ENHANCED COGNITIVE INTERVIEW: INCORPORATING "REMEMBER" OR "KNOW" AND/OR CONFIDENCE LEVEL PHASES TO DETERMINE THE ACCURACY OF EYEWITNESS INFORMATION.

by

Wayne Roberts

Ext. Studies Diploma Criminology, Simon Fraser University, 1986

B.A.(Psych), Simon Fraser University, 1981

THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS OF SCIENCE

in

PSYCHOLOGY

© Wayne Roberts, 2000

THE UNIVERSITY OF NORTHERN BRITISH COLUMBIA

December 2000

All rights reserved. The work may not be reproduced in whole or in part, by photocopy or other means, without the permission of the author.

UNIVERSITY OF NORTHERN BRITISH COLUMISIA LIBRARY Prince George, BC

Abstract

Many demands have been placed on the criminal justice system to change how police officers interview adult eyewitnesses. Police officers have been working hard to find an interview technique that maximizes correct information and reduces contamination of the interview. Geiselman and Fisher in the I980s developed the Cognitive Interview which appeared to address the concerns of the police officers. Laboratory research suggests when this technique is used there is a quantity increase of 35% more correct information recovered over the standard police interview, with little or no increase in errors or confabulations. Further research conducted by Geiselman and Fisher (1987) reported that some trained Cognitive Interview interviewers who had knowledge of the psychology of small groups and had excellent communication skills obtained more information using the Cognitive Interview then the trained Cognitive Interview interviewers who lacked these skills. Geiselman and Fisher noted when these skills were incorporated into the original Cognitive Interview there was a 46% increase in the amount of correct facts, with no substantial increase in errors or confabulations. This improved version of the Cognitive Interview became known as the Enhanced Cognitive Interview. However, many police officers are more concerned over the quality of the information and its accuracy than with mere quantity. Some police officers were disturbed over the fact the results of the laboratory research using the Enhanced Cognitive Interview indicated that there was a small increase in the amount of errors and confabulations. In the field there is usually no way of knowing what information

supplied by an eyewitness is correct, an error, or a confabulation. Higham and Roberts (1996b) predicted that incorporating an accuracy phase with the Enhanced Cognitive Interview using Tulving's (1985) "remember" or "know" paradigm may be an effective method of determining the accuracy of eyewitness information. Memon and Higham (1999) noted that incorporating confidence levels into the Enhanced Cognitive Interview may also be an effective method of determining the accuracy of eyewitness information. Two pilot studies were conducted to develop a method that would allow an evaluation of these hypotheses. In the final study 18 participants, first watched a short videotape of a crime enactment. Seven days later these same participants were interviewed using the Enhanced Cognitive Interview method and an incorporated accuracy phase, consisting of a "remember"- "know" and a confidence level section. The results of this research project support Higham and Roberts and Memon and Higham's predictions. Incorporating an accuracy phase with the Enhanced Cognitive Interview consisting of "remember" - "know" judgements section and/or a confidence levels section would allow police officers to be more confident that a particular set of statements elicited during the ECI were correct.

Table of Contents

Abstract		ii
Table of Contents		iv
List of Tables		vi
List if Figures		viii
Acknowledgments		ix
CHAPTER ONE	Introduction	1
	The Importance of Eyewitnesses	2
	Interrogation	4
	Problems with Police Eyewitness Interviewing Methods	6
	Eyewitness Memory Research	9
	Cognitive Interview	10
	Phases of Cognitive Interview	14
	Cognitive Interview Research	20
	Problems in the Field Implementing the Cognitive Interview	23
	Enhanced Cognitive Interview	28
	Police Acceptance of the Enhanced Cognitive Interview	29
	Quality of Information Versus Quantity of Information	32

	Effect of Trauma on the Eyewitness's Abilities to Disclose Information	33
	Script Memory can Affect the Accuracy of an Eyewitness's Memories	34
	The Problem of Determining Accuracy of Eyewitness Information in the Field	36
	Incorporating "Remember" - "Know" and/or Confidence Level Judgements in the Enhanced Cognitive Interview May Resolve the Accuracy Concerns	38
CHAPTER TWO	Development of Research Procedures Incorporating A "Remember" or "Know" and Confidence Level Accuracy Phase with the Enhanced Cognitive Interview	41
	Pilot Study One	42
	Pilot Study Two	47
CHAPTER THREE	"Remember" or "Know" and Confidence Level Accuracy Study	64
	Method .	64
	Procedure	68
	Results	87
	Discussion	95
References		115
Appendix A	Informed Consent Form	121
Appendix B	Enhanced Cognitive Interview Participant #13	122
Appendix C	Notes Participant #13 Enhanced Cognitive Interview Phase 1	209

Appendix D	Results of Comparison of Accuracy Rates of "Remember" Judgements Compared to Accuracy Rates of "Know" Judgements	213
Appendix E	Completed Score Sheets for Accuracy Study Participant #13	
	Description of Events	215
	Description of Man	220
	Description of Woman	222
	Description of Knife	223
Appendix F	Sample Score Sheets of Relevant Information for:	
	Relevant Event Information	224
	Relevant Information Man	227
	Relevant Information Woman	228
	Relevant Information Knife	229

List of Tables

Table 1 Distribution of Correct Relevant Event Facts

94

List of Figures

Figure 1 Accuracy Rates Across Phases

89

Acknowledgements

Firstly, I would like to thank Dr. Phil Higham for his patience and guidance throughout this research project. I would also like to thank Dr. Cindy Hardy and Glenn Schmidt who gave up their time to be part of my supervisory committee, their guidance and support is appreciated.

I would also like to thank my family, Tami, Patrick, Tracy, Bruce, Dean, Kerry and Kyle for your support and putting up with a "grumpy" dad now and again. Thanks to Christian and Tianna for their prayer for "papa" on December 19th.

Finally I would like to thank, my wife, Bonnie, who has <u>always</u> been there to support and encourage me.

CHAPTER ONE

Introduction

Canadian police officers have an obligation to the citizens they serve to impartially investigate various incidents in search of the truth. These investigations can result in people being charged with criminal offences and/or being convicted in criminal court. If convicted a person can be sentenced to a variety of terms of incarceration. Additionally, these same individuals, if found liable for their actions in civil court, can have large financial judgments imposed. As a result of the tremendous loss a person could suffer if wrongly accused, found guilty, or held liable, police officers have an enormous responsibility to search for the best possible techniques available to aid in their search for the truth.

One investigational technique police officers heavily rely on is the eyewitness account of an incident. Eyewitnesses are generally people who are victimized during the incident, are in a position to see the incident take place, possess some prior knowledge of the incident, or after the incident acquire some information to assist the investigation. Eyewitnesses have always been and always will be an integral part of police investigations. In the past the accuracy of information provided to police officers by eyewitnesses was rarely questioned. Many criminal convictions and findings of liability were based solely on an eyewitness's recollections of the event. Many of these convictions resulted in long periods of incarceration and/or large financial judgements being imposed on people.

The Importance of Eyewitnesses

From January 1st, 1996 to December 31st, 1996, I was the commander of the Serious Crime Unit of the Prince George Royal Canadian Mounted Police (R. C. M. Police) Detachment, Prince George, British Columbia, Canada. During this period of time the members of the serious crime unit were responsible for investigating ten homicides. Throughout these homicide investigations the Serious Crime members spent the majority of their time interviewing eyewitnesses. The eyewitnesses in these cases provided the investigators with information about the events preceding, during and following each homicide. Sanders (1986) reported sheriffs, deputies and detectives in the state of New York, United States of America, had identified the eyewitness as one of the most important elements of a criminal investigation. Recognizing the value of eyewitnesses is not just a North American phenomenon. Harren (1976) reported that in West Germany, police officers indicated they spent between 70% to 80% of their time interviewing eyewitnesses and suspects. As far back as 1975 The Rand Corporation reported many police officers strongly believed eyewitnesses were crucial to solving a crime. Twenty-three years later Kebbel and Milne (1998) found police officers still maintained that eyewitnesses were a key component of a criminal investigation. More recently Memon and Koehnken (1992) reported many investigators in other countries depended heavily on eyewitness interviews; however, Kebbel and Milne reported these same police officers who recognized the importance of the eyewitness were being frustrated by the limited amounts of information provided by eyewitnesses during police interviews.

For the amount of time police officers have spent over the years dealing with eyewitnesses one would have expected a heavy emphasis in police department recruit training programs on issues related to memory, memory storage, memory retrieval, suggestibility, communication skills and proper interviewing techniques, such as the Step-Wise Interview (Yuille, 1984), Structured Interview (SI) (McEwan, 1993), or the Enhanced Cognitive Interview (ECI) (Fisher & Geisleman, 1987). One would also expect more advanced courses in interviewing eyewitnesses would have been readily available for more senior police officers. Unfortunately, this type of training for recruits and senior police officers was not readily available during the 1970s and 1980s.

In Canada and in several other countries, police supervisors and front line police officers have repeatedly expressed a concern police forces were not adequately researching interview techniques nor were they providing sufficient training in the area of effective interviewing of eyewitnesses. The same training and research concerns were also reported in other countries such as the United States of America, where Harris (1973) reported police officers received little formal training around interviewing eyewitnesses. Only 2% of the police officers interviewed by Sanders (1986) indicated they had received any formal training in interviewing eyewitnesses. Fisher and Geiselman (1992) noted most police officers indicated they had to rely on their own common sense and observations of other senior officers conducting eyewitness interviews to develop their interview strategies. Geiselman, Fisher, MacKinnon and Holland (1985) found the majority of the training provided for interviewing people was conducted specifically around the interrogation of suspects.

