert (Alone) x Defence Expert (Alone)		
Table 11	.....	39
Distribution of scores - Prosecution Expert (Alone) x Defence Expert (Alone)		
Table 12	.....	40
Descriptive Statistics - Prosecution Expert (Alone) x Prosecution (with Defence)		
Table 13	.....	40
Distribution of Scores - Prosecution Expert (Alone) x Prosecution Expert (& Def)		
Table 14	.....	41
Descriptive Statistics - Defence Expert (Alone) x Defence Expert (with Pros)		
Table 15	.....	42
Distribution of Scores - Defence Expert (Alone) x Defence Expert (& Prosecution)		

	Page
Table 16	42
Descriptive Statistics - Within Group Ratings of Expert Credibility (Defence x Prosecution)	
Table 17	43
Distribution of Scores - Within Group Expert Credibility	
Table 18	43
Descriptive Statistics - Credibility of the Defence Counsel	
Table 19	44
Distribution of Scores - Credibility of the Defence Counsel	
Table 20	45
Descriptive Statistics - Credibility of the Prosecution Counsel	
Table 21	46
Distribution of Scores - Credibility of the Prosecution Counsel	
Table 22	46
Descriptive Statistics - Likelihood of Identification Accuracy	

	Page
Table 23	47
Distribution of Scores - Likelihood of Identification Accuracy	
Table 24	48
Expert Testimony for the Prosecution and the Frequency of Not Guilty Verdicts	
Table 25	48
Verdict Type as a Function of Expert Testimony for the Prosecution	
Table 26	49
Verdict Type as a Function of Expert Testimony for the Defence	
Table 27	49
Type of Verdict as a Function of Competing Experts	
Table 28	50
Differential Proportions of Verdict Type Within the Control Condition	
Table 29	51
Ratings of Importance Attached to Categories of Information in the Control Group	

..... Page

Table 30 52

Ratings of Importance Attached to Categories of Information in the Expert Testimony Condition

CHAPTER ONE - LITERATURE REVIEW

Introduction

The criminal justice system is often characterised as an infallible institution, structured by society's hierarchical leaders in order to protect the civil liberties of all individuals (Wells, 1986). Although the very concept of justice alludes to the impartial maintenance of proper societal norms, historical advances in applied eyewitness testimony have served to shatter this apparent illusion (Wells, 1986). If the adversarial system of trial enables the imprisonment of innocent victims of misidentification, does this not demonstrate inherent partiality, bias, and consequent injustice? Evidence to this effect would obviously constitute grounds for the abolition of current modes of trial, and the creation of new mechanisms by which justice could be ensured. Despite the obvious appeal of this notion, the founding premise upon which it is based is seriously flawed. Are miscarriages of justice actually perpetrated by the mode of trial, or by the human participants who manipulate implemented procedural safeguards? Common sense would implicate human error as opposed to institutional inadequacy, thereby suggesting that it would be more feasible to mould the current adversarial system into a form that is reconciled with the limited capacity of its human participants. It is within this domain that the discipline of psychology can offer considerable insight. By examining the functional roles of each human participant (namely the police, judges, and juries), psychologists may isolate the various factors which may lead to wrongful convictions, whilst suggesting appropriate strategies for the reformation of procedural safeguards against the same. As each justice system participant constitutes a separate unit of analysis, this thesis shall concern itself with the tendency for juries to be

insensitive to eyewitness identification issues, whilst advancing a method for empirically examining the validity of reforming current court procedure.

The Nature of the Problem

How many individuals are wrongly convicted on the basis of eyewitness testimony that lacks both validity and reliability? Although statistics are not available for perusal, any brief analysis of criminal case law serves to emphasise the extent of wrongful convictions. An historical example is evident when considering the case of *Davies. v. The King*, and *Cody. v. The King* (1937) - both of whom were convicted of murder and sentenced to death on the basis of eyewitness testimony. During the process of appeal it was determined that the method of identification employed by the police was highly suggestive in nature, thereby rendering subsequent positive identifications questionable (Commonwealth Law Reports, 1937). As the jury was not warned of the problems associated with eyewitness testimony, the court of criminal appeal quashed the conviction, thereby ordering a new trial (Commonwealth Law Reports, 1937). Any brief analysis of this outcome might lead the reader to formulate a seemingly obvious assumption - if the jury is instructed as to the dangers inherent within eyewitness testimony, then the probability of wrongful conviction is markedly diminished. Despite the apparent feasibility of this rationale extensive research within the domain of psychology has served to render this assumption highly questionable in nature. Jury members consistently convict an accused when erroneous identification evidence is successfully impeached by the defence counsel (Loftus & Doyle, 1992). Why do jury members attribute undue weight to this mode of evidence? Are jury members aware of the mechanisms responsible for both the fallibility and the malleability of the human memory? Even if jury members demonstrate an understanding of such variables,

do they draw upon such knowledge when determining issues of fact? Or are they more inclined to rely on heuristic based processing that essentially serves to increase the propensity for errors in judgement? Unfortunately, the current state of psychological research suggests that the jury is an inherently biased institution, completely insensitive to eyewitness identification issues (Loftus & Doyle, 1992).

Given the human tendency to rely on biased processing strategies, the view expressed by Loftus and Doyle (1992) appears fairly conclusive. However, this conclusion may be somewhat premature and requires further elaboration. During the process of trial, the prosecution counsel assumes the burden of proving (beyond a reasonable doubt) that the accused is actually the perpetrator of the crime (Gillies, 1987). Where the primary source of evidence constitutes the positive identification of the accused by the victim of the crime, an extensive examination of the reliability of that identification is warranted. When examining the reliability of an identification, what elements require consideration? Researchers have identified several categories of variables that serve to distort the memory of the eyewitness - those being estimator variables and system variables (Wells, 1978). Estimator variables are those factors that occur at the time an event is witnessed - although they are beyond the control of justice system participants, they "may be useful in evaluating the quality of the eyewitness account" (Loftus & Doyle, 1992, p12). Some examples constitute poor lighting conditions, short exposure times, extremely high or low levels of stress, expectations, and gender (Loftus & Doyle, 1992). In contrast, system variables are those factors that occur during the process of investigating the crime, and are therefore under the direct control of justice system participants (Loftus & Doyle, 1992). Some examples constitute long retention intervals, post-event information, extensive mugshot viewing prior to an identification, unconscious transference, and biased line-up formations

(Loftus & Doyle, 1992). There is now a multitude of research elucidating juror insensitivity to the operation of estimator and system variables - when evaluating the reliability of an eyewitness identification, jury members are more inclined to attribute undue weight to more extraneous elements (such as eyewitness confidence) that are by no means correlated with eyewitness accuracy (Lindsay, Wells, & Rumpel, 1981; Yarmey & Tressillian-Jones, 1983; Cutler, Penrod, & Stuve, 1988; and Cutler, Dexter, & Penrod, 1991).

A Solution to the Problem

The Provision of Expert Testimony for the Defence

Is it possible to mould the current adversarial system into a form that is reconciled with this limited capacity of triers of fact? In an attempt to sensitise jurors to the potential confounding impact of estimator and system variables, a number of researchers have advocated the provision of expert psychological testimony for the defence (Loftus, 1980; Cutler, Dexter & Penrod, 1989; Cutler, Penrod, & Dexter, 1989). It is generally anticipated that the provision of information in relation to witnessing and identification conditions would serve to educate the jury, and facilitate the critical evaluation of eyewitness identification issues (Cutler, Dexter, & Penrod 1991). Proponents of this view base their assertions on ideological considerations which form the conceptual foundations of a system committed to the fair dispensation of justice. The identification of practises which preserve existing institutional bias, and compound the likelihood of wrongful conviction, have shaped the directions and focus of psycho-legal research within the last decade. However, any reform to the procedural practices of the justice system requires an extensive analysis of costs and benefits in terms of the larger community. If expert testimony for the defence yields the anticipated outcome, a reduction in wrongful convictions would

be evidenced. However, a related concern expressed by Wells (1986) is whether such an outcome impacts adversely on the general community. An equally important consideration when addressing issues of reform involves the need to address the probability of wrongfully acquitting an otherwise guilty individual. As the notion of community welfare should be analysed in conjunction with the assurance of justice, these issues require extensive consideration.

Prior to formulating an opinion in relation to this ideological issue, the effects of expert testimony for the defence on the decision making capabilities of the individual juror must be assessed and analysed. Researchers who advocate the provision of expert testimony anticipate one of three potential outcomes - that of juror sensitivity, juror confusion, or juror scepticism (Cutler, Penrod, & Dexter, 1989). According to Cutler et al (1989) juror sensitivity constitutes a knowledge of the potential confounding influence of witnessing and identification conditions, and the ability to integrate this knowledge in a manner that enables the critical evaluation of eyewitness testimony. In contrast, juror confusion constitutes the tendency to "misinterpret, overgeneralise, or misapply the information presented by the expert" (Cutler et al, 1989, p312). The final potential outcome in relation to the provision of expert testimony refers to juror scepticism - the tendency to rely upon expert opinion, "whilst undervaluing the weight of additional eyewitness evidence" (Cutler et al, 1989, p314). Should expert testimony yield outcomes that are consistent with the juror confusion or the juror scepticism hypothesis, the probability of wrongfully acquitting an otherwise guilty individual would substantially increase - an obviously undesirable outcome in terms of community well being (Wells, 1986). If psychologists are to argue the efficacy of expert testimony, it must be demonstrated that the presentation of such testimony facilitates a level of juror sensitivity (Cutler et al, 1989). The cognitive

processes that are characterised by a sensitivity effect (namely the critical and elaborate analysis of relevant information), would ultimately serve to reduce the effects of juror bias. The outcomes envisaged by an application of this form of processing is a reduction in wrongful convictions. Where an accused appears guilty - elaborate processing should also lead to a reduction of wrongful acquittals. Such outcomes are highly desirable and ensure both the protection of the community at large, and the civil liberties of each accused person.

Early Research - Expert Testimony for the Defence

Research examining the impact of expert testimony for the defence may be categorised in terms of the experimental paradigm developed for analysis. Early research within this domain attempted to assess the effect of expert testimony where witnessing and identification conditions were conducive to a false identification (Wells, 1986). It was anticipated that the analysis of trial outcome would provide adequate evidence for a juror sensitivity effect. Despite the pioneering nature of research within this domain, Wells (1986) offers a word of caution. Where a reduction in the rate of conviction is facilitated by the provision of expert testimony, a sensitivity effect is not necessarily implied. It is equally plausible to assume the operation of a juror confusion, or a juror scepticism effect. If jury members unconditionally accept information that is delivered by a source of expertise, a juror scepticism effect may be implicated. As juror sensitivity is characterised by the critical and elaborate analysis of relevant information, researchers must develop an experimental paradigm that incorporates two inextricably linked dependent measures - that of the process by which jurors reach individual verdicts, and trial outcome (Wells, 1986). This enables the consecutive assessment of juror sensitivity, juror confusion, and juror scepticism effects.

The first empirical analysis of the effect of expert testimony on trial outcome

was conducted by Loftus (1980). Subjects were randomly assigned to one of two experimental conditions - an expert testimony present condition, and an expert testimony absent condition. All subjects read a trial transcript depicting the assault of an army officer, and were required to render a verdict in relation to guilt or innocence. The case for the prosecution was ultimately dependent upon the positive identification of the accused by the victim of the crime. Across experimental conditions, results demonstrated that the provision of expert testimony "significantly reduced the proportion of guilty verdicts from 57.5% to 39%" (Loftus, 1980, p12). Loftus (1980) tentatively suggests that the provision of expert testimony "prompts the jurors to more carefully scrutinise the eyewitness account, and to consider the possibility that it may be mistaken - perhaps it raises reasonable doubt" (Loftus, 1980, p13). When considering the words of caution delivered by Wells (1986), the feasibility of this conclusion is questionable. When analysis is confined to the dependent measure of trial outcome, it is not possible to differentiate between the operation of a juror confusion, a juror scepticism, or a juror sensitivity effect (Wells, 1986).

Within a similar experimental design, Hosch, Beck, and McIntyre (1980) randomly assigned subjects to one of two experimental conditions - an expert testimony present condition, and an expert testimony absent condition. At the conclusion of experimental manipulations, subjects were required to engage in the deliberation process, and render a verdict of guilt or innocence. Findings demonstrated that verdict delivered was not altered as a function of the provision of expert testimony - all subjects tended to acquit the accused. Despite this notion, the provision of expert testimony was demonstrated to facilitate increased attention to the elements that may have adversely influenced the identification of the accused (estimator and system variables). In addition, increased attention to pertinent trial evidence was observed. Such findings provide the first indication

of the effect of expert testimony on the processes by which jurors reach a verdict. If information presented to jurors is carefully and critically evaluated, the operation of a sensitivity effect is implied. In this manner, the probability of wrongful conviction is diminished.

Despite the progress implied by analysing the effect of expert testimony on the jury deliberation process, a critical issue appears to have escaped the attention of critics. Loftus (1980) and Hosch et al (1980) failed to clarify if poor witnessing and identification conditions were varied orthogonally. As an analysis of reported findings suggests that they were not, it proves necessary to offer an additional word of caution. In cases where the primary source of evidence constitutes the positive identification of the accused, the reliability of that identification (in terms of witnessing and identification conditions) requires extensive examination. Where expert testimony is excluded from proceedings, the adverse operation of estimator and system variables should be addressed by the defence counsel when subjecting the eyewitness to a cross-examination. When an expert witness appears on behalf of the defence, empirical evidence is submitted that serves to reinforce the elements raised by the defence counsel. If the adverse impact of estimator and system variables is excluded when cross-examining the eyewitness in control conditions, it could be argued that this body of research is not actually measuring the effect of expert testimony - it is measuring the effect of additional information on the decision making capabilities of the individual juror. As a consequence, it is not too surprising that those in receipt of expert testimony for the defence, afforded considerably more attention to the discussion of relevant trial evidence.

If the findings reported by Loftus (1980) and Hosch et al (1980) are indicative of a sensitivity effect, an ability to distinguish between accurate and inaccurate

eyewitness testimony should be evidenced. Wells, Lindsay, and Tousignant (1980) attempted to determine if information offered by an expert witness increased this discriminatory ability of the jury. Subjects were randomly assigned to one of two experimental conditions - a witnessing condition and a juror condition. Subjects within the witnessing condition were re-assigned to one of three experimental conditions (a low, moderate, or high, accuracy of identification condition). At the conclusion of condition assignment, witnessing subjects were exposed to staged thefts that were designed to "yield low, moderate, or high proportions of correct identifications of the thief" (Lindsay et al, 1971, p79). Each subject was required to identify the perpetrator within a photographic lineup. Eight accurate subjects, and eight inaccurate subjects were then subjected to a cross-examination. Subjects within the juror condition were re-assigned to one of four experimental conditions - an expert testimony present condition (with an accurate eyewitness or an inaccurate eyewitness), or an expert testimony absent condition (with an accurate eyewitness or an inaccurate eyewitness). All juror subjects were then exposed to video tapes depicting the cross-examination of the eyewitness, and the expert witness where applicable. Results demonstrated that the provision of expert testimony failed to "increase subject-jurors' abilities to discriminate between accurate and inaccurate witnesses to a given crime" (Wells et al, 1980, p282). Such results fail to provide the most critical evidence for a sensitivity effect. If expert testimony for the defence fails to increase the discriminatory ability of the jury, the potential benefits to be obtained from admitting such testimony become questionable. In conjunction with the notion of sensitivity, this analysis fails to eliminate the potential operation of a juror confusion, or a juror scepticism effect.

Current Research - Expert Testimony for the Defence

Early research examining the effect of expert testimony for the defence fails to demonstrate beneficial outcomes in terms of juror sensitivity. Given the inability to eliminate the operation of juror scepticism and juror confusion effects, Cutler, Penrod, and Dexter (1989) developed an experimental paradigm that enabled the consecutive assessment of juror sensitivity and juror scepticism. It was determined that three independent variables should be subjected to manipulation - witnessing and identification conditions (which implied a false as opposed to positive identification of the accused), eyewitness confidence (where the eyewitness was 80% as opposed to 100% confident in the accuracy of the identification), and expert testimony (which was present or absent). When systematically manipulating such variables, juror sensitivity as a function of expert testimony should manifest in increased convictions where witnessing and identification conditions are fair, reduced convictions where witnessing and identification conditions are poor, and a reduced tendency to rely on eyewitness confidence as a determinant of eyewitness accuracy (Cutler et al, 1989). In contrast, juror scepticism as a function of expert testimony should manifest in an increased tendency to acquit the accused (irrespective of the nature of witnessing and identification conditions). The scepticism hypothesis is justified by Cutler et al (1989) in the following manner - "jurors may understand the expert's basic view (i.e., identifications can be inaccurate) without considering the specific points of the expert's testimony regarding witnessing and identification conditions" (Cutler et al, 1989, p216). It was anticipated that the systematic manipulation of such variables would enable a thorough examination of the effect of expert testimony for the defence on the decision making capabilities of the individual juror.

When considering the manner in which witnessing and identification conditions should be systematically varied, the problems associated with the presence or absence of expert testimony are inadvertently eliminated. Cutler et al (1989) suggest that twenty estimator and system variables should be acknowledged within each experimental condition - ten of which should be described as adversely influencing the reliability of the identification (where witnessing and identification conditions are poor), and ten of which should be described as not adversely influencing the reliability of the identification (where witnessing and identification conditions are fair) (Cutler et al, 1989). When varying the nature of witnessing and identification conditions in an orthogonal manner, the control group is automatically provided with equivalent information. Where expert testimony is present, information in relation to twenty witnessing and identification conditions is delivered by the defence counsel during the cross-examination of the eyewitness. In accordance with the experimental condition, ten of these variables are described in a manner that alludes to identification reliability, or a lack of identification reliability. These same ten variables are reinforced by the expert witness when submitting empirical evidence towards the conclusion of the trial. Where expert testimony is absent, the defence counsel raises the same twenty issues when subjecting the eyewitness to an extensive cross-examination. Ten of these variables are described in a manner that alludes to identification reliability, or a lack of identification reliability. In this manner, the provision of expert testimony can be described as the reinforcement of relevant information in relation to the operation of ten estimator and system variables.

Cutler, Dexter, and Penrod (1989) were the first to use this experimental paradigm in an analysis of the effect of expert testimony on the decision making processes of the individual juror. When systematically varying witnessing and identification conditions,

the following variables were identified - a disguise (was or was not worn by the perpetrator), a weapon (was or was not visible during the robbery), the identification (was conducted two days after the robbery, or two weeks after the robbery), and line-up instructions (provided a no-choice option, or excluded a no-choice option (Cutler et al, 1989). All subjects were exposed to a video tape of a simulated trial, whereby the accused was charged with the armed hold-up of a liquor store. The primary evidence led on behalf of the prosecution constituted the positive identification of the accused by the victim of the crime. Subjects were required to render a verdict of guilt or innocence, rate the credibility of the eyewitness, and indicate the strength of the case for the prosecution and the defence. The findings reported by Cutler et al (1989) demonstrate that the provision of expert testimony reduces the tendency of the jury to rely on eyewitness confidence as a determinant of eyewitness accuracy. When the eyewitness was described as being 80% as opposed to 100% confident in the accuracy of the identification, credibility ratings assigned to the eyewitness did not reduce. In addition, witnessing and identification conditions were described as significantly influencing ratings of strength assigned to the case for the prosecution and the defence. Where witnessing and identification conditions were conducive to a false identification, ratings as to the strength of the defence case increased - where witnessing and identification conditions were optimal for identification, ratings as to the strength of the prosecution case increased. While all effects on verdict delivered were non-significant, Cutler et al (1989) maintain that "the results provide justification for expert testimony in eyewitness cases. Without such testimony, jurors appear unknowledgeable of eyewitness problems. Furthermore, there is no evidence to suggest a scepticism effect" (Cutler et al, 1989, p223). It is argued that the conclusions reached by Cutler et al (1989) are somewhat erroneous.

The findings reported by Cutler et al (1989) fail to provide evidence for a

sensitivity effect, and do not completely eliminate the operation of a juror scepticism effect, or a juror confusion effect. Where the provision of expert testimony fails to influence verdict type, jury members are demonstrating an inability to draw appropriate conclusions from information that is presented. It could be argued that finding provides evidence for a juror confusion effect. If jury members become confused when critically evaluating information presented by the expert, the probability of forming an accurate judgement in relation to verdict is no greater than chance alone (thereby justifying the non-significant finding in relation to verdict type). An equally plausible consideration is the operation of a juror scepticism effect. If jurors are too willing to accept the opinion of the expert witness for the defence, a greater proportion of acquittals would be evidenced (irrespective of the nature of witnessing and identification conditions). As the findings reported by Cutler et al (1989) fail to eliminate these potential effects, it is not possible to tender a conclusion in relation to the beneficial nature of expert testimony for the defence.

In the same year, Cutler, Penrod, and Dexter (1989) attempted to examine "how, and at what cognitive stages expert testimony affects juror decision making" (Cutler et al, 1989, p315). The decision making process was divided into three stages - that of juror knowledge, juror inference, and juror judgement. The first stage was defined as a knowledge of the adverse influence of estimator and system variables. The second stage was described as the ability to draw appropriate inferences in relation to the credibility of the eyewitness, and the strength of the case for both the prosecution and the defence. The final stage within the decision making process was identified as judgements in relation to the accuracy of the identification, and the final verdict warranted. It was anticipated that expert testimony would provide adequate information concerning the nature of estimator and system variables. This would enhance the ability to formulate accurate inferences, which would subsequently

increase the reliability of final judgements (Cutler et al, 1989). To enable the examination of this process, three independent variables were subjected to manipulation - witnessing and identification conditions (poor as opposed to fair), eyewitness confidence (80% as opposed to 100% confident in the accuracy of the identification), and expert testimony (where subjects were provided with the opportunity to hear an expert witness reinforce the information delivered by the defence counsel, or were not provided with this opportunity) (Cutler et al, 1989). All subjects were exposed to a video tape depicting a simulated trial. The case for the prosecution was dependent on the positive identification of the accused by the victim of the crime. The results reported by Cutler et al (1989) shall be described in accordance with each stage within the decision making process.

Stage one of the decision making process was identified as knowledge of estimator and system variables. Cutler et al (1989) demonstrated that jurors were "aware that disguise, retention interval, and line-up instructions all have appreciable effects on identification accuracy, but jurors were unaware of the effects associated with weapon visibility...and eyewitness confidence" (Cutler et al, 1989, p323). The provision of expert testimony for the defence improved juror knowledge in relation to the impact of such variables (Cutler et al, 1989). It could be argued that such conclusions are not adequately justified in terms of experimental outcomes. The manner in which findings are reported alludes to the notion of a pre-existing knowledge in relation to the impact of estimator and system variables. This particular rationale is somewhat inaccurate. Such findings merely imply that the defence counsel is able to communicate the effects of disguise, retention interval, and line-up instructions, in a manner that is understandable to the jury (when conducting the cross-examination of the eyewitness). However, the defence counsel is unable to communicate the effects of weapon visibility and eyewitness confidence. When an

expert witness clarifies the operation of such variables, juror understanding is facilitated. This outcome implies that the defence counsel is an adequate source of information in relation to the less complicated estimator and system variables. Where complex variables are present, the expert witness facilitates juror understanding to a greater degree.

Stage two of the decision making process was defined as the ability to draw inferences in relation to the credibility of the eyewitness, and the strength of the case for the prosecution and the defence (Cutler et al, 1989). It was determined that the "provision of expert testimony increased jurors reliance on estimator and system variables when drawing inferences" (Cutler et al, 1989, p324). Such findings clearly emphasise the efficacy of the expert witness as a means of communicating information. Perhaps the defence counsel is not afforded the requisite sense of impartiality when delivering equivalent information. As the defence counsel is assigned the responsibility of defending the accused (irrespective of beliefs in relation to guilt or innocence), it appears feasible to conclude that a level of partiality would be assumed. The final stage of the decision making process was identified as the ability to form judgements in relation to the accuracy of the identification, and the verdict warranted (Cutler et al, 1989). It was determined that "jurors were more likely to judge the identification as accurate in the good witnessing and identification condition rather than the poor...(furthermore)...witnessing and identification conditions had a large influence on jurors' judgements if the expert testified, but a negligible impact if no expert testified" (Cutler et al, 1989, p325). In addition, "more convictions were obtained where witnessing and identification conditions were good" (Cutler et al, 1989, p325). Such findings provide the most compelling evidence for a sensitivity effect as a function of the provision of expert testimony. The expert witness appears to deliver information in a manner that facilitates the level of clarity required in order to formulate a reliable judgement in relation to the accuracy

of the identification, and the final verdict warranted. In such instances, the potential operation of a juror confusion, and a juror scepticism effect is eliminated.