Interrogation

Fisher and Geiselman (1992) reported interrogation methods utilized by police officers contain a variety of communication strategies designed to convince a person who had committed a crime to confess his/her involvement. In the past, police officers who demonstrated skills in the area of interrogation were often the police officers selected to fill positions on major crime units. When these police officers became members of the major crime units they often received extensive training on the subject of interrogation.

There were many police officers who supported the position that the confession was the most valuable piece of evidence police officers could obtain in an investigation. These police officers and many senior management within police forces felt once a confession had been obtained, the search for corroborative evidence was considerably easier because the actual offender was providing the police officer with the information necessary to locate the evidence. For example, suppose a man murders his wife with a gun. During the initial stages of the investigation the gun is not found. The man is arrested and confesses to shooting his wife. The man takes the police officer to the gun he used to commit the murder. The gun is examined and confirmed to be the murder weapon. The fact that the man showed the police officer where the gun was hidden, and the fact that the gun located was the one used in the murder is corroborative of the fact that the man who confessed was responsible for the crime.

In the past, a large majority of confessions obtained from suspects through the use of interrogation techniques employed by police officers were admitted as evidence

at criminal trials. Once the confession had been admitted as evidence, the trier of fact could use the confession to decide the guilt or innocence of the person(s) charged with a criminal offence. Even when a confession obtained by police officers was found to be inadmissable, the evidence derived from the confession was sometimes admitted as evidence. In our case example if the man's confession had not been admitted at trial, the fact the man directed the police officer to the gun and the fact the gun was the murder weapon would have stood a strong chance of being admitted as evidence to be considered by the trier of fact. Because police officers using interrogation techniques learn first hand from the offenders where the crime took place along with the why, the what, the when, and the how of the crime being investigated, it was obviously beneficial for police forces to have their police officers proficient in interrogation methods.

Therefore, it was logical for police forces to spend training dollars in developing excellent interrogators of suspects rather then excellent interviewers of eyewitnesses.

In Canada the admissibility of confessions and the evidence derived from confessions had always been closely scrutinized by the judiciary. However, with the inception of the Charter of Rights and Freedoms in 1985 a whole new set of rules arose around the individual's constitutional rights. As a result of the rulings made by the courts in relation to the Charter it has become considerably more difficult for police officers to have a confession and/or the evidence obtained directly from a confession admitted as evidence in a criminal trial. This does not mean obtaining a confession is no longer of importance. Confessions will always be an integral part in the overall investigative process. The reduction of confessions and other evidence derived from

confession being admitted by judges contributed to police officers' recognition of the need to develop and improve the quality of other avenues of investigation, such as the eyewitness interview.

Problems With Police Eyewitness Interviewing Methods

As police officers had been primarily trained to use an interrogation style interview with a person who had something to hide, it was difficult for these police officers to develop another style of interviewing which would be effective in interviewing eyewitnesses. Fisher and Geiselman noted because police officers had little information on how memory worked or the issues concerning suggestibility, they failed to adequately access a large amount of correct information which was held in the memories of eyewitnesses. On occasion this lack of knowledge led some police officers to inadvertently contaminate the memory of the eyewitness. Furthermore, this lack of knowledge caused many police officers to use their own ingenuity to develop methods they felt were efficient and enabled them to quickly elicit what they believed to be the truth. Fisher and Geiselman (1992) reported an examination of the standard police interview revealed that some of the techniques employed by police officers were suggestible and interfered with the eyewitness's abilities to access memories. Yuille (1984) reported many Canadian police officers held the view leading questions were necessary to obtain a complete and accurate description of a crime. Yuille described leading questions as questions which contain information about the event before the information is supplied by the eyewitness. Leading questions are often formed from police officers' assumptions about what occurred, information from other evewitnesses

or information from the police officer's crime script of the event. Yuille pointed out in some instances the use of leading questions could result in the creation of errors or confabulations.

Milne and Bull (1999) noted another area of concern centered around some police officers' practice of developing preconceived ideas of the incident prior to conducting any interviews of eyewitnesses. This investigational bias often caused police officers to exercise complete control over the interview. Milne and Bull noted that some police officers would inappropriately avoid information that was provided by the eyewitness which could have supported an alternative hypothesis for the incident. By employing methods such as closed questioning, police officers could control the type of information provided by the eyewitnesses. These types of procedures often prevented the eyewitness from disclosing other relevant information. Milne and Bull also noted that police officers would prematurely cut off an eyewitness's accounts when the police officers felt the eyewitness had provided enough evidence to support the police officer's interpretation of the events. Fisher and Geiselman (1992) felt this premature closure of interviews often prevented the maximization of information available from the eyewitness.

Other police officers, according to Fisher and Geiselman (1992), reverted to a communication style that was often founded in interrogation training. The use of leading questions, closed questions and premature closure allowed the police officers to maintain total control over the interview process. Imposing total control resulted in situations where some police officers failed to develop any rapport with the eyewitness.

These same police officers tended to listen ineffectively to the eyewitness; they tended to summarize the information they thought had been provided by the eyewitness, and occasionally the summaries were inaccurate representations of what had been said. Some police officers also used specific questioning which did not encourage the eyewitness to volunteer or expand on information provided. Loftus (1979) reported that techniques for interviewing eyewitnesses similar to those reported in Fisher and Geiselman were not productive and on occasion led to contamination of the eyewitness information. Although these problems did exist it was my opinion from working in the field, as a serious crime investigator, that there were many excellent police officers who were very effective at obtaining large quantities of uncontaminated relevant information during eyewitness interviews.

Fisher and Geiselman (1992) reported that as a result of the eyewitness research conducted in the I980s genuine concerns had been expressed over the methods employed by some police officers who used the standard police interview. These concerns over the possible contamination of the eyewitnesses memory and the failure of police officers to maximize information using the standard police interview led police forces to look for new eyewitness interview techniques. Police forces felt that maximizing the information from an eyewitness would improve the quality of the actual investigation and reducing the contamination of the interview process would allow the trier of fact to put more weight on eyewitnesss testimony.

Eyewitness Memory Research

Over the last twenty years research in the field of eyewitness memory has demonstrated that memory is fragile. Some researchers have gone as far as to suggest that it is possible to create false memories in people by using inappropriate interview techniques (e.g., see Byerstein & Ogloff, 1993; Holmes, 1990; Lanning, 1991; Lindsay, 1990; Lindsay & Read, 1994; Loftus, 1979; Loftus, Coan and Pickerall, 1996; Ofshe, 1992; Piaget, 1962; for discussion). Loftus (1979) theorized a new memory (i.e., a false memory) could in fact replace a person's original memory of an event. It was theorized that people can replace the original stored information about an incident with new information that is provided by others, such as police officers, during eyewitness interviews. This new information, according to Loftus, becomes part of the original memory and the person actually believes the "false memory".

Although there has been no concrete evidence presented in the literature to establish whether Loftus's false memory hypothesis is correct, what this research did do was make police officers and others in the criminal justice system aware of how fragile human memory can be. As a result of all the research findings in the area of memory the onus was put on police officers to become more aware of all the eyewitness interviewing techniques that reported to maximize the amount of information obtained without contaminating the eyewitness's memories.

Due to the change in focus from interrogation of suspects to more thorough eyewitness interviews by police officers, defence counsels began to challenge trial iudges to examine more closely the eyewitness interview techniques used by the police

officers. Judges became more and more familiar with the research in such areas as suggestibility, leading questioning, closed questioning, interviewer bias, and premature closure of eyewitness interviews. With their increased knowledge of the research judges began to scrutinize police officer's interviewing techniques of the eyewitnesses. As a result judges began to express concerns over some of the methods utilized by police officers. In their decisions judges identified what would be an acceptable minimal standard for police officers to maintain if an eyewitness's testimony is to have any weight in a criminal trial. It was made clear in the latest Supreme Court of Canada's decisions involving the interviews of children who witness crimes that the justices want police officers to conduct eyewitness interviews using more open ended questions (Regina vs C. C. F., S. C. C., 1998). Eyewitnesses who are interviewed by a police officer in the prescribed manner will have far more weight put on their evidence by the trier of fact than will eyewitnesses whose interviews have been contaminated by police officers using poor interviewing techniques.

Cognitive Interview

In the early 1980s, American psychologists Ed Geiselman and Ronald Fisher began to look at all the concerns uncovered by the research and the manner in which police officers conducted eyewitness interviews. Fisher, Geiselman and Raymond (1987) proposed an interview process which was based on theoretical and laboratory research on the organization and retrieval of memory. Fisher and Geiselman referred to this technique as the Cognitive Interview. Geiselman (Prosecutor's Note, no date) was reported to have claimed that the Cognitive Interview appears to have answered

the majority of the concerns of the police and the courts. Memon and Koehnken (1992) reported numerous studies had demonstrated that by using the Cognitive Interview, police officers could increase the amount of correct information retrieved from an eyewitness by approximately 35% with little or no increase in errors or confabulations over the standard police interview (e.g., see Fisher & Geiselman, 1992; Fisher, Geiselman & Raymond, 1987; Fisher, et al. 1987; Geiselman, et al. 1984; George, 1991; George & Clifford, 1991; Koehnken, Mantwill, Aschermann & Vieweg, 1992; Memon & Bull, 1991; for results of research). According to Fisher and Geiselman (1992) the Cognitive Interview allowed police officers to maximize the amount of correct information and minimize contamination. Milne and Bull (1999) reported that the techniques developed by Fisher and Giesleman were well founded on "established psychological findings concerning memory" (p. 33).

Fisher and Geiselman (1992) reported they had embraced the view held by many memory psychologists, such as Melton (1963), that memory was made up of three phases; encoding, storage and retrieval. The analogy of a mechanical filing system was used by Fisher and Geiselman to explain how these phases of memory functioned. The opening of a file represented the encoding phase. During this phase, people encoded what they saw, heard, smelled, tasted or felt when they witnessed an incident. Once the file had been opened and filled with information it was placed in the file cabinet for storage. The actual recovery of the file from the file cabinet is the retrieval phase. The file cabinet door is opened and the index checked for the appropriate file name. Once the name of the correct file has been obtained the file is

located and pulled from the cabinet. The file is then opened and the record that was stored is retrieved.