Prior to advocating the provision of expert testimony for the defence within the context of the adversarial system of trial, current research emphasises the necessity to examine the effect of alternative sources of information on the decision making capabilities of the individual juror. When exploring the validity of the concerns that have been emphasised by Brekke, Enko, Clavet, and Seclau (1991), the justification for such research appears self evident in nature. A psychologist may offer testimony within the context of the courtroom anticipating that the contents of such testimony would be delivered in an impartial manner (Brekke et al, 1991). This means of providing information would facilitate the required level of understanding in relation to the effect of estimator and system variables. When considering the adversarial nature of trial by jury, it could be argued that this outcome is somewhat idealistic. In essence, the very nature of the adversarial system "encourages partiality on the part of experts, and fosters the development of professional experts and hired guns" (Brekke et al, 1991, p452). Such potentiality would serve to diminish the level of credibility afforded to the psychological profession, and encourages the notion of scepticism in relation to psychological findings (Brekke et al, 1991). It has been suggested that an efficient means by which to avoid this potential constitutes the provision of non-adversarial forms of expert testimony (Brekke et al, 1991). Would judicial instruction in relation to witnessing and identification conditions, or a court appointed expert witness for the defence, serve to foster an equivalent level of juror sensitivity to witnessing and identification conditions?

In an examination of this notion, Cutler, Dexter, and Penrod (1991) attempted to explore the effect of non-adversarial forms of expert testimony (the court

appointed expert, or judicial instruction) on the decision making processes of the individual juror. Three independent variables were subjected to manipulation - witnessing and identification conditions (poor as opposed to fair), eyewitness confidence (80% as opposed to 100% confident in the accuracy of the identification), and expert testimony (the contents of which were delivered by the defence counsel when conducting the cross examination of the eyewitness, and reinforced by an adversarial expert, a court appointed expert, the presiding judge, or no expert) (Cutler et al, 1989). The adversarial expert delivered testimony on behalf on the defence from the witness box. Empirical evidence was submitted that described the effect of estimator and system variables - this was delivered prior to the closing statements of the defence and the prosecution counsel. The non-adversarial expert appeared on behalf of the court and delivered testimony whilst standing in front of the judge. The content of the testimony was equivalent to that delivered by the adversarial expert. Where judicial instruction was incorporated, the judge recited the Telefair (1972) instructions indicating the dangers inherent within eyewitness testimony. This was delivered when instructing the jury as to their deliberation task at the conclusion of the trial. All subjects were exposed to video tapes depicting a simulated trial. The primary evidence led on behalf of the prosecution constituted the positive identification of the accused by the victim of the crime (Cutler et al, 1991). Results demonstrated a sensitisation effect when an adversarial expert delivered information, and a scepticism effect when non-adversarial experts delivered information (Cutler et al, 1991). The justification for such findings shall be described below.

Cutler et al (1991) claim to have provided additional evidence for a sensitivity effect as a function of the provision of adversarial sources of information. It is suggested that such findings provide considerable insight into the manner in which expert

testimony serves to optimise the decision making processes of the individual juror. Why did non-adversarial sources of information facilitate a scepticism effect? Cutler et al (1991) suggest that the elaboration likelihood model of persuasion (1986) provides an adequate theoretical model from which to conceptualise the effects of non-adversarial sources of information. Findings demonstrated that non-adversarial sources of information were afforded considerably higher ratings of credibility than adversarial sources of information (Cutler et al, 1991). Petty and Cacioppo (1986) imply that high levels of source credibility may reduce jurors motivation to critically evaluate the information that is presented. When a source of information is presumed to be credible, jurors may consider that the risk associated with accepting the opinion of the expert is minimal. In this manner, little effort is expended in the critical evaluation of the contents of the information provided. Where an expert is assigned lower ratings of credibility, jurors become motivated to carefully evaluate the contents of the argument - the risk associated with accepting the opinion of the expert is considerable. In this manner, adversarial forms of expert testimony facilitate the critical evaluation of relevant information, whilst non-adversarial forms of expert testimony foster the unconditional acceptance of information delivered by a more credible source (Cutler et al, 1991). It is suggested that the theoretical justification provided by Cutler et al (1991) is somewhat erroneous.

Despite the initial feasibility of this theoretical justification, the elaboration likelihood model of persuasion (1986) fails to provide an adequate explanation for the effect of adversarial sources of information. If the credibility of the adversarial expert is considered questionable when compared to the non-adversarial expert, it appears feasible to assume that the credibility of the prosecution counsel would be considered questionable when compared to the adversarial expert. In this manner, subjects would demonstrate the tendency to

critically evaluate the contents of information delivered by the prosecution counsel, whilst unconditionally accepting the information delivered by the adversarial expert witness. In this manner, the provision of adversarial forms of expert testimony actually facilitate a scepticism effect. As ratings of credibility assigned to the prosecution counsel were excluded from consideration, it is not possible to substantiate this issue. However, this scenario serves to emphasise the circularity of conclusions that are justified in terms of the elaboration likelihood model of persuasion (Petty & Cacioppo, 1986).

When summarising the research examining the effect of expert testimony for the defence, it is possible to draw a relatively simple conclusion. Although jurors are completely ignorant as to the influence of estimator and system variables on positive identifications of the accused, the provision of expert testimony for the defence serves to provide the crucial information from which informed decisions may be made (Cutler et al, 1989). By communicating information in a manner that encourages critical evaluation, jury members have the basis to draw appropriate inferences from the evidence about witnessing and identification conditions (Cutler et al, 1989). Where judgments in relation to the accuracy of the identification, and the verdict delivered are based upon the critical evaluation of evidence, the reliability of that judgement should substantially increase (Wells, 1986). Such outcomes clearly serve to reduce the probability of wrongfully convicting an innocent victim of misidentification. Where judgements are based on the critical evaluation of information, the probability of wrongfully acquitting an otherwise guilty individual should be substantially protected. In light of such findings, the American courts have acknowledged the potential benefits to be obtained from admitting expert testimony on eyewitness identification issues (Loftus, 1986). As this provision ensures the protection of the community at large, and the civil liberties of those accused on the basis of eyewitness

testimony, research within this domain virtually ceased at the beginning of the 1990's. However, the position of the courts within Australia paints a somewhat different interpretation in terms of the potential benefits to be obtained from admitting expert testimony for the defence.

The Australian Courts and Expert Testimony for the Defence

The Australian judiciary perceives the expert testimony of the psychologist (in relation to eyewitness identification issues) to fall within the parameters of common knowledge (Law Reform Commission, 1985). It has been determined that as the "ordinary man on the jury is competent to understand ordinary things, he is competent to comprehend the psychic functioning of the ordinary man....they have on this basis excluded expert testimony that relates to him" (Law Reform Commission, 1985, p411). This attitude has been succinctly reinforced by judicial authorities in the appeal of *R. v. Fong* (1980), and the case of *R. v. Smith* (1987) (Queensland Law Reports, 1980; and Victorian Law Reports, 1987). As demonstrated within the context of this review, a vast proportion of the psychological literature serves to negate the validity of such argumentation. Jury members consistently demonstrate a level of insensitivity to the mechanisms responsible for both the fallibility and the malleability of the human memory (Lindsay, Wells, & Rumpel, 1981; Yarmey & Tressillian-Jones, 1983; Cutler, Penrod, & Stuve, 1988; and Cutler, Dexter, & Penrod, 1991). In conjunction with this element, the provision of expert testimony for the defence has been demonstrated to "assist the trier of fact in understanding the evidence, and determining a fact in issue" (Law Reform Commission, 1985, p3). When considering the potential benefits to be obtained from admitting expert testimony for the defence (in relation to eyewitness identification issues), a reform of judicial attitudes in relation to the

admissibility of such testimony is warranted.

Despite the appeal of this assertion, the psychological literature has yet to extensively analyse the procedural consequences of admitting expert testimony for the defence. When considering the very nature of psychological research, one such consequence appears self evident in nature. In essence, psychological research demonstrating the adverse nature of estimator and system variables has not been consistent. These contradictory findings pose a problem in terms of admitting expert testimony for the defence. If the "hired gun" theory advocated by Brekke et al (1991) proves accurate, the admissibility of expert testimony for the defence in relation to eyewitness identification issues may facilitate a situation of trial by expert (as opposed to trial by jury). This potential is justified when considering the following scenario. During the process of trial, the prosecution counsel assumes the burden of proving (beyond a reasonable doubt) that the accused is actually the perpetrator of the crime (Gillies, 1987). Where the central evidence is the positive identification of the accused by the victim of the crime, an extensive examination of the reliability of that identification is warranted. If witnessing and identification conditions are conducive to a false identification, it is likely that the prosecution counsel will employ the services of a psychologist who specialises in eyewitness identification issues. As the prosecution counsel is motivated by the desire to establish the reliability of that identification, the psychologist would be required to deliver testimony that emphasises the positive impact of estimator and system variables on the eyewitness identification. For example, it may be argued that the presence of a weapon, or extreme levels of stress, serve to enhance the perceptual abilities of the eyewitness (Yuille & Cutshall, 1986). As the defence counsel is motivated by the desire to demonstrate the erroneous nature of the identification, the services of a psychologist who emphasises the adverse effect of estimator

and system variables will be employed. For example, it may be argued that the presence of a weapon, or extreme levels of stress, serve to hinder the perceptual acuity of the eyewitness (Christianson & Loftus, 1987). If witnessing and identification conditions actually implied a false identification (as demonstrated by a significant proportion of the psychological literature in relation to estimator and system variables) - what effects would be yielded as a function of the provision of competing modes of expert testimony? Would jurors still demonstrate a sensitisation effect in relation to the provision of expert testimony for the defence? Would a juror confusion effect be yielded? Or would jurors demonstrate scepticism in relation to the validity of psychological research in general?

Although the psychological literature may argue the beneficial nature of expert testimony for the defence (in relation to eyewitness identification issues), it has yet to explore the impact of expert testimony for the prosecution, and the notion of competing expert opinions within the same criminal trial. If psychological knowledge is to be adequately applied within the legal context, the differential effects of each mode of testimony require extensive examination. It is this notion that has provided the conceptual foundations for the present form of research.

Experimental Design

This research was generated to explore the differential effects of alternative types of expert testimony in eyewitness identification cases. So as to enable a thorough exploration of the decision making processes of the individual juror, several research questions were developed for analysis. When witnessing and identification conditions are conducive to a false identification;

- does expert testimony for the defence and the prosecution within the same criminal

trial influence the decision of the individual juror?

- does expert testimony for the prosecution influence the decision of the individual juror?
- does expert testimony for the defence influence the decision of the individual juror?

The decision making process of the juror was divided into three stages - that of juror inference, juror evaluation, and juror judgement. Juror inference is defined as the ability to draw appropriate inferences from information in relation to witnessing and identification conditions. This required the analysis of credibility ratings afforded to the eyewitness and the accused. Although past research has restricted analysis to eyewitness credibility, any sensitisation effect should also manifest in differential ratings of credibility assigned to the accused. In conjunction with the notion of credibility, individual ratings as to the strength of the case for both the prosecution and the defence were incorporated. The second stage of the decision making process is defined as the ability to critically evaluate information about witnessing and identification conditions. As Cutler et al (1991) considered critical evaluation to be a function of suspect expert credibility, individual ratings of credibility afforded to each expert witness were incorporated. As the defence and the prosecution counsel constitute an additional source of information in relation to witnessing and identification conditions, ratings of credibility afforded to each were required. The final stage in the decision making process is defined as the ability to formulate accurate judgements in relation to the accuracy of the identification, and the verdict delivered. As qualitative responses provide a rich source of information in relation to the determinants of guilt or innocence, five elements that influenced decisions in relation to verdict delivered were incorporated. It was anticipated that each category of dependent variables would

enable a thorough examination of the differential effects of alternative forms of expert testimony in eyewitness identification cases.

A 2 x 2 experimental design enabled the analysis of expert testimony for the prosecution and expert testimony for the defence. Table 1 below identifies each experimental condition.

Table 1

Experimental Conditions

Defence Expert	Prosecution	
	Present	Absent
Present	1	2
Absent	3	4

As shown in Table 1, in condition one, the prosecution counsel implied that the eyewitness identification was reliable when questioning the eyewitness. An expert witness gave testimony corroborating the scenario presented by the prosecution counsel. Within this same experimental condition, the defence counsel implied that the eyewitness identification was lacking in reliability when conducting the cross-examination of the eyewitness. An expert witness delivered testimony corroborating the scenario presented by the defence counsel. In condition two, the defence counsel emphasised the lack of identification reliability when conducting the cross-examination of the eyewitness. An expert witness delivered testimony reinforcing this notion of unreliability. In condition three, the prosecution counsel emphasised the reliable nature of the identification when questioning the eyewitness. This opinion was reinforced by an expert witness who corroborated the opinion of the

prosecution counsel. Finally, in condition four, no expert witnesses were introduced - the prosecution counsel emphasised identification reliability when questioning the eyewitness, whilst the defence counsel emphasised the lack of identification reliability when conducting the cross examination of the eyewitness. In this manner, the provision of expert testimony became the scientific reinforcement of information delivered by both the defence counsel, and the prosecution counsel. The estimator and system variables cited as alluding to identification reliability, or a lack of reliability, were equivalent within each experimental condition (the types of variables mentioned shall be explored within the later sections of this thesis). It was anticipated that each experimental condition would enable a thorough exploration of the differential effects of alternative types of expert testimony in eyewitness identification cases.