Fisher and Giesleman (1992) reported it is important to keep in mind that the actual mental record entered into the file may not be a carbon copy of the actual event. In a real life incident an eyewitness could experience physical pain from an injury received during the incident, feel fear, be concerned for the safety of others, or even be thinking about how the incident is going to make them late to pick up their children. As a result the eyewitness may fail to attend to all aspects of the incident. This mental record may also be affected by those who speak to the eyewitness after the incident, such as a medical doctor treating an injury, a news reporter attending a scene, other eyewitnesses and police officers conducting interviews. All of these mental and physical experiences along with the conversations could result in the tainting of some of the information provided by the eyewitness concerning the actual incident. Any existing scripts stored by the eyewitness related to similar incidents may also have an effect on the storage of the event. Fisher and Geiselman noted that the mental record of an incident would reflect "an intricate web of interactions between the event, the surrounding context, the observer's mood, the thoughts at the time, general knowledge and related experiences, along with a host of others" (p.13). It is Fisher and Geiselman's position that unless the eyewitness wants to retrieve the mental record created of an incident it will stay on file for a long time.

During the retrieval phase Fisher and Geiselman (1992) reported that certain retrieval cues activate memories and bring about the conscious recollection of the

witnessed incident. According to Fisher and Geiselman, by using retrieval cues police officers would be able to unlock the actual main file and all associated files where the coded memory of an incident is stored. Fisher and Geiselman noted that people who are participants in most memory research experiments have some prior knowledge that their memory is going to be tested. These participants have time to develop conscious strategies, such as retrieval cues, that will assist them in accessing the appropriate memories when requested to do so. The participants who have had the opportunity to develop their own retrieval cues often are able to recall a great amount of information. However, Fisher and Giesleman (1992) pointed out that eyewitnesses of an incident outside the laboratory seldom have any prior knowledge that the incident is going to occur. Because these eyewitnesses do not have time to develop elaborate conscious strategies to encode information prior to the event they would find it very difficult to recall a great amount of information without assistance.

Fisher and Geiselman (1992) reported that people were limited as to how many events going on in front of them they could actually store in memory. They felt that an eyewitness can only attend to one event at a time. Fisher and Geiselman suggested that the eyewitnesses use some form of mental code to store the information about an event to which they attend. They pointed out this mental code is integrated with the psychological state of the eyewitness and what is occurring in the environment at the time the event is witnessed. As a result information is encoded in many different ways. Landauer (1986) hypothesized that the brain is capable of storing billions of pieces of information at any given time. Fisher and Geisleman pointed out trying to search

through billions of pieces of information is inconceivable without some organized procedure.

According to Fisher and Geiselman (1992), because the information attended to by an eyewitness is influenced by so many factors and is stored amongst billions of pieces of very similar information, an eyewitness will find it difficult on their own to recover much of the specific event information. The eyewitness's attempts would be further limited by their failure to develop appropriate retrieval cues at the time they witnessed the event. Tulving and Thomson (1974) reported information that is coded and stored in memory can be retrieved if the appropriate retrieval cue is uncovered. In both Tulving and Thomson and Tulving (1977) it was discovered that information which was demonstrated to have been previously forgotten by a participant could be retrieved using different retrieval cues. According to Fisher and Geiselman, the challenge for a police officer conducting an interview is to help the eyewitness uncover all possible retrieval cues required to access every piece of stored information available concerning the incident.

Phases of the Cognitive Interview

Based on the above noted principles, Fisher and Geiselman (1987) developed four general methods of accessing memory and several mnemonics to assist retrieval of specific pieces of information. The first two methods (mental reinstatement and reporting everything) are aimed at increasing the overlap of elements between stored memory and retrieval cues. The third and fourth methods (recalling in a different order and changing perspectives) encourages the use of many retrieval paths. The following

are summaries of these methods and mnemonics which were reported in Fisher and Geiselman (1992).

Mental Reinstatement

This phase involves the police officer encouraging the eyewitness to mentally reinstate the eyewitness's mental and physical states when the incident was witnessed. The police officer actually asks the eyewitness to form in his or her mind the images, sounds, smells, feelings and physical conditions experienced at the time of the incident. When mental reinstatement was used in numerous laboratory experiments this procedure was proven to be a powerful memory aid (Fisher & Geiselman, 1992). Mental reinstatement is not an easy task for all eyewitnesses and some time has to be afforded at the beginning of the interview for the eyewitness to accomplish this task.

Mental reinstatement overcomes the logistical problems of returning an eyewitness to the scene of the crime. Although there has been some suggestion that taking the eyewitness back to the crime scene will assist in improving memory of the incident (Wicks, 1974) Fisher and Geiselman do not recommend this procedure. A genuine concern exists that even if the eyewitness is taken back to the exact location he/she would not be exposed to the exact conditions that existed in the environment at the time the event was witnessed. Loftus, Manber and Keating (1983) reported the greater the difference between the actual environment which existed at the time of the incident, such as lighting, weather, and so on, the more the memory of the incident will be impaired. Therefore, mentally reinstating the scene appears to be the most effective method of optimizing the re-creation of the circumstances both environmentally and

personally. Further studies by Memon and Koehnken (1992) reported that mental reinstatement is the most effective part of the Cognitive Interview. Preliminary field data from George and Clifford (1991) also disclosed that British police officers hold the view mental reinstatement is the most effective part of the Cognitive Interview.

Report Everything

When a police officer commences an interview of an eyewitness the police officer has no idea what information the eyewitness has stored in memory that is going to be helpful. The same is true for the eyewitnesses; they have no idea what information they have stored in their memory will be important and assist the police officer. A trivial piece of information from one eyewitness when combined with another piece of trivial information from a second eyewitness could result in a major piece of evidence being uncovered. If the eyewitness strives to be complete, important details can sometimes be remembered through association with something unimportant. Therefore, to ensure an eyewitness maximizes the information, they are instructed to leave out no detail, no matter how trivial. Fisher and Geiselman (1992) caution that during this free narrative eyewitnesses may come to some part of the incident where they are unsure about what occurred. The eyewitnesses may unwittingly substitute some information from a script of a similar event which they feel would have been expected to occur in the event they are describing.

Recall the Events in Different Order

During the first phases of the interview, events are recalled in the order in which they occurred. Fisher and Giesleman (1992) proposed the next step would be to have

the police officer ask the eyewitness to recall events in a different order. One way is to use a reverse order procedure. During the reverse order procedure, new details are often added by the eyewitness to the description of the event, especially the actions of people during the event (Geiselman, Fisher, MacKinnon & Holland, 1986). For example, in a corner store robbery, once the eyewitness has completely described the event, the police officer would proceed as follows: "The last thing you said was the robber left the store and that was the last time you saw him. Tell me what happened just before he left". After the eyewitness answers, he/she would be asked "What happened just before that" and so on going right back to where the eyewitness started the free narrative. It is important to allow the eyewitness to pick his/her own starting point after each question of "What happened just before that"?

Another method which could be used to have the eyewitness recall events in another order is for the police officer to ask the eyewitness to identify the components of the witnessed incident that caused him/her the greatest concern. After the eyewitness has identified the components of concern the police officer would then ask the eyewitness to tell what happened just before and just after each component of concern. For example, in our corner store robbery the eyewitness advised that one of the components of concern for him/her was when the robber pointed the gun at the store clerk. The police officer would then request the eyewitness to, "Tell me what happened just before the robber pointed the gun". Once the eyewitness has provided this information the police officer would request the eyewitness to "Tell me what happened just after the robber pointed the gun". Fisher and Geiselman reported that

using these techniques will assist the eyewitness in locating more retrieval cues, which in turn will allow them to locate more "misplaced memories".

Change Perspectives

To implement this phase of the interview eyewitnesses are instructed to describe what they would have seen from different perspectives such as that of the victim, another eyewitness, the suspect, or perhaps a different location. An eyewitness being interviewed in the case of the corner store robbery could be asked to describe the robbery from the perspective of the clerk, the robber, or someone looking down on the robbery. By performing this exercise the eyewitness is sometimes able to remember additional information. In some instances when using these procedures, conversations which took place during the incident are reported. Using our corner store robbery example the eyewitness would be instructed to take the perspective of the clerk who was robbed. The eyewitness may report the robber said "Put all the money into the bag", which could be new information. It is important to caution the evewitness before commencing this phase to only relate what he/she actually saw, heard, felt, smelled, and tasted during the event. The eyewitness should also be instructed not to make up something he/she thought the other person may have experienced. According to Fisher and Geiselman most people normally reported only what they had witnessed from one perspective when in reality they had many different perspectives of an event. It is therefore important for the police officer to pursue different possible perspectives, in an attempt to locate more retrieval paths.

Mnemonics

Fisher and Geiselman reported mnemonics assist an eyewitness in accessing specific pieces of information such as names and licence numbers. The following suggestions were made by Fisher and Geiselman (1992) to help the police officer assist the eyewitness improve his/her ability to recall names and vehicle licence plate numbers.

Names. When there is a possibility that names may have been used by the perpetrator(s) of the crime Fisher and Geiselman recommended that the eyewitnesses should be instructed to think of the first letter of the name by going through the alphabet. If this procedure is unsuccessful the eyewitness should then be instructed to think of the number of syllables in the name. Another suggestion to uncover the name, proposed by Fisher and Geiselman, is to have the eyewitness think of any ethnic group of which the name may have reminded them.