CHAPTER TWO - METHOD AND RESULTS

Participants

Participants constituted a sample of eligible jury members within the general population. A snowball sampling procedure saw volunteers within three large companies, and a university, distribute experimental materials to co-workers, friends, and acquaintances. Although the external validity of non-probability sampling procedures is open to criticism, the confines of exploratory research rendered this approach feasible. An analysis of demographic data (such as employment status and age) enabled the determination of representativeness in relation to eligibility for jury duty. One hundred and four subjects participated (26 participants per experimental condition). The mean age was 39.64, whilst employment status ranged from the skilled trades, to banking and finance, general office duties, self-proprietors, home caretakers, and the unemployed sector.

Materials

The primary experimental material was a trial transcript depicting the armed hold-up of a service station (an adaptation of a scenario presented by Loftus, 1980). The critical evidence constituted the positive identification of the accused by the victim of the crime. The case presented by both the prosecution and the defence assumed the following form :-

Prosecution Case

- The victim positively identified the accused as the offender.

- The accused was unable to provide an alibi for the day in question. Having moved house on the previous day, the accused claimed he was recuperating at home. There were no witnesses to corroborate this potential alibi.
- A gun was retrieved from the scene of the crime. Police investigations determined that the weapon was registered to a friend of the accused - this friend had reported the weapon as stolen two days prior to the hold-up.
- The police officer in charge of the investigation confirmed that the victim positively identified the accused as the perpetrator of the crime.

Defence Case

- The accused protested his innocence claiming that the eyewitness was mistaken.
- The next door neighbour of the accused remembered hearing music in the flat next door at the time of the robbery. However, he was unable to corroborate the alibi of the accused with confidence.
- The police officer in charge of the investigation stated that at no time did the accused admit to being the perpetrator of the crime.

Poor witnessing and identification conditions were held constant across all experimental conditions. The defence counsel emphasised the lack of identification reliability (when cross-examining the eyewitness), whilst the prosecution counsel described the identification as reliable (when questioning the eyewitness). When an expert witness testified for the defence, the scenario presented by the defence counsel was reinforced - the expert witness submitted empirical evidence demonstrating the adverse effect of estimator and system variables on eyewitness identifications. When an expert witness testified for the

prosecution, the scenario presented by the prosecution counsel was reinforced - the expert witness testified that estimator and system variables were optimal for the identification of the perpetrator. The following estimator and system variables were varied orthogonally across each experimental condition :-

- **Weapon Focus** - the victim alluded to spending more time focusing on the weapon as opposed to the facial features of the perpetrator.
- **Stress** - the victim alluded to being anxious prior to the hold-up, and during.
- **Suggestive Identification Parade** - the accused was identified via a show-up, as opposed to an identification parade.
- **Unconscious Transference** - the accused moved into the same block of flats as the victim the day before the hold-up.
- **Exposure Time** - the hold-up transpired within a five minute duration.

Within the expert testimony conditions, each expert was subjected to a cross-examination. Those elements recommended by Cutler et al (1989) were emphasised in the following manner :-

- Psychologists do not often agree in relation to the reliability of research findings.
- The majority of psychological analyses are conducted on student samples as opposed to the general population. Such procedures call into question the generaliseability of research findings.
- It is not possible to measure the level of stress experienced by the victim of the crime.

- The psychologist is a paid witness for the defence (or the prosecution where applicable), and has only offered expert testimony for the defence (as opposed to the prosecution where applicable).

Four versions of the trial transcript were prepared, and delivered in a condition appropriate manner (see Appendix A, B, C, and D for relevant transcripts). Although it could be argued that a video enactment of the above transcripts would optimise external validity, this procedure was considered to be inappropriate in terms of the present analysis. As physical characteristics of the accused, characteristics of the eyewitness, ethnicity, and mode of speech, have all been demonstrated to influence the outcome of a criminal trial, it was considered necessary to experimentally control for these extra-legal sources of juror bias (Gerbasí, Zuckerman, & Reis, 1977).

A standardised instruction sheet to appear at the beginning of each trial transcript was developed. This advised subjects of the nature of the experimental task - they were required to imagine themselves as real jurors, read the transcript once, and complete the questions appearing at the conclusion of the transcript (see Appendix E for sheet format). In addition, a questionnaire was developed to appear at the conclusion of each trial transcript. The dependent variables that enabled the assessment of each stage within the decision making process, and relevant scales of measurement are listed below :-

Juror Inferences

- Credibility ratings of the eyewitness and the accused were scored on a five point likert scale. This continuous scale ranged from minus two (definitely not credible), minus one (not credible), zero (undecided), one (credible), to two (definitely

credible).

- Ratings as to the strength of the case for both the prosecution and the defence were scored on a five point likert scale. This continuous scale ranged from zero (very weak), one (weak), two (moderate), three (strong), to four (very strong).

Juror Evaluation

- Credibility ratings of the defence counsel, the prosecution counsel, and the expert witness where applicable, were scored on a five point likert scale. This continuous scale ranged from minus two (definitely not credible), minus one (not credible), zero (undecided), one (credible), to two (definitely credible).

Juror Judgement

- Verdict delivered was scored as guilty as opposed to not guilty. The dichotomous nature of this variable required the collation of frequency counts in terms of verdict type (guilty -v- not guilty).
- Subjects were asked to list five factors that influenced their decision in relation to verdict delivered. Subjects were provided with one line of writing space per factor.
- The likelihood of identification accuracy was scored on a five point likert scale. This continuous scale ranged from minus two (highly unlikely), minus one (unlikely), zero (undecided), one (likely), to two (highly likely).

Despite the controversy surrounding subjects interpretations of the term undecided, the inclusion of this element within the majority of likert scales was required. As the standard of proof in a criminal trial is beyond reasonable doubt, any subject who is undecided should

render a not guilty verdict (Appendix F details questionnaire format and relevant scales of measurement).

In accordance with the Edith Cowan University guidelines, an informed consent sheet was also prepared (see Appendix G for consent format). This form summarised the nature of the research, emphasised the right to withdraw participation at any stage during proceedings, and offered telephone contact for both the ethical and educational functions of the debriefing process.

Procedure

Condition appropriate court transcripts were randomly organised. Three major companies were approached within the district of Belmont (Western Australia). On discussing the nature of the research, company directors allowed the researcher to approach staff, and request participation on a voluntary basis. The anonymity of each company was both requested and assured. Students at the Edith Cowan University were also approached (these individuals did not participate in the present form of research). On obtaining informed consent, forty individuals agreed to participate. Each participant distributed a number of experimental materials to co-workers, friends, and acquaintances. One hundred and fifty transcripts were distributed in total, with a response rate of 69% over a six week period of distribution. In order to ensure the receipt of appropriate debriefing, telephone contact was encouraged - results are to be distributed to those whom have requested the same.

Results

This research examined the differential effects of alternative types of expert testimony on the decision of the individual juror. The decision making process was divided

into three stages - that of juror inference, juror evaluation, and juror judgement. As a consequence, results shall be categorised in terms of each stage within the decision making process.

Juror Inference

Each dependent variable within this stage of the decision making process was analysed with a 2 x 2 ANOVA (prosecution expert x defence expert). All assumptions of the ANOVA were adhered to, excluding that of normality. As the ANOVA is considered robust to the violation of this assumption (where cell sizes are equal, and greater than $N = 20$), this was not considered to be problematic in terms of further statistical analyses (Hills, 1994).

When analysing individual ratings of eyewitness credibility, the 2 x 2 ANOVA demonstrated a non-significant interaction, $F(1, 97) = 0.01, p > 0.05$, in conjunction with non-significant main effects : Defence, $F(1, 97) = 2.49, p > 0.05$, prosecution, $F(1, 97) = 0.21, p > 0.05$. Table 2 below provides a summary of descriptive statistics in relation to ratings of eyewitness credibility.

Table 2

Descriptive Statistics - Credibility of the Eyewitness

	Prosecution		Expert		Total
	Present		Absent		
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>
Defence Present	0.34	1.02	0.46	0.94	0.40
Defence Absent	0.03	1.11	0.11	1.07	0.07
Total	1.18		0.28		0.23

As shown in Table 2, mean ratings of eyewitness credibility were equivalent across groups. Where expert testimony for the defence and the prosecution was present, a range of four was observed (one extreme score of -2 was eliminated from consideration). Where expert testimony for the defence was presented in isolation, a range of three was observed. Where expert testimony for the prosecution was presented in isolation, a range of four was observed. Finally, where expert testimony was excluded from proceedings, a range of four was observed. Each figure reflects a distribution of scores ranging from a view of the eyewitness as not credible (-2) to a view of the eyewitness as credible (2), with a median point of zero reflecting an inability to decide. Table 3 below provides descriptive statistics that identify the proportion of decisions that were observed within each range.

Table 3

Distribution of Scores - Eyewitness Credibility

Expert Type	Not Credible	Undecided	Credible
Prosecution & Defence	17.39%	26.09%	52.17%
Defence	19.24%	26.92%	53.84%
Prosecution	30.77%	38.46%	30.77%
Control	34.62%	23.08%	42.30%

When analysing ratings of credibility assigned to the accused, a 2 x 2 ANOVA demonstrated a non-significant interaction, $F(1, 97) = 0.08, p > 0.05$, and non-significant main effects: Defence, $F(1, 97) = 0.03, p > 0.05$, prosecution, $F(1, 97) = 0.03, p > 0.05$. Table 4 below provides a summary of descriptive statistics in relation to the credibility of the accused.

Table 4

Descriptive Statistics - Accused Credibility

Defence	Prosecution		Expert		Total
	Present		Absent		
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>
Present	0.45	0.88	0.53	0.81	0.50
Absent	0.53	0.98	0.52	0.91	0.52
Total	0.50		0.52		0.51

As shown in Table 4, mean ratings of accused credibility were equivalent across groups. Where expert testimony for the defence and the prosecution was present, a range of three was observed (one extreme score of -2 was eliminated from consideration). Where expert testimony for the defence was present, a range of three was observed. Where expert testimony for the prosecution was present, a range of four was observed (one extreme score of -2 was eliminated from consideration). Finally, where expert testimony was excluded from proceedings, a range of four was observed (one extreme score of -2 was eliminated from consideration). Each figure reflects a distribution of scores ranging from a view of the accused as not credible (-2) to a view of the accused as credible (2), with a median point of zero reflecting an inability to decide. Table 5 below provides descriptive statistics that identify the proportion of decisions that were observed within each range.

Table 5

Distribution of Scores - Accused Credibility

Expert Type	Not Credible	Undecided	Credible
Prosecution & Defence	12.50%	16.67%	66.67%
Defence	15.38%	19.23%	65.39%
Prosecution	11.53%	23.08%	61.54%
Control	8.00%	28.00%	60.00%

When analysing ratings of the strength of the prosecution case, a 2 x 2 ANOVA demonstrated a non-significant interaction, $F(1, 98) = 0.15, p > 0.05$, and non-significant main effects: Defence: $F(1, 98) = 0.15, p > 0.05$, prosecution, $F(1, 98) = 0.12, p > 0.05$. Table 6 below provides a summary of descriptive statistics in relation to the strength of the case for the prosecution.

Table 6

Descriptive Statistics - Strength of the Prosecution Case

	Prosecution		Expert		Total
	Present		Absent		
	M	SD	M	SD	M
Present	2.08	1.05	2.07	1.09	2.08
Absent	1.92	1.09	2.07	0.97	2.00
Total	2.00		2.08		2.04

As shown in Table 6, mean ratings of the strength of the prosecution case were equivalent

across groups. Where expert testimony for the defence and the prosecution was present, a range of three was observed. Where expert testimony for the defence was present, a range of four was observed. Where expert testimony for the prosecution was present, a range of three was observed (three extreme scores of 4 were eliminated from consideration). Finally, where expert testimony was excluded from proceedings, a range of four was observed. This reflects a distribution of scores ranging from a view of the prosecution case as weak (0) to a view of the prosecution case as strong (4), with a median point of two reflecting moderate strength. Table 7 below provides descriptive statistics that identify the proportion of decisions that were observed within each range.