Vehicle licence plate numbers. During some incidents the licence plate numbers of the perpetrator(s)' vehicle may have been observed by an eyewitness. Fisher and Geiselman recommended if this situation occurs then the eyewitness should be asked if the letters remind him/her of any words. Then the eyewitness should be asked if he/she thought the numbers were high or low. The police officer should also inquire as to what colours the eyewitness noted on the vehicle licence plate. Fisher and Geiselman noted that research conducted by McKinnon, O'Reily and Geiselman (1990), reported some success in obtaining complete and partial vehicle licence numbers by conducting the following procedure: (a) providing the eyewitness with

pieces of paper the size of a licence plate, (b) providing the eyewitness with letters and numbers which could be moved around on the paper, and (c) instructing the eyewitness to move the numbers and letters anyway he/she wants on the piece of paper.

McKinnon et al. (1990) reported that this technique could assist an eyewitness in recreating the details of the actual licence plate he/she saw.

Cognitive Interview Research

Fisher and Geiselman (1992) concluded the Cognitive Interview was quite effective when used by police officers to conduct interviews of eyewitnesses. Research conducted by Geiselman et al. (1984); Fisher, Geiselman and Raymond (1987); Fisher et al. (1987); George (1991); George and Clifford (1991); Memon and Bull, (1991); Koehnken et al. (1992) all reported there was strong evidence for using the Cognitive Interview. The following is a summary of the methods and results of the studies reviewed.

Methods

Participants. In the original studies and the majority of later studies the interviewers were university students trained in using the Cognitive Interview and the study participants were also university students. Some studies used police officers trained in the Cognitive Interview to do interviews of participants who were university students. One study conducted by Fisher, Geiselman, MacKinnon, and Holland (1986) was reported to have used participants who were much more representative of the general population. All of the participants in the Fisher et al. (1986) study were from outside of university and ranged in education from Grade 10 to Masters degrees. One

half of the participants were interviewed by police officers trained in conducting the Cognitive Interview method and the other half of the participants were interviewed by police officers who had experience in the standard police interview utilized in the field at the time.

Procedures. The participants in the majority of the studies were exposed to a simulated crime using actors, a film, or a videotape of a crime enactment. The simulated crime was recorded on videotape which was then used to check the information obtained during both the Cognitive Interviews and the standard police interviews of the participants. In all the studies, after the participants watched the film, videotape or simulated crime, half the group were interviewed using the Cognitive Interview and the other half were interviewed using the standard police interview which was in existence at the time. There were a variety of delays used in the studies between the time of experiencing the incident to the actual interview. These delays ranged from one hour to several weeks.

In a few of the studies interviews were not conducted. Half of the participants were provided with written instructions outlining the Cognitive Interview and half of the participants were provided with written instructions outlining the standard police interview method. Each group of participants were then instructed to follow the interview instructions they had been provided with and write out what they could recall of the crime simulation or the crime videotape. In most studies where actual interviews were conducted by interviewers using the Cognitive Interview and the standard police interview, audiotape recordings were made of the interview and transcripts prepared.

The transcripts of the interviews were then compared to the film, the crime enactment videotape or the videotape of the simulated crime. The number of correct items, the number of incorrect items and the number of confabulations were identified and recorded. According to Memon and Kokhenen (1992), incorrect items were defined as any item described by a participant which was discrepant with the respective details in the film or simulated crime videotape. For example, the participant may have advised: "the man held the gun in his left hand" when in fact the man had really held the gun in his right hand. A confabulation was defined as a detail mentioned which was not in the film or videotape. For example, the participant may have advised: "the man was wearing a hat" when in fact the man was not wearing a hat.

Results

Fisher and Geiselman (1992) reported that across studies using university students there was an increase of approximately 35% in the correct information being recalled when the participants were interviewed using the Cognitive Interview over the standard police interview. The reported number of increases in incorrect responses and confabulations were similar across interview conditions and not of any significance. Fisher et al. (1986) reported similar results using participants from the general population. Fisher and Geiselman (1992) strongly felt the Cognitive Interview was the best technique available for police officers to utilize in interviewing eyewitnesses. The results of all the research indicated the Cognitive Interview was unquestionably far superior to the standard police interview.

Problems in the Field Implementing the Cognitive Interview

During their research of the Cognitive Interview Fisher, Geiselman and Raymond (1987) reviewed hundreds of transcripts of interviews conducted by police officers in several jurisdictions. Fisher et al. (1987) reported a wide variance in how individual police officers conducted standard interviews and even though some police officers had received training in the Cognitive Interview they were still not obtaining as much correct information as other police officers. Fisher et al. felt the reason some police officers did not obtain a great deal of detail was due to their poor communication skills and the anxiety observed in some of the eyewitnesses.

Characteristics of Poor Interviewing Techniques

After a complete review of all the interviews Fisher, Geiselman and Raymond (1987) reported they were able to identify certain characteristics in some of the police officers' interviews which appeared to impede the amount of information recovered from memory. The following is a summary of characteristics Fisher et al. (1987) reported finding in poorly completed eyewitness interviews.

Interrupting an eyewitness. Police officers were noted to interrupt the eyewitnesses on average every 7.5 seconds. It was noted these interruptions usually occurred when the eyewitness was describing an event and the police officer wanted to clarify a specific point. Fisher et al. concluded that when these interruptions occurred some eyewitnesses formed the opinion a more detailed description of the incident was not required.

Closed questioning of an eyewitness. Police officers asked a lot of closed type questions which only elicited short answers from the eyewitnesses. When this type of questioning took place some eyewitnesses failed to provide any extra details. For example, when the eyewitness is asked "Did the suspect leave by the back door"? the eyewitness would usually reply with just a "Yes" or "No".

Failure to pre-plan the questioning phase of interview. Police officers' failure to pre-plan the questioning phase of the interview created some confusion for the eyewitnesses and prevented them from expanding on the information they had provided. For example, an eyewitness would be asked a question about the licence plate on the front of the car. Then the eyewitness would be asked about the tail light on the rear of the car. The next questions would jump back to the front of the car and so on. Each time a question was asked the eyewitness had to recreate the image of the front, the back, the front and so on.

Fisher, Geiselman and Raymond (1987) felt that police officers who used these poor interview techniques could improve the amount of information they recovered if they enhanced their ability to interact with the eyewitnesses and learned more effective communication methods.

Methods to Enhance Cognitive Interview Techniques

Relying on the principals of interactive small groups and effective communication strategies, Fisher et al. (1987) recommended methods to correct the impediments created by the police officers that inhibited the eyewitness's abilities to access information. The enhancements to the Cognitive Interview help the eyewitness

convert conscious recollection into intelligible responses and helps improve the police officer's comprehension of the eyewitness's responses. Fisher et al. predicted the enhancements would also assist an eyewitness's understandings of the investigative needs of the interviewer. Fisher et al. reported that in the enhanced interview they proposed the four phases of the Cognitive Interview still remain the same along with the use of mnemonics for specific events. The following is a summary of the enhancements recommended by Fisher et al. that police officers should incorporate into their Cognitive Interview of an eyewitness.

Rapport building. There is a need to establish a rapport with the eyewitness during the interview process. By building rapport, the police officer will begin to reduce the trauma of the incident for the eyewitness. The rapport building will also help develop a more open relationship with the eyewitness and this will facilitate a more relaxed atmosphere during the interview. Rapport in some instances will simply be achieved by showing empathy and checking with the eyewitness to ensure that their personal needs are met. For example, asking an eyewitness if he/she is thirsty and providing him/her with a drink if requested shows the eyewitness the police officer is concerned about their well being.

Transfer of control. The eyewitness being interviewed needs to have a feeling that he/she has some control over how the interview will proceed. One method police officers can utilize to implement transfer of control is to simply not interrupt the eyewitness when he/she is talking. Another method to transfer control is for the police officer to use open ended questioning. This type of questioning gives the eyewitness

the power to control how much information they will provide.

Pre-planning question phase. Police officers have to ask questions which are compatible with the eyewitness's mental operations. This type of questioning will take some careful planning by the police officer conducting the interview. It is vital for the police officer to completely explore one area at a time with the eyewitness before moving to another area. For example, a police officer should ask all the questions about the front of the car when the eyewitness is thinking about the front of the car. When the recall of information about the front of the car is exhausted the police officer could direct the eyewitness to think about the rear of the car. It is important to make sure the eyewitness is informed when the police officer is going to shift to another area.

Encouraging many retrieval attempts. The police officer has to encourage the eyewitness to make an extra effort to keep focused and to try several techniques to access as much stored memory as possible. Fisher and Geiselman (1992) reported eyewitnesses can move through three levels of precision of knowledge when providing information about an event. Fisher and Geiselman described these levels of precision as follows.

1. The general precision level is the first level the eyewitness will pass through. The general precision level usually occurs when the eyewitness first relates what he/she experienced. This level is noted for the limited amount of details provided by the eyewitness. Although there is little detail provided what detail is provided is sufficient to understand what happened. For example, an eyewitness could advise a police officer: "I saw Jim murder Jane".

- 2. After the general precision level the eyewitness can move to the intermediate precision level. During the intermediate precision level more detail is added about the event by the eyewitness. The added detail usually provides more detail concerning actions which occurred during the event. For example, and eyewitness could advise a police officer: "Jim came into the room, he walked over and hit Jane, murdering her".
- 3. The detailed precision level is the final level an eyewitness can achieve. This level is the most important of the three levels. During this level the eyewitness will provide the most detailed description of the event, the emotions observed during the incident and any conversations between the participants in the event. For example, an eyewitness could advise a police officer: "I saw Jim come into the room carrying a hammer. Jim was wearing a red shirt, blue jeans and he looked weird. Jim looked really mad. I saw Jim had a hammer in his left hand and he walked over to Jane who was sitting down in the red chair. Jane had her housecoat on and Jim came up behind her hitting her on her head five times with the hammer. Jim then told me, 'she will never do that again'. Then Jim drove away in his red Chevrolet truck, licence plate 8881XS".