Table 7

Distribution of Scores - Strength of the Prosecution Case

Expert Type	Weak	Moderate	Strong
Prosecution & Defence	37.50%	29.17%	33.33%
Defence	38.46%	19.23%	42.31%
Prosecution	46.15%	30.77%	7.69%
Control	26.92%	42.31%	30.77%

A 2 x 2 ANOVA on ratings of the strength of the defence case demonstrated a non-significant interaction, and a non-significant main effect for the prosecution. The main effect for the defence was significant, $F(1, 98) = 3.97, p < 0.05$. Table 8 below provides a summary of descriptive statistics in relation to the strength of the case for the defence.

Table 8

Descriptive Statistics - Strength of the Defence Case

Defence	Prosecution		Expert		Total
	Present		Absent		
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>
Present	2.45	0.77	2.19	0.84	2.32
Absent	2.03	0.66	2.00	0.80	2.01
Total	2.24		2.09		2.16

As shown in Table 8, the case for the defence was perceived as stronger where expert testimony for the defence was present. Where expert testimony for the defence and the prosecution was present, a range of three was observed. Where expert testimony for the defence was present, a range of three was observed. Where expert testimony for the prosecution was present, a range of three was observed (five extreme scores of 3, and three extreme scores of 0 and 1 were eliminated from consideration). Finally, where expert testimony was excluded from proceedings, a range of three was observed (one extreme score of 4 was eliminated from consideration). This reflects a distribution of scores ranging from a view of the defence case as weak (0) to a view of the defence case as strong (4), with a median point of two reflecting moderate strength. Table 9 below provides descriptive statistics that identify the proportion of decisions that were observed within each range.

Table 9

Distribution of Scores - Strength of the Defence Case

Expert Type	Weak	Moderate	Strong
Prosecution & Defence	8.33%	45.83%	45.84%
Defence	19.23%	50.00%	30.77%
Prosecution	0.00%	69.23%	0.00%
Control	26.92%	50.00%	19.23%

Juror Evaluation

The orthogonal analysis of ratings of expert credibility required the use of multiple t-tests - Bonferoni adjusted alpha levels will be reported. All assumptions of the t-test were adhered to, excluding that of normality. In light of the sample size, this was not considered to be problematic. Conditions in receipt of expert testimony were analysed in the following manner :-

1. An independent samples t-test was conducted on ratings of credibility assigned to the prosecution expert and the defence expert (when appearing alone). Results demonstrated that mean differences in ratings of credibility assigned to each expert witness were non-significant, $t(50) = -1.09$, $p > 0.02$. Table 10 below provides a summary of descriptive statistics in relation to expert credibility.

Table 10

Descriptive Statistics - Prosecution Expert (Alone) x Defence Expert (Alone)

Group	M	SD
Defence (Alone)	-0.15	1.08
Prosecution (Alone)	0.19	1.20

As shown in Table 10, mean ratings of expert credibility were equivalent for both groups. Where expert testimony for the defence was presented in isolation, a range of four was observed. Where expert testimony for the prosecution was presented in isolation, a range of four was also observed. This reflects a distribution of scores ranging from a view of the expert as not credible (-2), to a view of the expert as credible (2), with a median point of zero reflecting an inability to decide. Table 11 below provides descriptive statistics that identify the proportion of decisions that were observed within each range.

Table 11

Distribution of Scores - Prosecution Expert (Alone) x Defence Expert (Alone)

Expert Type	Not Credible	Undecided	Credible
Defence (Alone)	42.30%	30.77%	26.93%
Prosecution (Alone)	30.77%	26.93%	42.30%

2. An independent samples t-test was conducted on ratings of credibility assigned to the prosecution expert (when appearing alone x when appearing in conjunction with an expert witness for the defence). The mean differences in ratings of credibility were

non-significant, $t(48) = -0.41$, $p > 0.02$. Table 12 below provides a summary of descriptive statistics in relation to expert credibility.

Table 12

Descriptive Statistics - Prosecution Expert (Alone) x Prosecution (with Defence)

Group	M	SD
Prosecution (Alone)	0.19	1.20
Prosecution (& Defence)	0.33	1.20

As shown in Table 12, mean ratings of credibility assigned to the prosecution expert were equivalent for both groups. Where expert testimony for the prosecution was presented in isolation, a range of four was observed. Where expert testimony for the prosecution was presented in conjunction with expert testimony for the defence, a range of four was also observed. These reflect a distribution of scores ranging from a view of the expert as not credible (-2), to a view of the expert as credible (2), with a median point of zero reflecting an inability to decide. Table 13 below provides descriptive statistics that identify the proportion of decisions that were observed within each range.

Table 13

Distribution of Scores - Prosecution Expert (Alone) x Prosecution Expert (& Defence)

Expert Type	Not Credible	Undecided	Credible
Prosecution (Alone)	30.77%	26.93%	42.30%
Prosecution (& Def)	26.92%	11.53%	53.85%

3. An independent samples t-test was conducted on ratings of credibility assigned to the defence expert (when appearing alone x when appearing in conjunction with a prosecution expert witness). The mean differences in ratings of credibility assigned to the defence expert were significant, $t(48) = -2.72$, $p < 0.02$. Table 14 below provides a summary of descriptive statistics in relation to defence expert credibility.

Table 14

Descriptive Statistics - Defence Expert (Alone) x Defence Expert (with Prosecution)

Group	<u>M</u>	<u>SD</u>
Defence (Alone)	-0.15	1.08
Defence (& Prosecution)	0.62	0.92

As shown in Table 14, the expert witness for the defence was perceived as more credible when appearing in conjunction with an expert witness for the prosecution. Where expert testimony for the defence was presented in isolation, a range of four was observed. Where expert testimony for the defence was presented in conjunction with expert testimony for the prosecution, a range of four was also observed (one extreme score of 1 was eliminated from consideration). These reflect a distribution of scores ranging from a view of the expert as not credible (-2), to a view of the expert as credible (2), with a median point of zero reflecting an inability to decide. Table 15 below provides descriptive statistics that identify the proportion of decisions that were observed within each range.

Table 15

Distribution of Scores - Defence Expert (Alone) x Defence Expert (& Prosecution)

Expert Type	Not Credible	Undecided	Credible
Defence (Alone)	42.30%	30.77%	26.93%
Defence (& Prosec)	8.33%	16.67%	70.83%

4. A dependent samples t-test was conducted on ratings of credibility assigned to the prosecution expert and the defence expert (when appearing within the same experimental condition). Results demonstrated that mean differences in ratings of credibility assigned to each expert witness were non-significant, $t(25) = 1.23$, $p > 0.02$. Table 16 below provides a summary of descriptive statistics in relation to within group expert credibility.

Table 16

Descriptive Statistics - Within Groups Ratings of Expert Credibility (Defence x Prosecution)

Expert Type	<u>M</u>	<u>SD</u>
Prosecution	0.33	1.20
Defence	0.62	0.92

As shown in Table 16, mean ratings of expert credibility were equivalent for both groups. Where expert testimony for the prosecution was presented, a range of four was observed. Where expert testimony for the defence was presented, a range of four was also observed (an extreme score of -2 was eliminated from consideration). This reflects a distribution of

scores ranging from a view of the expert as not credible (-2), to a view of the expert as credible (2), with a median point of zero reflecting an inability to decide. Table 17 below provides descriptive statistics that identify the proportion of decisions that were observed within each range.

Table 17

Distribution of Scores - Within Group Expert Credibility

Expert Type	Not Credible	Undecided	Credible
Defence	8.33%	16.67%	70.83%
Prosecution	26.92%	11.53%	53.85%

When analysing ratings of credibility assigned to the defence counsel, a 2 x 2 ANOVA demonstrated a non-significant interaction, $F(1, 98) = 0.52, p > 0.05$, and non-significant main effects: Defence, $F(1, 98) = 0.08, p > 0.05$, prosecution, $F(1, 98) = 0.00, p > 0.05$. Table 18 below provides a summary of descriptive statistics in relation to the credibility of the defence counsel.

Table 18

Descriptive Statistics - Credibility of the Defence Counsel

	Prosecution		Expert		Total
	Present	SD	Absent	SD	
Defence	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>
Present	0.75	0.79	0.61	0.94	0.68
Absent	0.57	0.75	0.69	0.97	0.63
Total	0.66		0.65		0.65

As shown in table 18, mean ratings of defence counsel credibility were equivalent for all groups. A range of three was observed where expert testimony for the defence and prosecution was presented, and where expert testimony for the defence was presented in isolation. Where expert testimony for the prosecution appeared, a range of two was observed. Finally, where expert testimony was excluded, a range of four was observed (six extreme scores of -2, -1, and 0, and three extreme scores of 2 were excluded from consideration). Each figure reflects a distribution of scores ranging from a view of the defence counsel as not credible (-2), to a view of the defence counsel as credible (2), with a median point of zero reflecting an inability to decide. Table 19 below provides descriptive statistics that identify the proportion of decisions that were observed within each range.

Table 19

Distribution of Scores - Credibility of the Defence Counsel

Expert Type	Not Credible	Undecided	Credible
Prosecution & Defence	8.34%	20.83%	70.83%
Defence	19.23%	11.54%	69.23%
Prosecution	15.38%	11.54%	73.08%
Control	0.00%	0.00%	65.38%

When analysing ratings of credibility afforded to the prosecution counsel, a 2 x 2 ANOVA demonstrated a non-significant interaction, $F(1,98) = 0.07, p > 0.05$, and non-significant main effects: Defence, $F(1, 98) = 3.15, p > 0.05$, prosecution, $F(1, 98) = 2.78, p > 0.05$. Table 20 below provides a summary of descriptive statistics in relation to the credibility of the prosecution counsel.

Table 20

Descriptive Statistics - Credibility of the Prosecution Counsel

Defence	Prosecution		Expert		Total
	Present		Absent		
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>
Present	0.75	0.94	1.00	0.69	0.88
Absent	0.38	1.06	0.73	0.97	0.55
Total	0.57		0.86		0.71

As shown in Table 20, mean ratings of credibility assigned to the prosecution counsel were equivalent across groups. Where expert testimony for the defence and the prosecution appeared, a range of four was observed (one extreme score of -2 was excluded from consideration). Where expert testimony for the defence was presented, a range of three was observed (two extreme scores of -1, and four extreme scores of 2 were excluded from consideration). Where expert testimony for the prosecution appeared, a range of four was observed. Finally, where expert testimony was excluded, a range of three was observed (six extreme scores of -1 and 0, and three extreme scores of 2 were excluded from the consideration). Each figure reflects a distribution of scores ranging from a view of the expert as not credible (-2), to a view of the expert as credible (2), with a median point of zero reflecting an inability to decide. Table 21 below provides descriptive statistics that identify the proportion of decisions that were observed within each range.

Table 21

Distribution of Scores - Credibility of the Prosecution Counsel

Expert Type	Not Credible	Undecided	Credible
Prosecution & Defence	4.17%	20.83%	70.83%
Defence	0.00%	0.00%	76.92%
Prosecution	26.92%	11.54%	61.54%
Control	0.00%	0.00%	65.38%

Juror Judgement

When analysing ratings as to the probability that the identification was correct, a 2 x 2 ANOVA demonstrated a non-significant interaction, $F(1, 98) = 0.35, p > 0.05$, and non-significant main effects : Defence, $F(1, 98) = 0.35, p > 0.05$, prosecution, $F(1, 98) = 0.01, p > 0.05$. Table 22 below provides a summary of descriptive statistics in relation to the likelihood that the identification was correct.

Table 22

Descriptive Statistics - Likelihood of Identification Accuracy

Defence	Prosecution		Expert		Total
	Present		Absent		
	M	SD	M	SD	M
Present	-0.12	1.29	0.03	1.21	-0.04
Absent	0.03	1.11	-0.07	1.16	-0.01
Total	-0.04		-0.01		-0.02

As shown in Table 22, mean ratings of identification accuracy were equivalent across groups. A range of four was observed when expert testimony for the defence and prosecution appeared, when expert testimony for the defence appeared, when expert testimony for the prosecution appeared, and where expert testimony was excluded from experimental conditions. This reflects a distribution of scores ranging from a view of the identification as lacking in reliability (-2), to a view of the identification as reliable (2), with a median point of zero reflecting an inability to decide. Table 23 below provides descriptive statistics that identify the proportion of decisions that were observed within each range.

Table 23

Distribution of Scores - Likelihood of Identification Accuracy

Expert Type	Not Reliable	Undecided	Reliable
Prosecution & Defence	45.83%	25.00%	29.17%
Defence	46.16%	15.38%	38.46%
Prosecution	38.46%	26.92%	34.62%
Control	46.16%	26.92%	26.92%

A two-way chi-square analysis was conducted on the proportion of not guilty verdicts. All assumptions of the chi-square were adhered to. Results demonstrated non-significance, $\chi^2 (1, N = 80) = 0.05, p > 0.05$. Table 24 below summarises the frequency count of not guilty verdicts in accordance with the type of expert testimony delivered.

Table 24

Expert Testimony and the Frequency of Not Guilty Verdicts

Defence	Prosecution		
	Present	Absent	Total
Present	23 (51.10%)	22 (48.90%)	45 (56.30%)
Absent	17 (48.60%)	18 (51.40%)	35 (43.80%)

As shown in Table 24, the proportion of not guilty verdicts across each form of expert testimony were equivalent.

An analysis of within group proportions of guilty as opposed to not guilty verdicts enabled the further exploration of the final decision rendered by individual jurors. A one-way chi-square analysis of those in receipt of expert testimony for the prosecution was significant, $\chi^2 (1, N = 26) = 9.85, p < 0.05$. Table 25 below provides a summary of within group proportions of guilty as opposed to not guilty verdicts.

Table 25

Verdict Type as a Function of Expert Testimony for the Prosecution

Verdict	N	%
Guilty	5	19.20
Not Guilty	21	80.80
Total	26	100.00

As shown in table 25, subjects in receipt of expert testimony for the prosecution delivered a significantly greater proportion of not guilty verdicts.

A one way chi-square analysis of those in receipt of expert testimony for the defence was non-significant, $\chi^2(1, N = 26) = 2.46, p > 0.05$. Table 26 below provides a summary of the within group proportion of guilty as opposed to not guilty verdicts.

Table 26

Verdict Type as a Function of Expert Testimony for the Defence

Verdict	N	%
Guilty	9	34.62
Not Guilty	17	65.38
Total	26	100.00

As shown in Table 26, the within group proportion of guilty and not guilty verdicts was equivalent.

A one-way chi-square analysis of those in receipt of competing modes of expert testimony was significant, $\chi^2(1, N = 26) = 3.84, p < 0.05$. Table 27 provides a summary of the within group proportion of guilty and not guilty verdicts.

Table 27

Type of Verdict as a Function of Competing Expert Opinions

Verdict	N	%
Guilty	8	30.77
Not Guilty	18	69.23
Total	26	100.00

As shown in Table 27, subjects in receipt of competing modes of expert opinion within the

same experimental condition delivered a significantly greater proportion of not guilty verdicts.

A one-way chi-square analysis of the control condition was significant, $\chi^2(1, N = 26) = 5.53, p < 0.05$. Table 28 below provides a summary of the within group proportions of guilty as opposed to not guilty verdicts.

Table 28

Differential Proportions of Verdict Type Within the Control Condition

Verdict	N	%
Guilty	7	26.92
Not Guilty	19	73.08
Total	26	100.00

As shown in Table 28, subjects not in receipt of expert testimony delivered a significantly greater proportion of not guilty verdicts.

The assessment of qualitative data in relation to the primary determinants of verdict delivered involved several stages of analysis. As expert testimony was experimentally balanced across each form of expert testimony, each condition in receipt of expert testimony was collapsed in a manner that enabled the evaluation of those in receipt of expert testimony x those not in receipt of expert testimony. Each qualitative response was dummy coded for references to estimator and system variables, and circumstantial evidence presented throughout the duration of the trial. Two consecutive assessments of inter-rater reliability yielded agreement percentages of 86% and 92% respectively. As between group analyses of verdict delivered were non-significant, verdict type was excluded from consideration.

This resulted in the content analysis of importance attached to certain categories of information, as a function of the provision of expert testimony. Table 29 below summarises the rank order of importance attached to each piece of evidence within the control condition.

Table 29

Ratings of Importance Attached to Categories of Information in the Control Group

Rank	Category of Information	Proportion
1	The Use of a Show-up (System Variable)	61.53
2	Different Descriptions Provided by the Eyewitness	34.61
2	The Accused Owned a Gun - Why Would he Steal One	34.61
3	The Accused was an Experienced Gun Handler	30.77
3	All Evidence was Circumstantial	30.77
4	The Accused was Aware of the Location of the Gun	26.92
4	The Accused Had No Alibi	26.92
5	Weapon Focus and Stress (Estimator Variable)	23.07
6	No Motive	15.38
7	Unconscious Transference (System Variable)	11.54
8	Other People Were Aware of the Location of the Gun	7.69
9	Duration (Estimator Variable)	3.84

As shown in Table 29, those not in receipt of expert testimony perceived the method of identification to be the primary determinant of verdict type. The pieces of evidence ranked second, third, and fourth, demonstrated that circumstantial evidence played a pivotal role in determining the type of verdict selected.

Table 30 below summarises the rank order of importance attached to each

piece of evidence within the expert testimony condition.

Table 30

Ratings of Importance Attached to Categories of Information in the Expert Testimony

Condition

Rank	Category of Information	Proportion
1	The Use of a Show-up (System Variable)	56.41
2	The Accused was an Experienced Gun Handler	37.17
3	All Evidence was Circumstantial	33.33
4	Different Descriptions Provided by the Eyewitness	25.64
5	The Accused was Aware of the Location of the Gun	24.36
6	No Motive	21.79
7	The Accused Owned a Gun - Why Would he Steal One	17.95
7	The Accused had No Alibi	17.95
8	Weapon Focus and Stress (Estimator Variable)	15.38
9	Unconscious Transference (System Variable)	14.10
9	Other People Were Aware of the Location of the Gun	14.10
10	Duration (Estimator Variable)	2.56

As shown in Table 30, those in receipt of expert testimony perceived the method of identification to be the primary determinant of verdict type. The pieces of evidence ranked second, third, fourth, fifth, sixth, and seventh, demonstrated that circumstantial evidence played a pivotal role in determining the type of verdict selected.

Missing Data

Participants who exercised their right of refusal to participate, or neglected to complete segments of the materials were dummy coded as missing data. The results were then analysed using SPSS for Windows in order to determine the pattern of refusal rate (Tabachnick & Fidell, 1989). As missing data was random in nature, it was not considered to be confounding in terms of the statistical analyses presented throughout this chapter.

A Word of Caution

As demonstrated within this chapter, multiple ANOVA's have been conducted. Although many may dismiss the validity of such strategies (citing the often addressed family wise error), this issue was not considered to be problematic in terms of the research questions addressed. Considerable attention shall be afforded to this issue within the context of the discussion.

CHAPTER THREE - DISCUSSION

This thesis has examined the differential effects of alternative types of expert testimony on the decision of the individual juror. The decision making process was divided into three stages - that of juror inference, juror evaluation and juror judgement. The results generated from this research shall be discussed in accordance with each stage in the decision making process.

Juror Inference

Juror inference was defined as the ability to draw appropriate inferences in relation to the credibility of the eyewitness and the accused, and the strength of the case for the prosecution and the defence. This research demonstrated no difference across groups in relation to the credibility of the eyewitness and the accused. Given the sample size of $N=26$ within each experimental condition, the inability to detect a difference is not attributable to the power of the test. As wrongful convictions on the basis of eyewitness identification evidence are facilitated by the presence of weak circumstantial evidence, and an inability to evaluate the reliability of the identification, the experimental manipulation is not determined to be the cause of the failure to detect a difference. It is submitted that the findings of no difference are reliable. Therefore, juror inferences do not alter when subjects are provided with different types of expert testimony (that emphasise the positive as opposed to the negative impact of estimator and system variables). Given that witnessing and identification conditions were conducive to a false identification, it is suggested that the presentation of contradictory information in the form of expert testimony for the prosecution, fails to mislead the jury when drawing inferences from information about

estimator and system variables.

Are jurors able to draw accurate inferences from information about witnessing and identification conditions? As witnessing and identification conditions were conducive to a false identification, the credibility of the eyewitness should be considered suspect, whilst the accused should be perceived as credible. An analysis of the distribution of scores for eyewitness credibility indicated that subjects in receipt of competing forms of expert testimony, and expert testimony for the defence, considered the eyewitness to be credible. As the proportion of scores (across the range of possible scores) were equivalent for both groups, it is suggested that expert testimony for the prosecution fails to impact on juror inferences when presented in conjunction with expert testimony for the defence. Care must be taken not to interpret this finding as evidence of sensitivity to poor witnessing and identification conditions that are canvassed by the defence expert - subjects still rated the eyewitness as credible. As a consequence, it is argued that the provision of expert testimony for the defence induces a scepticism effect. Where a defence counsel introduces an expert witness who submits empirical evidence indicating that the identification is not reliable, jurors are more inclined to draw an inference that is in the opposite direction of that anticipated. As an equivalent proportion of subjects within each experimental condition reflected an inability to decide, the notion of a juror confusion effect is eliminated. The findings observed where expert testimony for the defence was present contradict those reported by Cutler et al (1989; 1991). Given that Cutler et al (1991) used the same trial transcript in each separate experiment (where the accused was charged with the armed hold-up of a liquor store) - it is argued that the findings reported by Cutler et al (1989; 1991) are specific to the scenario that was presented to subjects. This emphasises a potential confound within this research. As mode of crime was not systematically varied, the generaliseability

of findings are limited.

Ratings of eyewitness credibility where expert testimony for the prosecution was presented in isolation were inconclusive - the spread of scores were evenly distributed across the range of possible scores (from not credible, to undecided, to credible). These findings were equivalent to those observed within the control condition. This equity further supports the position that expert testimony for the prosecution fails to influence juror inferences. This effect is justified when examining the contents of expert testimony for the prosecution. This form of expert testimony serves to challenge everyday notions of common sense - that extreme levels of stress enhance the ability to encode relevant information, that the presence of a weapon does not serve to distract attention from the more central aspects of the event in question, and that the longer you observe an event is not relevant to the issue of identification reliability. It is proposed that when jurors are presented with information that contradicts notions of common sense, a level of scepticism is induced that motivates jurors to discard the contents of the testimony. If sensitivity was observed, the critical evaluation of expert testimony would facilitate an inference in the opposite direction to that inferred by the prosecution expert (as witnessing and identification conditions were conducive to a false identification). Given that the inferences drawn by subjects exposed to expert testimony for the prosecution were equivalent to those drawn by subjects who were not exposed to expert testimony, the notion of a juror sensitivity effect is eliminated. The even distribution of the spread of scores within the control condition indicates that the defence and prosecution counsel were unable to sensitise jurors in relation to the effect of estimator and system variables. This finding is consistent with those reported by Cutler et al (1989) who demonstrated that the defence counsel was unable to communicate the adverse effects of the more complicated estimator and system variables.

An analysis of the distribution of scores for the credibility of the accused indicated that subjects perceived the accused to be credible, irrespective of the type of expert testimony delivered. A minor proportion of subjects reflected an inability to decide. As witnessing and identification conditions were conducive to a false identification, this rating of credibility reflects an accurate inference. Although this finding is consistent with those reported by Cutler et al (1989) - a word of caution is warranted. As the control group demonstrated an equivalent distribution of scores, it is not possible to imply that expert testimony sensitised jury members to witnessing and identification conditions. When comparing the distribution of scores for the credibility of the accused, with those for the credibility of the eyewitness, a significant finding emerges. A large proportion of subjects reflected an inability to decide how credible the eyewitness appeared. In contrast, a minor proportion of subjects reflected an inability to decide how credible the accused appeared. In light of this disparity, the findings generated from this analysis indicate that credibility ratings assigned to each witness are based on different considerations. As the eyewitness delivers testimony that pertains directly to the reliability of the identification, juror inferences are based on information that is presented in relation to witnessing and identification conditions (irrespective of the source of that information). As the accused delivers testimony that is specific to his alibi, inferences in relation to the credibility of the accused are based on circumstantial evidence that is presented throughout the duration of the trial. Therefore, it is argued that the high ratings of credibility assigned to the accused are not indicative of sensitivity to witnessing identification conditions. This emphasises the dual task of the jury that is often overlooked in the eyewitness literature - the jury is required to evaluate the reliability of the identification, and the nature of the circumstantial evidence that is presented. In this manner, wrongful convictions should be seen as a function of the improper

evaluation of eyewitness testimony and circumstantial evidence.

This research demonstrated no difference across groups in ratings of the strength of the prosecution case. This finding supports the view that expert testimony for the prosecution fails to mislead the jury when drawing inferences from information about witnessing and identification conditions. Is the inference drawn by the jury correct? As witnessing and identification conditions were conducive to a false identification, the case for the prosecution should be presumed weak. An analysis of the distribution of scores for each condition was inconclusive - the spread of scores were evenly distributed across the range of possible scores (from weak, to moderate, to strong). In this manner, subjects were unable to form accurate inferences in relation to strength of the case for the prosecution (irrespective of the type of expert testimony presented). In contrast, this research demonstrated a significant difference in ratings of strength assigned to the defence case. Where expert testimony for the defence was present, subjects considered the case for the defence to be of greater strength. This finding supports those of Cutler et al (1989) implying an increased sensitivity to witnessing and identification conditions.