Fisher and Geiselman (1992) reported that within each of the general, intermediate and detailed levels of precision there are many smaller stages which an eyewitness can pass through before moving on to the next level. Fisher and Geiselman noted it requires a tremendous amount of concentration by the eyewitness to reach the detailed precision level. Without some direction from the police officer conducting the interview, Fisher and Geiselman felt an eyewitness may stop

by Fisher and Geiselman to help the eyewitness achieve detailed precision is to use open ended questions. Open ended questions serve as a means of facilitating more and more retrieval attempts by the eyewitness. For example: "You said that Jim came up behind Jane. Tell me more about that".

Enhanced Cognitive Interview

Fisher, Geiselman and Raymond (1987) modified the original Cognitive Interview by incorporating the enhancements noted above. This improved version of the Cognitive Interview became known as the Enhanced Cognitive Interview (ECI) Fisher et al. (1987) reported that police officers using the ECI would provide the eyewitnesses with a greater opportunity to maximize the amount of correct information recovered from his/her memory.

Enhanced Cognitive Interview Research

Fisher, Geiselman, Raymond, Jukevich and Warthaftig (1987) conducted a study which examined the effect of the enhancements made to the Cognitive Interview on the number of correct facts produced by the participants. During this study the participants, who were undergraduate students, viewed a videotape of a simulated crime. Forty-eight hours later half of the participants were interviewed using the original Cognitive Interview and the other half of the participants were interviewed using the ECI. All the interviewers received training in the Cognitive Interview and half of the interviewers received further training in the ECI. Fisher et al. (1987) reported 47% more correct detail was obtained using the ECI over the original cognitive

interview. There was no substantial increase in the number of incorrect facts reported or in the number of confabulations. Similar results using the ECI have been obtained in studies conducted in England and Germany (e.g., see George, 1991; Koehnken, Thuerer & Zorberbier, 1994).

Police Acceptance of the Enhanced Cognitive Interview

Since the early 1990s police officers in the United States of America, England and Wales have been particularly interested in the ECI. Kebbel, Milne and Wagstaff (1999) reported that police forces in England and Wales had introduced the ECI into recruit field training as early as 1992. In the early 1990s Canadian police officers had shown some interest in the ECI; however, they were not as quick to adopt the procedure. Police officers in Canada, in particular British Columbia, had been engaged in working with John Yuille's (1984) Step-Wise Interview model which had been developed for children and modified slightly for use with adult eyewitnesses.

Yuille's (1984) Step-Wise Interview is an interview protocol designed to reduce contamination and have an eyewitness explain his/her recall of the events in his/her own words, without interruption. The police officers are encouraged to follow several steps in the interview. In the first step, the police officer is to establish rapport with the eyewitness. The second step involves introducing the topic and the third step allows the eyewitness to provided a free flowing narrative of the incident they experienced. After the free flowing narrative, the fourth step encourages the police officers to ask open ended questions to gather more information about the incident. The fifth step allows for the use of specific questions to clarify any issues not resolved in the open

ended questioning phase. The final step is the closure of the interview, which involves explaining to the eyewitness (a) what is going to happen next, (b) answering any questions he/she has, and (c) setting up a means to contact each other. Police officers using the Step-Wise interview are also informed about the dangers of leading questions and receive training information on how to formulate questions that were non-leading (Yuille, 1984). The Step-Wise Interview is still being utilized by many Canadian police officers when interviewing both children and adult eyewitnesses. Yuille's Step-Wise Interview has also begun to gain acceptance in the Canadian criminal courts (e.g., see Regina vs C. C. F., 1998).

During this same time period, English police officers were engaged in the use of the Structured Interview model (SI) which is similar to the Step-Wise Interview.

McEwan (1993) noted The British Home Office Memorandum of Good Practice (1992) directed the SI was to be used by police officers in England. The SI also involves a rapport building stage, free narrative, time to answer questions, open ended questioning, active listening and use of nonverbal behavior to encourage recall (Koehnken, 1995). All of the techniques used in the Step-Wise interview and SI were incorporated into the ECI. The only difference in the ECI and the SI noted by Memon and Higham (1999) is "that the cognitive technique (e.g., contextual reinstatement) is only employed with the ECI" (p.186). Memon and Higham reported research conducted in England comparing the SI with the ECI which disclosed the ECI produced more information than the SI. However, the SI and ECI had similar accuracy rates.

In the mid-1990s Canadian police officers began to show an interest in the ECI. This interest was primarily due to the reported increases in the quantity of correct information obtained from eyewitnesses when they were interviewed using the ECI. From my involvement at the time, in Canada, as a supervisor of police officers who investigate serious crimes and as a trainer involved in developing and providing training related to interview techniques, I became aware of two views held by police officers related to use of the ECI in the field. There were some police officers who supported the view that the increased amount of correct information obtained using the ECI would create more investigational avenues for follow up. The increased number of investigational avenues would in turn improve the chances of successfully obtaining all the facts of an incident. The other group of police officers expressed concerns that the increased amount of correct information may be of a peripheral nature and of no investigational value. The increase in actual correct peripheral information could lead to wasted person hours following up information of little investigational value. Another concern noted by these police officers was that in the studies conducted using the ECI there was a reported slight increase in the amount of errors and/or confabulations. These police officers felt that any interview that contributed to any type of increase in errors or confabulations could be problematic during investigations. All police officers in the field were concerned with their limited ability to determine what information obtained from an eyewitness was correct, an error or a confabulation.

Quality of Information Versus Quantity of Information

Fisher and Geiselman (1992) reported that the high increase in correct information using the ECI would be beneficial for police officers, especially in complicated serious crime investigations. However, front line police officers engaged in these serious crime investigations questioned the value of just obtaining high quantities of information. Fisher, Geiselman and Raymond (1987) reported that the correct information obtained in the laboratory using the ECI was of investigative value. However, Newlands, George, Towell, Kemp and Clifford (1999) commented that there was no clear explanation of how Fisher et al. (1987) researchers determined what was of investigative value. If the majority of the information obtained using the ECI is only correct peripheral information it may be of little investigational value for the police officer. Berkerian and Dennett (1994) commented on the fact there has been considerable attention focused on the "effects the ECI has on the quantitative aspects of recall and little on the qualitative characteristics of recall" (p.4). According to Newlands et al. (1999) the issues surrounding quality are only just recently being addressed by researchers.

Higham and Roberts (1996a) also reported a concern with the use of percentages in reporting the number of correct, incorrect and confabulated responses. Higham and Roberts felt this type of reporting failed to take into account the amount of information not reported and the quality of the information which was reported. Higham and Roberts commented that:

during the initial part of the investigation of a crime, an interview that produced

many statements may be preferable to one with only a few, even though the accuracy is the same. At this stage obtaining as many leads as possible might be the goal of the interview. Conversely, in a courtroom setting, an interview containing a large absolute number of errors might be used to argue that a particular witness or victim is unreliable, despite the fact that the accuracy of the interview might be high. (p.2)

However, from my experience as an investigator and supervisor, accuracy and quality are more beneficial to the serious crime investigator than quantity. The mere fact an individual produces a large quantity of information is of little value unless some assessment can be made of the accuracy and quality of the information.

Effect of Trauma On the Eyewitness's Abilities to Disclose Information

Many eyewitnesses involved in real life crimes suffer trauma which may affect the quantity and the quality of the information provided during an ECI. One of the effects of trauma associated with the incident is the eyewitnesses fear of victimization at the hands of the culprit(s). Koriat and Goldsmith (1994) reported that fear of reprisal from the offender or the offender's family and friends may outweigh the eyewitnesss' desires to provide the police officer with relevant information. From my own experience it is apparent that eyewitnesses to a crime, no matter how co-operative they appear on the surface, will be constantly making decisions throughout a police officer's interview, as to whether or not they will share the information recalled. For example, during an ECI of a homicide eyewitness a police officer may help the eyewitness generate a retrieval cue that allows him/her to recall the actual licence plate number of the culprit's

vehicle. If the eyewitness made a conscious decision not to disclose the information concerning the licence plate number he/she may well have decided the benefits in disclosing did not outweigh the risks. In this case example there is a possibility the eyewitness could (a) avoid the topic by providing all kinds of correct peripheral information about the event, (b) provide incorrect information about the vehicle, or (c) avoid mentioning any information which would suggest he/she saw the vehicle.

Exposure to this type of trauma cannot, for ethical reasons, be replicated in the laboratory studies using the ECI. Therefore, it is my view that because participants in the reported studies do not have to make conscious decisions about the risks and benefits in disclosing information, a higher number of correct pieces of information would be obtained using the ECI in the laboratory than in actual cases in the field. If this is the case, police officers in the field could make incorrect assumptions that when they use the ECI and obtains large quantities of information, the eyewitness has completely exhausted his/her memory. This may be true of the peripheral information; however, some of the relevant information the eyewitness has recalled may never be revealed because of the risk decision made by the eyewitness. Therefore, police officers in the field must never assume they have been informed of all the relevant information the eyewitness recalls based solely on the quantity of the information obtained.

Script Memory Can Affect the Accuracy of an Eyewitness's Memories

There is also reported evidence that the accuracy of the eyewitness's memories can be affected by the eyewitness's script memories. Milne and Bull (1999) state that

script memories

are used to help us know how to act in certain situations. For example, most of us have a script for going to a restaurant; we typically sit down, read the menu, order a drink, order a starter, etc. Script also helps us to filter, organize and process large amounts of information economically. Instead of having to remember and encode all the details of each new event we encounter we can simply rely on the script we have in our memories and only encode new, distinctive information. (p.18)

Research has demonstrated people do develop script memories for familiar events (e.g., see Bower, Black & Turner, 1979; Fisher, Holst & Pezdek, 1992; Milne & Bull, 1999 for discussion). As script memories for an event can be incorporated into the eyewitness account of the incident it is my opinion that given the repeated retrieval attempts created by the ECI there is a high probability that the eyewitness could unwittingly access his/her script memory to add to the information already provided to the police officer.