Prior to advocating the beneficial nature of expert testimony for the defence, a word of caution is warranted. It is submitted that the significant findings observed may be a consequence of the experimental manipulation. Where expert testimony for the defence was excluded from proceedings, two witnesses appeared on behalf of the defence - neither witness could provide an alibi for the accused. In contrast, three witnesses appeared on behalf the prosecution - each witness presented compelling circumstantial evidence. Considering the disparity in the nature of the testimony delivered, it appears reasonable to assume that an additional witness for the defence would facilitate increased perceptions of case strength. This does not imply that jurors were able to draw appropriate inferences from

information presented by the witness. It merely suggests that three witnesses are more compelling than two. In conjunction with the experimental manipulation, it is argued that the significant findings may be attributable to an inflated type 1 error. Although the use of multiple ANOVA's is justified when analysing individual outcome variables (as applied within this research), ignoring the possibility of a type 1 error is questionable (Huberty & Morris, 1989). The main effect for expert testimony for the defence was significant at an alpha level of 0.04. When applying the Bonferoni adjustment, this main effect fails to reach significance (at an alpha level of 0.03). As a consequence, care must be taken when interpreting these findings as evidence for a sensitivity effect as a function of expert testimony for the defence.

In summary, this research has demonstrated that alternative forms of expert testimony fail to influence the type of inferences drawn from information about estimator and system variables. Furthermore, subjects are unable to draw accurate inferences in relation to the credibility of the eyewitness, and the strength of the case for the prosecution (irrespective of the type of expert testimony presented). Where expert testimony for the defence is presented, subjects are able to draw appropriate inferences in relation to the strength of the case for the defence. Although it is not possible to ignore this finding, it should be viewed with caution. It is argued that the provision of expert testimony for the defence actually facilitates a scepticism effect. Where expert testimony for the prosecution is present, a scepticism effect is also observed. Where expert testimony is excluded from proceedings, subjects demonstrate insensitivity to witnessing and identification conditions. This indicates that the defence counsel is unable to communicate information about estimator and system variables in a manner that is understandable to the jury.

Juror Evaluation

Juror evaluation was defined as the ability to critically evaluate information about witnessing and identification conditions. In accordance with the elaboration likelihood model of persuasion, Petty and Cacioppo (1986) imply that high levels of source credibility may reduce jurors motivation to critically evaluate information that is presented. As a consequence, Cutler et al (1991) conclude that critical evaluation may be viewed as a function of low levels of credibility assigned to an expert witness. This position shall be evaluated after discussing the findings in relation to expert credibility.

This research demonstrated no difference in ratings of credibility assigned to the expert witness for the defence (when appearing alone), and the expert witness for the prosecution (when appearing alone). An analysis of the distribution of scores for each expert witness was inconclusive - the spread of scores were evenly distributed across the range of possible scores (from not credible, to undecided, to credible). It is argued that these findings support the notion of a scepticism effect when presented with expert testimony for the prosecution. As opposed to critically evaluating expert testimony that contradicts notions of common sense, a level of scepticism is induced that motivates jurors to discard the information that is presented. Had jurors critically evaluated the contents of the testimony, the prosecution expert would be assigned lower ratings of credibility. These findings also support the notion of a scepticism effect when presented with expert testimony for the defence. Where a defence counsel introduces an expert witness who submits empirical evidence indicating that the identification is not reliable, jurors are equally motivated to discard the information that is presented. The characteristic fundamental to the operation of a scepticism effect is a lack of critical and elaborate processing. Where final judgements

are based on inadequate evaluative strategies, the probability of forming a reliable decision is not greater than chance alone.

This research demonstrated no difference in ratings of credibility assigned to the prosecution expert when appearing alone, and when appearing in conjunction with an expert witness for the defence. An analysis of the distribution of scores demonstrated an even spread across the range of possible scores - this supports the notion of scepticism described in the preceding paragraph. In contrast, this research demonstrated significant differences in ratings of credibility assigned to the defence expert - this expert witness was perceived as more credible when appearing in conjunction with an expert witness for the prosecution. Although no difference was observed when analysing ratings of credibility assigned to the expert witness for the defence and the prosecution (when appearing in the same experimental condition), the distribution of scores demonstrated that a greater proportion of subjects rated the expert witness for the defence as credible. It is submitted that these findings have strong implications when considering the effect of competing forms of expert testimony within the same criminal trial. If expert testimony for the prosecution contradicts notions of common sense, it is feasible to assume that expert testimony for the defence reinforces notions of common sense. When jurors are presented with information that is consistent with previously held beliefs, higher ratings of credibility will be assigned. Where jurors are presented with information that contradicts previously held beliefs, lower ratings of credibility will be assigned. Given the position argued by Cutler et al (1991), high levels of credibility afforded to the expert witness for the defence will reduce motivation to critically evaluate the information that is presented - the risk associated with accepting the opinion of the expert is minimal. Where low levels of credibility are assigned to the expert witness for the prosecution, jurors will become motivated to carefully evaluate the contents

of the argument presented - the risk associated with accepting the opinion of the expert is considerable (Petty & Cacioppo, 1986). As a consequence, the expert witness for the prosecution fosters the critical evaluation of information, whilst the expert witness for the defence fosters the unconditional acceptance of information delivered by a more credible source. The reliability of final judgements that are dependent on this form of cognitive processing should be called into question.

In eyewitness identification cases, the defence and the prosecution counsel provide the jury with two categories of information. Through the examination and the cross-examination of relevant witnesses, circumstantial evidence is presented to the jury. The second category of information relates directly to the issue of identification reliability. When conducting the examination of the eyewitness, the prosecution counsel will attempt to elicit information that portrays the identification as reliable. When conducting the cross-examination of the eyewitness, the defence counsel will attempt to elicit information that portrays the identification as lacking in reliability. As the defence and the prosecution counsel constitute an additional source of information about estimator and system variables, they possess the capacity to induce a juror scepticism effect, a juror confusion effect, and a juror sensitivity effect. This research demonstrated no difference in ratings of credibility assigned to the prosecution and the defence counsel. An analysis of the distribution of scores indicated that subjects perceived each counsel to be credible (irrespective of the type of expert testimony presented). Given that source credibility reduces the motivation to critically evaluate information, it is argued that each counsel induces a scepticism effect. In this manner, the content of the information about estimator and system variables delivered by the defence and the prosecution counsel is not subjected to the required degree of critical evaluation.

The findings evidenced within this stage of the decision making process are not consistent with those reported by Cutler et al (1991). Cutler et al (1991) indicated that adversarial sources of information are afforded low ratings of credibility which facilitate the elaborate and critical evaluation of information. In contrast, this research has demonstrated a juror scepticism effect across all sources of information about estimator and system variables. As this finding of scepticism is consistent with observation drawn at the inference stage of the decision making process, and is adequately justified in terms of the elaboration likelihood model of persuasion (1986), a critical issue requires addressing. Although intuitively appealing, the elaboration likelihood model of persuasion (1986) has the potential to justify any experimental outcomes. If a non-adversarial expert is afforded higher ratings of credibility than an adversarial expert, the critical evaluation of adversarial expert testimony is implied. However, if an adversarial expert is afforded a higher rating of credibility than a prosecution counsel, adversarial expert testimony is presumed to be unconditionally accepted. It is submitted that this theoretical rationale is an inadequate means of considering the effect of expert testimony on the evaluative abilities of the individual juror. It is argued that ratings of credibility are not a sensitive measure of the ability of the jury to critically evaluate information that is presented. This emphasises a significant confound within this research.

In summary, this research has demonstrated that expert testimony for the defence (when presented in isolation), and expert testimony for the prosecution (when presented in isolation) induces a juror scepticism effect. As opposed to critically evaluating information that is presented, jury members are motivated to ignore the testimony of the expert. When competing expert witnesses appear in the same criminal trial, the presentation of expert testimony for the defence facilitates a scepticism effect, whilst expert testimony

for the prosecution facilitates a sensitivity effect. The information delivered by the expert witness for the prosecution is eliminated after critical evaluation, whilst the information delivered by the expert witness for the defence is unconditionally accepted as accurate. Although these findings appear plausible, it must be acknowledged that ratings of credibility are not a sensitive measure of the ability to critically evaluate information. In this manner, findings are by no means generaliseable beyond this thesis.

Juror Judgement

The final stage of the decision making process was defined as the ability to formulate reliable judgements in relation to the accuracy of the eyewitness identification, and the verdict delivered. This research demonstrated no difference across groups in relation to verdict rendered. This suggests that alternative modes of expert testimony fail to influence the type of judgement formed from inferences in relation to the credibility of the eyewitness, the credibility of the accused, and the strength of the case for the prosecution and the defence. These findings contradict those reported by Loftus (1980) who observed a significant reduction in the proportion of guilty verdicts where witnessing and identification conditions were poor. It is submitted that this disparity in findings is attributable to the experimental manipulation carried out by Loftus (1980). Where cases are dependent upon eyewitness testimony, the reliability of the identification (in terms of witnessing and identification conditions) requires extensive examination. Where expert testimony is excluded from proceedings, the adverse operation of estimator and system variables should be addressed by the defence counsel in control conditions. Where an expert witness appears on behalf of the defence, empirical evidence is submitted that serves to reinforce the elements raised by the defence counsel. As Loftus (1980) failed to introduce information

about estimator and system variables in control conditions, it is argued that the findings reported are not indicative of the effect of expert testimony for the defence. They merely address the effect of additional information on the ability of the jury to formulate an accurate judgement.

As witnessing and identification conditions were conducive to a false identification, a greater proportion of not-guilty verdicts should be observed in each experimental condition. This finding was evident where expert testimony for the prosecution was presented in isolation, where expert testimony for the defence was presented in conjunction with expert testimony for the prosecution, and where no expert testimony was presented. Where subjects were presented with expert testimony for the defence, this research demonstrated an equivalent proportion of guilty and not guilty verdicts. It is submitted that this finding supports the notion of a juror scepticism effect. Where the defence counsel introduces an expert witness who submits empirical evidence indicating that the identification is not reliable, jurors are more inclined to form a judgement that is in the opposite direction of that anticipated. This finding contradicts those reported by Cutler et al (1989; 1991), who evidenced a sensitivity effect as a function of the provision of expert testimony for the defence. It is argued that this disparity corroborates an assertion made within the preceding sections of this discussion. As Cutler et al (1989; 1991) used the same trial transcript within each separate experiment, the findings observed are specific to the scenario presented to subjects.

This research demonstrated no difference across groups in relation to the likelihood that the identification was correct. This finding supports the view that expert testimony for the prosecution fails to mislead the jury when forming final judgements from inferences made. Is the judgement formed by the jury accurate? As witnessing and

identification conditions were conducive to a false identification, and the majority of subjects delivered a not guilty verdict, the eyewitness identification should be presumed suspect. An analysis of the distribution of scores for this variable was inconclusive - the spread of scores were evenly distributed across the range of possible scores (from unlikely, to undecided, to likely). Therefore, it is submitted that jury members are unable to form a reliable judgement in relation to the likelihood that the identification is correct. Given that jury members are unable to draw appropriate inferences in relation to the credibility of the eyewitness, and do not properly evaluate the information that is presented about estimator and system variables, this finding is justified.

If the crucial evidence that links the accused to the scene of the crime is eyewitness testimony, and jurors are unable to establish the reliability of that identification, how is it possible to formulate an accurate judgement in relation to verdict delivered (a significant proportion of subjects delivered an accurate verdict of not guilty)? This issue is clarified when analysing ratings of importance attached to different categories of information presented during the trial. Where expert testimony was presented, a large proportion of subjects indicated that the method of identification was an important determinant of verdict type (a system variable). Remaining variables that demonstrated large proportions of responses related directly to circumstantial evidence, and inferences that were drawn in relation to the validity of circumstantial evidence. For example, a large proportion of subjects indicated that the accused owned a gun, so why would he steal one in order to commit the robbery? Where expert testimony was excluded from proceedings, an identical pattern emerged. As a consequence, it is argued that the findings in relation to verdict type can be viewed as a function of the nature of the experimental manipulation. Jurors were faced with two tasks within this research - they were required to evaluate the reliability of

the identification, and the nature of circumstantial evidence that was presented. As jurors were unable to form an accurate inference as to eyewitness credibility, and failed to render an accurate judgement in relation to reliability of the identification, the notion of scepticism to witnessing and identifications is reinforced. However, as jurors formulated accurate inferences in relation to the credibility of the accused, and rendered accurate decisions in relation to verdict type, it could be implied that the form of verdict delivered was an indication of the nature of the circumstantial evidence presented (as opposed to the presence of witnessing and identification conditions that were conducive to a false identification). If circumstantial evidence was not sufficiently compelling, a notion of reasonable doubt may be facilitated. As the burden of proof in a criminal trial is beyond reasonable doubt, this serves to portray the jury as a relatively competent institution in the evaluation of evidential sources of information.

Implications and Conclusions

This research has demonstrated that alternative modes of expert testimony fail to influence the type of inference that is formed from information about estimator and system variables. All subjects demonstrated an inability to form accurate inferences in relation to the credibility of the eyewitness, and the strength of the case for the prosecution. Inaccurate inferences were viewed to be a function of juror scepticism to information delivered by both the expert witness for the defence, and the expert witness for the prosecution. Where expert testimony for the defence is presented, jurors draw an inference that is in the opposite direction of that anticipated. Where expert testimony for the prosecution is presented, a level of scepticism is induced that motivates the juror to discard the contents of the testimony. In addition, alternative types of expert testimony fail to

influence the manner in which information about estimator and system variables is evaluated. All subjects fail to engage in the critical and elaborate processing of information. Finally, alternative forms of expert testimony fail to influence judgements as to the likelihood of identification accuracy. All subjects exhibit an inability to draw accurate conclusions from inferences that are formed in response to witnessing and identification conditions. In this manner, the provision of alternative forms of expert testimony fail to influence the decision making processes of the individual juror, where witnessing and identification conditions are conducive to a false identification.

These findings have strong implications when considering the admissibility of expert testimony for the defence in eyewitness identification cases. Psychological research demonstrating the adverse nature of estimator and system variables has not been consistent (Brekke et al, 1991). Where this disparity in psychological opinion exists, the admissibility of expert testimony for the defence would provide an opportunity for a prosecution counsel to submit expert evidence that emphasises the positive impact of estimator and system variables on eyewitness identifications. Although this research detects no difference as a function of expert testimony for the prosecution (when appearing in conjunction with an expert witness for the defence), neither form of expert testimony elicits a juror sensitivity effect. In contrast, a juror scepticism effect is implicated where both forms of expert testimony are presented. This supports the concerns expressed by Brekke et al (1991) in relation to the application of psychological knowledge within the context of the courtroom. Where expert testimony induces a scepticism effect, the probability of wrongfully acquitting an otherwise guilty individual is substantially increased (Wells, 1986). In this manner, the welfare of the larger community is placed at substantial risk. As the fair dispensation of justice should be analysed in conjunction with the notion of community welfare, the findings

of this research question the validity of demanding the reform of current judicial attitudes in relation to the admissibility of expert testimony for the defence.

The exploratory nature of this research has provided numerous avenues for future research. As the mode of crime was not systematically varied in this analysis, the generaliseability of findings are limited. In this manner, future research should examine the impact of different forms of expert testimony where differing degrees of crime severity are varied. In conjunction with this variable, the effect of different types of expert testimony where witnessing and identification conditions imply a positive identification requires analysis. Do equivalent patterns of scepticism emerge in the opposite direction to those reported within this thesis?

An additional issue that requires examination is the insensitivity of the measure of juror evaluation tendered by Cutler et al (1991). As scepticism is implied where elaborate processing is omitted, and sensitivity is implied where critical evaluation is observed, any assessment of the effect of expert testimony on decision making processes requires a measure that is sensitive to juror evaluation. Without this measure, the notion of juror scepticism and juror sensitivity is confounded. In conjunction with this element, it appears necessary to examine the nature of information that drives juror decision making in eyewitness identification cases. Are decisions based on circumstantial evidence, witnessing and identification conditions, or a combination of each? Information gleaned from each analysis would provide the foundations for an argument that assesses the validity of reforming current judicial doctrines in relation to the admissibility of expert testimony for the defence.

References

- Brekke, N.J., Enko, P.J., Clavet, G., & Seelau, E. (1991). Of juries and court appointed experts. Law and Human Behaviour, 15 (5) 451-475.
- Christianson, S., & Loftus, E.F. (1987). Memory for traumatic events. Applied Cognitive Psychology, 225, (2), 834-527.
- Cutler, B.L., Dexter, H.R., & Penrod, S.R. (1991). Non-adversarial methods for sensitising jurors to eyewitness evidence. Journal of Applied Social Psychology, 20 (14), 1197-1207.
- Cutler, B.L., Penrod, S.R., & Stuve, T.E. (1988). Juror decision making in eyewitness identification cases. Law and Human Behaviour, 12 (1), 41-55.
- Cutler, B.L., Penrod, S.R., & Dexter, H.R. (1989). The eyewitness, the expert psychologist, and the jury. Law and Human Behaviour, 13, 311-332.
- Cutler, B.L., Dexter, H.D., & Penrod, J.D. (1989). Expert testimony and jury decision making : an empirical analysis. Behavioural Sciences and the Law, 7 (2), 215-225.
- Davies. v. The King, & Cody. v. The King (1937). Commonwealth law reports, 170-185.

- Gerbas, K.C., Zuckerman, M., & Reis, H.T. (1977). Justice needs a new blindfold : A review of mock jury research. Psychological Bulletin, 84 (2), 323-345.
- Gillies, P. (1987). Australian evidence cases and commentary. Sydney : The Law Book Company.
- Hills, A. (1994). Unit handbook : Correlational designs, and between subjects analysis of variance using SPSS for windows. Perth : Edith Cowan.
- Hosch, H.M., Beck, E.L., & McIntyre, P. (1980). Influence of expert testimony regarding eyewitness accuracy on jury decisions. Law and Human Behaviour, 4, 287-296.
- Huberty, C.J., & Morris, J.D. (1989). Multivariate analysis versus multiple univariate analyses. Psychological Bulletin, 105 (2), 302-308.
- Law Reform Commission (1985). Report number 26 - Evidence. Canberra : Australian Government.
- Lindsay, R.C.L., Wells, G.L., & Rumpel, C.M. (1981). Can people detect eyewitness identification accuracy within and across situations. Journal of Applied Psychology, 66 (1), 79-89.
- Loftus, E.L. (1980). Impact of expert psychological testimony on the unreliability of eyewitness identification. Journal of Applied Psychology, 65 (1), 9-15.

- Loftus, E.L., & Doyle, J.M. (1992). Eyewitness testimony : civil and criminal. Virginia : Michie Company.
- Petty, R.E., & Cacioppo, J.T. (1986). Communication and persuasion : Central and peripheral routes to attitude change. New York : Springer Verlag.
- R. v. Fong. (1980). Queensland law reports, 90-95.
- R. v. Smith. (1987). Victorian law reports, 907-912.
- Tabachnick, B.G., & Fidell, L.S. (1989). Using multivariate statistics. New York : Harper Collins.
- United States v. Telefaire, 469 F.2d 552 (D.C. Cir. 1972).
- Wells, G.L. (1986). Expert psychological testimony. Law and Human Behaviour, 10 (1/2), 83-95.
- Wells, G.L. (1987). Applied eyewitness testimony research : System variables and estimator variables. Journal of Personality and Social Psychology, 36, 1546-1557.
- Wells, G.L., Lindsay, R.C.L., & Tounignant, J.P. (1980). Effects of expert psychological advice on human performance in judging the validity of eyewitness testimony. Law and Human Behaviour, 4 (4), 275-281.

Yarmey, A.D., & Tressillian-Jones, H.P. (1983). In the psychology of eyewitness identification a matter of common sense? In S.M.A. Lloyd-Bostock and B.R. Clifford (Eds.), Evaluating witness evidence (pp. 13-39).

Yuille, J.C., & Cutshall, J.L. (1986). A case study of eyewitness memory of a crime. Journal of Applied Psychology, 71 (2), 291-301.

APPENDIX A

EXPERT TESTIMONY FOR THE PROSECUTION

(Please see attached file for the full transcript)

APPENDIX B

EXPERT TESTIMONY FOR THE DEFENCE

(Please see attached file for the full transcript)

APPENDIX C

EXPERT TESTIMONY FOR THE PROSECUTION AND THE DEFENCE

(Please see attached file for the full transcript)

APPENDIX D

NO EXPERT TESTIMONY (CONTROL CONDITION)

(Please see attached file for full transcript)

APPENDIX E**COULD YOU PLEASE READ THE FOLLOWING INSTRUCTIONS**

Within this booklet you will find the summary of a criminal trial. Could you please imagine that you have been requested to serve as a real juror in this trial. When you have finished reading the summary, please answer all of the questions appearing on the last few pages. Only read the summary once, but feel free to take as long as you need.

Your participation is greatly appreciated. If you have any questions regarding the experiment, I will be glad to discuss them with you. Please feel free to contact me on 305 4596.

Thankyou.

APPENDIX F
QUESTIONNAIRE

1. What is your verdict? Please circle the response you select.

Guilty

Not Guilty

2. In the space provided, please list 5 factors that most influenced your verdict.

- a
.....
- b
.....
- c
.....
- d
.....
- e
.....

3. What is the likelihood that the eyewitness provided an accurate identification of the perpetrator? Please use the following scale when answering this question, and circle the response you select.

Highly Likely 2	Likely 1	Undecided 0	Unlikely -1	Highly Unlikely -2
--------------------	-------------	----------------	----------------	-----------------------

4. How credible was the prosecution counsel? Please use the following scale when answering this question, and circle the response you select.

Definitely Credible 2	Credible 1	Undecided 0	Not Credible -1	Definitely Not Credible -2
--------------------------	---------------	----------------	--------------------	-------------------------------

5. How credible was the defence counsel? Please use the following scale when answering this question, and circle the response you select.

Definitely Credible 2	Credible 1	Undecided 0	Not Credible -1	Definitely Not Credible -2
--------------------------	---------------	----------------	--------------------	-------------------------------

6. How credible was the accused? Please use the following scale when answering this question, and circle the response you select.

Definitely Credible	Credible	Undecided	Not Credible	Definitely Not Credible
2	1	0	-1	-2

7. **How credible was the eyewitness? Please use the following scale when answering this question, and circle the response you select.**

Definitely Credible	Credible	Undecided	Not Credible	Definitely Not Credible
2	1	0	-1	-2

8. **How credible was the expert witness for the prosecution? Please use the following scale when answering this question, and circle the response you select.**

Definitely Credible	Credible	Undecided	Not Credible	Definitely Not Credible
2	1	0	-1	-2

9. **How credible was the expert witness for the defence? Please use the following scale when answering this question, and circle the response you select.**

Definitely Credible	Credible	Undecided	Not Credible	Definitely Not Credible
2	1	0	-1	-2

10. **How strong was the case for the prosecution? Please use the following scale when answering this question, and circle the response you select.**

Very Strong	Strong	Moderate	Weak	Very Weak
4	3	2	1	0

11. **How strong was the case for the defence? Please use the following scale when answering this question, and circle the response you select.**

Very Strong	Strong	Moderate	Weak	Very Weak
4	3	2	1	0

12. **Please complete the following questions.**

a **What is your age ?**.....

b **Are you male or female?**.....

c **What is your occupation?**.....

THANKYOU FOR YOUR PARTICIPATION

Please Note :- Questions 9 and 10 only appeared where an expert witness appeared.

APPENDIX G

Dear Participant,

This study is being conducted as part of my Honours degree at the Edith Cowan University. I am interested in examining the nature of juror decision making in eyewitness identification cases. Prior to obtaining your agreement to participate, I would like to advise you of the nature of the court transcript I will be presenting. The accused has been charged with armed robbery - although the transcript is not graphic in nature, it still alludes to a violent event having taken place. Please take this into consideration when deciding if you wish to participate or not.

If you agree to participate, about an hour of your time will be required. You will be asked to read a court transcript, and complete a short questionnaire. Please remember that your participation is entirely voluntary. Furthermore, if you agree to participate, you are free to withdraw that participation at any stage, or decline to complete any part of the materials.

The information obtained from you will be treated in the strictest confidence, and will remain anonymous. There is no need for you to record your name, or any other information that could identify you.

It is anticipated that the information obtained from this research will assist in the formation of a theoretical model from which juror decision making may be conceptualised. Should you wish to find out about the results of the study, please feel free to write to me requesting a summary.

Should you have any queries regarding this project, please feel free to contact me, or my University supervisor at the address below.

Yours sincerely,

Pamela Sullivan (09) 305 4596

University Supervisor
Prof. D.M.Thomson
Department of Psychology
Edith Cowan University
Joondalup, 6028

I, the undersigned, have read all of the above information, and agree to participate in this study. I am fully aware that I may withdraw my participation at any stage.

.....
Signature of participant

APPENDIX H

DESCRIPTIVE STATISTICS

(See attached file for descriptive statistics)

APPENDIX I

INFERENCEAL STATISTICS

(See attached file for inferential statistics)