Bower et al. (1979) reported that the script memory of a person can be supplemented by coming in contact with other information of similar events. This contact can occur in many different ways especially with the wide variety of information sources in the world today. Bower et al. (1979) demonstrated people will fill in gaps in their descriptions of events by using information from their script memory. Bower et al. had participants first read a story about a man going to a restaurant. There was no mention in the story of the man eating or paying the bill. After the participants read the

story they were requested to repeat what they had read. Participants repeated the information in the story and filled in details about the man eating the food and paying the bill. Fisher et al. (1992) reported an eyewitness uses script memory when describing what he/she witnessed during a crime even if the eyewitness had little knowledge about the crime prior to its occurrence. However, Fisher et al. (1992) reported cases where the eyewitness had little past exposure to an incident, such as a homicide, the script substitution was less than when an eyewitness had lots of exposure to an incident, such as going to a restaurant. In some instances the script memory may be correct. However, in many instances the script memory will not be correct. The eyewitness may have incorporated the script so well they may actually feel they have a conscious recollection of the information and therefore give the impression to the interviewing police officer that the information is accurate.

The Problem of Determining Accuracy of Eyewitness Information in the Field

At the conclusion of an investigation a police officer is seldom in a position to make a decision as to what information obtained in the ECI is correct, incorrect, relevant or peripheral. In order to assist the police officer in attempting to make these decisions, he/she can use other evidence collected such as, confessions, expert opinion, forensic evidence and other eyewitness interviews. However, without a videotape of the actual incident there is still no sure method of determining the accuracy of the information provided by the eyewitness. Although there are more videotapes surfacing showing actual crimes taking place they are usually of such poor quality they are of limited value. For example, twenty-four hour corner stores, gas bars,

and major financial institutions have video surveillance cameras which record on videotape any armed robberies, thefts or frauds occurring within the establishment.

Even if police officers could identify all the possible relevant information obtained using the ECI there is no way in the field of determining the accuracy of this information without a high quality videotape of the crime occurring.

In the laboratory the researcher has the benefit of the videotape taken of the simulated crime, or access to the film or videotape of the crime enactment which the participants viewed before he/she was interviewed by an interviewer using the ECI. In these situations the researcher is able to accurately determine what was relevant, peripheral, correct, an error or confabulation. Police officers in the field have no means at their disposal to accomplish this important task. Following up on information which is an error or confabulation could result in many wasted person-hours and the loss of physical evidence. For example, an eyewitness may describe the culprit fairly accurately during the first retrieval attempts using the ECI. After repeated retrieval attempts the eyewitness might report the culprit had a moustache. This one piece of information would be considered very important. However, if the information provided by the eyewitness about the moustache was a confabulation, this confabulation could cause the investigators to spend many wasted hours looking for the wrong culprit. If our example occurred in a laboratory study using the ECI it would merely be scored as one confabulation and only be used in the calculations to determine if there was an increase in errors or confabulations. Confabulation of this nature occurring in the field can have disastrous effects on an investigation and the final outcome.

Incorporating "Remember" - "Know" and/or Confidence Level Judgements in the

Enhanced Cognitive Interview May Resolve the Accuracy Concerns

Higham and Roberts (1996b) noted one recent development which may be of assistance in determining the accuracy of eyewitness information relates to the state of consciousness eyewitnesses are in when remembering events (e.g., see Gardiner & Java, 1993). Tulving (1985) conducted a study where the participants were asked to indicate whether the information they provided in a memory test was a "remember" or "know" response. A "remember" response would indicate the participant could consciously recall the contextual details surrounding the event. When participants used "remember", it was as if the participants were reliving the event. A "know" response would indicate the participant had no conscious recollection of the event, only some familiarity associated with the reported piece of information. Even though a participant makes a "know" statement to a response it does not mean he/she necessarily lacks confidence in his/her memory. Gardiner and Java (1993) noted in some cases a strong confidence can still be reported with a "know" response, even when a participant reported he/she did not have any conscious recollections of the event.

Higham and Roberts (1996b) predicted by using the "remember" or "know" paradigm one would be able to enhance the ability of an interviewer to determined correct statements made during an ECI. However, Bekerian and Dennett (1994) identified a possible problem in using the "remember" or "know" paradigm with the ECI. Bekerian and Dennett suggested that because one of the techniques of the ECI is to

have the eyewitness use context reinstatement at the beginning of the interview process, there may be a problem with the eyewitness's abilities to differentiate between "remember" or "know". Bekerian and Dennett were concerned that because an eyewitness would have some contextual reinstatement of the event already created in his/her mind there may be more "remember" responses reported by the eyewitness. Therefore, it would be possible for incorrect information to be erroneously reported as "remember" instead of "know".

Taking into account the issues related to (a) the risk decision making process of the eyewitness, (b) effects of script memory, and (c) Berkerian and Dennett's (1994) concerns, it is my opinion that there is little possibility of developing a method to determine the accuracy of the information provided by an eyewitness during an ECI that would be one hundred percent reliable. I therefore hypothesized that the accuracy of the ECI could be improved by only examining interview statements assigned a "remember" judgement rather that by examining all statements combined.

Memon and Higham (1999) discussed the possibility of incorporating confidence levels with the ECI as an alternative method to using the "remember" or "know" paradigm for enhancing the interviewers' ability to determine the accuracy of information supplied by an eyewitness. Koriat and Goldsmith (1996) reported under many circumstances high confidence was correlated with a higher percentage of correct scores. Following this line of thought, it is predicted high levels of confidence reported by an eyewitness would have a high indicate a correct response and low levels would likely indicate an error or confabulation. Again, taking into account the

effects of trauma, script memory and Berkerian and Dennett's (1994) concerns I hypothesized that the accuracy of the ECI could be improved by only examining interview statements assigned a confidence level rather than by examining all statements combined.

CHAPTER TWO

Development of Research Procedures Incorporating a "Remember" or "Know" and Confidence Level Accuracy Phase with the Enhanced Cognitive Interview During my review of the literature related to the ECI, there were no procedures reported that provided a format for me to incorporate and evaluate an accuracy phase within the ECI. Therefore, two pilot studies were designed to assist in the development of procedures that would allow accurate testing of the "remember" or "know" and confidence levels hypotheses.

Pilot Study One was designed to allow me to look at the effect of creating a delay between the viewing of a crime enactment videotape and the actual ECI. Secondly, I would be able to evaluate a method of incorporating a "remember" or "know" and a confidence level accuracy phase with the ECI. During Pilot Study One I would also be able to examine if it was possible to run the confidence level accuracy phase immediately after the "remember" or 'know" accuracy phase with each participant. Pilot Study One also provided me with an opportunity to examine the effectiveness of audio taped recordings of the ECI and at the same time evaluate note taking procedures. As I had only used the ECI before in the field to conduct actual interviews of eyewitnesses Pilot Study One provided me with some experience conducting the ECI under laboratory conditions.

Pilot Study Two was designed to allow me to examine the viability of training others to conduct the ECI and the incorporated accuracy phases. From my experience in the field using the ECI I estimated that during this study it would take up to 2 hours to conduct an ECI and incorporated accuracy phases with each participant. I felt having only one person conducting the complete interview process would limit the number of participants used in the study. One way to increase the number of participants that could be interviewed would be to have trained interviewers conduct an ECI with the

incorporated accuracy phases of the participants. During my review of the research involving the use of the ECI it was noted that the majority of the researchers had indicated they had trained undergraduate students and/or police officers to conduct the ECI of participants (see e.g., Fisher & Geiselman, 1992; Memon & Bull, 1991; Memon, Holley, Milne, Koehnken, & Bull, 1994; Memon, Wark, Holley, Bull, & Koehnken, 1996; Milne & Bull, 1999; Wark, Memon, Holley, Bull, & Koehnken, 1994, for discussion). A one day training course was developed to provide potential interviewers with information and the skills required to conduct an ECI and the incorporated accuracy phases. The training day was designed to inform participants of (a) the importance of conducting high quality eyewitness interviews, (b) how memory works, (c) the theory behind the ECI and accuracy phases, (d) how to implement phase of the ECI and accuracy phases, and (e) to allow participants an opportunity to practice the ECI and accuracy phase. Pilot Study Two was also designed so that at the end of the training day, if the ECI and accuracy phases were conducted properly by the police officers during the practice sessions, these interviews would provide sufficient data to examine the two hypotheses.

Pilot Study One

Method

Participants. There were 13 undergraduate university students who were enrolled in an introductory psychology course that volunteered to take part in this pilot study. For participating in this study each student received 2% toward the final mark in the introductory psychology course he/she was registered in (see Appendix A for a copy of consent form).

Materials. The videotape utilized in the study was a R. C. M. Police training videotape crime enactment which ran for approximately 4.5 minutes. The crime enactment was of a male unlawfully entering a house at night, where a woman was

getting ready for bed. Although no murder is seen the male is observed cleaning a bloody knife which leaves one with the impression the male murdered the woman. A colour television and videotape cassette recorder was required to show the videotape. In an attempt to distract the participants' attention away from the videotape, each participant was given a word search puzzle to work on for 5 minutes. A sheet defining "remember" or "know" and providing examples was given to the participants to read before the "remember" or "know" section of the accuracy phase. A tape recorder and a blank 90 minute cassette tape were utilized to record each participant's interview.

<u>Procedure</u>. Each participant was advised I was a member of the Serious Crime Unit of the R. C. M. Police and was conducting research with Dr. P. Higham to test a procedure police officers could use to select statements that have a higher probability of bing correct. It was explained to each participant that he/she would:

- 1. Watch a videotape of a crime re-enactment;
- 2. Work on a word search puzzle for five minutes right after the videotape ended;
- 3. After the word search puzzle he/she would be interviewed using the Enhanced Cognitive Interview to determine what he/she could recall about the videotape;
- 4. Upon completion of the interview he/she would be asked a series of questions about the information he/she had provided.

When the participant indicated he/she understood what was going to happen I advised the participant that I would be leaving him/her alone in a room with a television, videotape cassette recorder and the videotape of the crime enactment.

Just prior to leaving the room I instructed each participant to turn the videotape recorder on when I left and watch the videotape. I also instructed all participants not to make notes about what they saw in the videotape. After the videotape was over all participants were instructed to shut off the videotape and open the door. Once the participant opened the door I provided him/her with a word search puzzle and

instructed the participant to complete as much of the word search as possible in the five minutes. The word search puzzle was utilized to try and simulate the distractions many eyewitnesses experience before being interviewed by police officers. The time allotment of 5 minutes was utilized as this is the approximate time it takes for police officers to respond to high priority request for assistance calls. Every participant was advised to stop the word search puzzles when the five minutes had passed and turn in his/her puzzle.

Once the time had expired for the word search puzzle each participant was interviewed using the ECI in an effort to ascertain what he/she could recall about the videotape they had watched. It was explained to every participant I would be taking notes and they were requested to proceed slowly. During the interview each participant was given verbal cues to indicate active listening and encouragement phrases such as "uh hum". An audio cassette recording was made of the interview and notes were taken.

The "remember" or "know" accuracy phase immediately followed the ECI of each participant. All participants were provided a "remember" and "know" definitions and examples sheet. The definitions and examples sheet given to each participant read as follows:

1. "Remember" responses should be made if your recognition of the event or detail is accompanied by a conscious recollection of its prior occurrence in the videotape. "Remember" is the ability to become consciously aware again of some aspect or aspects of what happened or what was experienced at the time the event or detail was observed. For example, the physical aspects of the event, or of something that happened in the room when you observed or heard the event or detail, or what you were thinking or doing at the time. In other words the remembered event or detail should bring back to mind a particular association, image or something more personal

from the time of watching the videotape, or something about the appearance of the event or detail, or its position in the scene, or what came before or after the event or detail in the videotape.

- 2. "Know" responses should be made when you recognize that the event or detail was in the videotape, but cannot consciously recollect anything about the actual occurrence. In other words say "know" when you are certain of recognizing the event or detail but it fails to evoke any specific conscious recollection from the videotape.
- 3. To further clarify the difference between the two judgements. (e.g., "Remember" vs "Know") here are a few examples. If someone asks for your name you would typically respond in the "know" sense without becoming consciously aware of anything about a particular event or experience. However, when asked about the last time you went out for supper, you would typically respond in the "remember" sense, that is, becoming consciously aware again of some aspects of the experience.

After the participants read the "remember" and "know" definitions and examples sheet they were asked if they understood the concepts. Each participant was advised the notes taken during the interview would be used to inform them of all the component pieces of information they had provided. All participants were advised that after each component piece of information was repeated they were to advise me if they "remember" or "know" the information. An audio cassette recording of this phase of the interview was made and notes were taken of the participants' responses.

To examine how confidence levels could be incorporated into the study five of the participants who had completed the "remember" or "know" accuracy phase were then asked to complete the confidence rating. Each of these five participants had the component information they had provided during the ECI repeated back to him/her and were asked to indicate his/her level of confidence using a 1 to 7 scale, where 1 would indicate "no confidence", 7 would indicate "high confidence", and the numbers 2 to 6

would indicate different levels of confidence. In some instances participants were asked to use a scale out of 100%, 0% would indicate no confidence, l00% would indicate high confidence and percentages between 0 and 100 would indicate different degrees of confidence. An audio cassette recording was made of this phase of the interview and notes were taken of the participants' responses.

Results and discussion. Early on in the pilot study it was noted some of the participants responded with considerably more "know" responses than "remember" responses concerning the information supplied and others had considerably more "remember" responses than "know" responses. Those participants responding with considerably more "know" responses appeared to be indicating "know" to information one would expect the participant to consciously recollect. Each participant was debriefed after the ECI and they were asked to explain how they were using "remember" and "know". Participants who used more "know" responses advised they were trying to use "know" to indicate they were seeing the information as it happened on the videotape. One participant who had numerous "know" responses explained he/she used "know" "when you 'know' for sure" (participant 8 transcript, p.17). These participants stated they knew the information was correct so they used "know". These same participants indicated that when they used "remember" they were not really sure of the information because they could not see it happening. Clearly even though the participants had read the definitions and indicated they had understood, some had misused the terms.

Audiotapes were made of all the participants' interviews and transcripts were prepared by police stenographers experienced in preparing eyewitness transcripts for court. The procedures followed during the recording of the ECI were appropriate to ensure quality audio cassettes were made of the interviews. Upon reviewing the transcripts it was noted the participants made very few errors or confabulations. The

delay of 5 minutes and the use of the word search puzzle in an attempt to distract the participants appeared to have little effect on the participants' ability to recall information. I decided to examine the effects of a longer delay during Pilot Study Two. It was also determined from Pilot Study One that I could effectively incorporate the "remember" or "know" questions with confidence level questions into an ECI. The only problem would be the length of time the interview would take. A further evaluation of the incorporation procedures for the accuracy phase and the effects on the interviewer and participants was to be conducted in Pilot Study Two. As some of the participants in Pilot Study One had misused the terms "remember" and "know" a further evaluation of this occurrence would be conducted during Pilot Study Two.

Pilot Study Two

Introduction

Pilot Study Two was proposed to the R. C. M. Police, Prince George, British Columbia, detachment members. Watch commanders and section commanders at the local R. C. M. Police Detachment in Prince George had requested I conduct more training for front line police officers in the area of interviewing co-operative eyewitnesses using the ECI. As a result of this request the ongoing research I was conducting with Dr. P. Higham was explained to all the commanders. All commanders agreed to the design of the program, involving the ECI and accuracy phases. The commanders also consented to the training event being used to assist in this study. It was agreed only watch and section members who consented to participating in this study would have an evaluation completed of his/her ECI and accuracy phase transcript.

Method

<u>Participants.</u> Sixty-four male and female police officers ranging in service from one year to twenty eight years took part in the training and study. All police officers

were either actively involved in interviewing eyewitnesses or in supervision of investigations involving the use of eyewitnesses.

Materials. An eyewitness interview training manual developed specifically for Pilot Study Two was to be utilized as a guide for the trainer. A colour television and videotape cassette recorder was required to show the videotape. Four videotapes were utilized in these training days. One videotape was the same R. C. M. Police training videotape of a male breaking into a house and possibly committing a murder used in Pilot Study One. Another was a videotape enactment of a drive-by shooting, of a young boy. The third was a videotape of an armed robbery and homicide of two security guards. The fourth was a videotape of an unlawful entry to an apartment and double homicide. All four videotapes were approximately 4.5 minutes long. A "remember" or "know" definitions and examples sheets used in Pilot Study One was provided for each participant to review. A tape recorder and a blank 90 minute cassette tape was utilized to record each participant's interview. Instruction sheets outlining the steps to be followed by an interviewer when conducting an ECI and accuracy phase were given to the participants.

<u>Procedure.</u> Each watch or unit member received one day of training. Six separate training days were identified. The following is a summary of the training syllabus I developed for the training day.

- 1. Section 1 involves formation of two groups (A and B) from the participants who attend the training day. The participants are to be randomly placed into either group A or group B. Each group will watch a different videotape of a crime enactments in separate rooms.
- Section 2 covers the reasons a police officer has to do a better job of interviewing co-operative eyewitnesses. The legal issues and court decisions in the area of eyewitness interviews are examined.

- 3. Section 3 examines the difference between a suspect interview and an eyewitness interview.
- 4. Section 4 introduces the skills that are required to become a good interviewer. The design of a proper interview room is discussed. The advantages and disadvantages of different recording methods for interviews are also addressed.
- 5. Section 5 covers how memory functions. The processes of encoding, storage and retrieval are examined. Instruction is provided on the general, intermediate and detailed precision phases of disclosure.
- 6. Section 6 provides a close examination of the ECI. This includes the development of the ECI and the procedures used to implement the interview in the field. An explanation is provided of the accuracy phase of the interview that this research project is centered around and how to incorporate this phase into the ECI. In particular the use of the "remember" or "know" paradigm and confidence levels is covered.
- 7. Section 7 is designed to randomly pair Group A participants with Group B participants. One of the police officers, who is identified as the interviewer, conducts an ECI of a police officer who has watched a different crime videotape than the one the interviewer watched in section 1. Each police officer is provided with an ECI and accuracy phase guide to follow during the interview process. Each police officer conducts either (a) the "remember" or "know" accuracy phase, (b) the confidence level accuracy phase, or (c) both of the accuracy phases. Upon completion of the interview the participants were then instructed to switch roles and the second participant conducted the ECI and appropriate accuracy phase.

At the beginning of training days 1, 2, 3, and 4, at approximately 0800 hours, the police officers were randomly assigned to two groups, Group A and Group B. Each group watched a different videotape of a crime enactment. Each of the videotapes was

approximately 4.5 minutes long. All police officers were advised they were not to take notes while they watched the videotape and not to discuss the videotapes with any members of their own group or the other group.

The police officers received instruction throughout the majority of the day as outlined in the training course design. Of note, there was considerable discussion during training Section 6 (ECI development, procedures and implementation) concerning the "change perspective" phase of the ECI. Many of the officers felt the "change perspective" part of the interview would be problematic for many of the eyewitnesses they had to deal with in the field. Even with a careful explanation to the eyewitness that he/she was only being asked to report what he/she had experienced many police officers felt this could cause the eyewitness to fabricate information. This fabrication would not be done by the eyewitness to intentionally mislead the police officer but more in an attempt to inform the police officers what the eyewitness believed the other person saw. The consensus among the police officers was that using "change perspective" could led to the eyewitness being challenged in court, and result in the credibility of the whole interview process being adversely affected.

As a result of the concerns expressed by the police officers over the use of the "change perspective" phase I decided for the purpose of Pilot Study Two, training days 1, 2, 3, and 4, the "change perspective" phase would not be implemented. It was my opinion that for the purpose of Pilot Study Two sufficient information about the videotape the participants viewed could be obtained from them using the first three phases of the ECI. I felt that there would be sufficient data generated to evaluate the trainers' implementation of the ECI and accuracy phases. My decision to proceed in this manner was also supported by the research reported by Lipton (1977) and Milne (1997). Lipton (1977) conducted a study where participants first watched a crime simulation. Lipton found that when the participants were instructed to provide a free

narrative about what happened they provided an average of 21% of the information contained in the crime simulation with a 91% accuracy rating. Lipton noted when questions were asked to elicit more detail, more facts were recovered but there was a decrease in accuracy. Milne (1997) noted that the context reinstatement phase of the ECI "yields as much information as the full ECI procedure" (p.178). Therefore, the "change perspective" phase was omitted from Section 7 for training days 1, 2, 3, and 4.

At approximately 1500 hours on each of the training days 1, 2, 3, 4, 5, and 6, the police officers were reformed back into Group A and Group B and Section 7 of the training was implemented. The police officers in Group A were randomly assigned a partner from Group B. All participants in Group A were advised to interview their partner from Group B using the ECI with an accuracy phase in an attempt to learn what the partner in Group B could recall from the videotape they had viewed in the morning. The police officers from Group A were provided with tape recorders and instruction sheets outlining the ECI and accuracy steps they were to follow. It was also explained to all of the police officers that the police officer actually conducting the ECI should also take comprehensive notes as these would be essential for planning the questioning phase and going over the "remember" or "know" and/or confidence levels. When Group A completed the ECI and the accuracy phase of the interview, Group E members assumed the role of interviewers and followed the same ECI and accuracy phase procedures as Group A. Groups A and B alternated as the starting group for each training day. For example, in training session 1, Group A started the ECI then Group B; in training session 2, Group B started the ECI then Group A; in training session 3, Group A started the ECI then Group B and so on.

At the end of the day all participants turned in their cassettes and notes. The cassettes from all participants were turned over to police stenographers who were familiar with preparation of transcripts of audio taped interviews of eyewitnesses for

court. Transcripts of all interviews were prepared of each of the participants' interviews.

Results of Training Days 1 and 2

During Training Days 1 and 2 some problems were noted with the implementation of the ECI steps and the accuracy phase. The problems noted were as follows.

- 1. Some police officers conducting the ECI were not adequately taking notes of the interview during the actual ECI. For example, one police officer's total notes for the one hour interview were as follows: "male, 5"10' dark hair, red roots t-shirt". The police officers who failed to take proper notes had to rely on their own memory of what the participant had told them about the videotape during the ECI to ask questions and conduct the accuracy phase of the interview. As a result police officers who took limited notes were only able to ask a few open ended questions. During the accuracy phase the police officers had to rely on their own memory of what the participant had said and this created other problems. In some instances, the information repeated back to the participant by the police officer was not what the participant had said during the ECI. Secondly, only a small portion of the total information supplied during the ECI was covered in the accuracy phase.
- 2. Even with the ECI instruction sheet describing the steps to follow during the ECI a few police officers had problems implementing the procedure. The police officers who had trouble usually started the ECI correctly but fell back into old habits such as interrupting, using closed questions and asking questions at inappropriate times.
 When these police officers realized what had happened they would try to correct their errors by reverting back to the ECI instruction sheet and commencing where they had left off.

3. During the "remember" or "know" phase of the study problems were noted with some participants misusing the "remember" and "know" responses. This misuse of the terms was similar to that observed in Pilot Study One. Some of the participants were using "know" to indicate they knew the information was correct and they had a conscious recollection of the information. These participants used "remember" to explain they had no conscious recollection.

Discussion of Training Days 1 and 2

It was apparent from the problems noted in Training Days 1 and 2 that the ECI interview and accuracy phase conducted by the police officers at the end of the training days were not done to a standard that would allow me to effectively evaluate my hypotheses. I felt it was more important to have consistency in how the procedures were implemented with the participants than to end up with a large group of data that could not be used. Therefore, the main focus of Pilot Study Two became the development and evaluation of the procedures that could be used in an actual study of the hypotheses.

During Training Days 1 and 2 the police officers' failure to keep adequate notes resulted in their inability to develop an effective strategy to ask open ended questions of the participants being interviewed. More time would have to be taken in the training process to demonstrate appropriate note taking procedures. Fisher and Geiselman (1992) had also pointed out note taking was a very important part of the interview process. Fisher and Geiselman reported that most eyewitnesses tend to talk faster than police officers can write, therefore police officers have to develop their own style of note taking. Fisher and Geisleman suggested the police officer should develop their own abbreviations or some form of short hand. From my own personal experience this type of note taking can not be accomplished overnight; it requires extensive practice. There was a need in this training to demonstrate that effective note taking could aid the

police officers in planning the use of open ended questions so they could maximize the information recalled by the participant. Finally, there was a need in this study to illustrate to the police officers how these notes could be utilized to determine accuracy of the information supplied by the participant.

For police officers to become proficient in conducting the ECI more than one training day would appear to be required. During other teaching experiences I have been involved in with regards to teaching interviewing methods I found that for people to become proficient in the use of a technique several steps have to take place. First, the theory around the procedure has to be taught to the participants. Second, the theory session has to be followed by several practice sessions specifically related to the implementation of the procedure. Throughout these sessions each student needs feedback on how he/she was able to implemented the interview procedures. Finally, students need practice conducting the interview with participants who have watched videotapes similar to the ones used in this study. During this final training phase students should be allowed to provide their own feedback on how they felt they were implementing the procedure. The participants being interviewed and the facilitators would provide feedback to the students on their conduct of the interview. It is important the facilitator be a person who has considerable knowledge around the interview model and has used it successfully in the field. All of the practice interviews should be videotaped and made available for discussion. This method of instruction provides students with an opportunity to (a) develop an understanding of the theory, (b) become familiar with the process, (c) put aside old habits, and (d) develop confidence in their ability to use the procedure. Unfortunately, the required time to implement this training procedure was not available during the training days, therefore, a decision was made to proceed with the training as set out in the training manual for the remaining training days.

55

As some confusion was noted over use of the terms "remember" or "know" the word "know" was changed to "believe". "Believe" was to be defined as follows:

"believe" responses should be made when you recognize that the event or detail was in the video, but cannot consciously recollect anything about the actual occurrence. In other words say "believe" when you are certain of recognizing the event or detail but it fails to evoke any specific conscious recollection from the video.

It should be pointed out many of the participants were actually using the terms "remember" and "know" correctly. However, those participants who were using the terms incorrectly created considerable confusion when I attempted an analysis of their interview transcript. It was possible participants may have been using the term "know" more to express confidence rather than to express the absence of conscious recall of the information. By using the term "believe" instead of "know" the misuse may be alleviated.

Procedure Changes for Training Days 3 and 4

Everything remained the same concerning the formation of the groups, the viewing of the videotape, the length of time between viewing the videotape and the ECI and the instructions sheet explaining the ECI. There was no change in how to implement the "remember" or "know" accuracy phase. However, there was a change from the term "know" to "believe", with no change in the actual wording of the definition. Police officers conducting the interviews were to ask the participants if they "remember" or "believe" the event information. Police officers received instruction in the same manner as Training Days 1 and 2. However, a new section was added which explained the value of taking notes and how to take notes while actively listening. Instruction was also given on how to formulate open ended questions from these notes in a manner which would maximize the information provided by the eyewitness being interviewed.

Police officers were also shown how to set up the notes in a way that benefitted the police officer when formulating questions for the "remember" or "believe" or confidence level phase of the process.

Results of Training Days 3 and 4

During Training Days 3 and 4 police officers demonstrated better note taking and this resulted in more open ended questions being asked. The use of the notes also allowed more data to be collected in the accuracy phase. However, there were still problems noted during the note taking and other aspects of the implementation of procedures which are described below.

1. Even with the improvement in note taking, police officers still had problems carrying out the accuracy phase. Some of the police officers were not breaking down the information supplied during the ECI into the component parts before proceeding to the accuracy phase. As a result the police officers asked compound type questions during the accuracy phase that did not allow for proper evaluation of the participants' responses. For example, the participant being interviewed may have said during the ECI "the man approached the gate, opened the gate and walked through the gate". In some of these situations the question which was posed during the accuracy phase was as follows: "you said 'the man approached the gate, opened the gate, threw his cigarette down, then walked through the gate". The participant who supplied the information in this example would reply "I 'remember'" or rate his/her confidence in the information. The manner in which the information was repeated back to the participant would make it impossible for the police officer to interpret what the participant was indicating by his/her response. Did the participant mean he/she remembered or had the confidence level for (a) all four of the component parts of the information, (b) just one of the component parts, (c) two of the component parts, (d) three of the component parts, or (e) just the last component part?

- 2. Changing the terminology from "know" to "believe" did not prevent some participants from misusing the terms. The same reasons were supplied for the misuse of "believe" as for "know" in Training Days 1 and 2. In other words when the participant said they "believe" something happened they knew it had happened and had a conscious recollection.
- 3. Some police officers were still having problems implementing the actual ECI in section 7. As in Training Days 1 and 2 some police officers failed to follow the procedures outlined in the ECI instructions sheet. This resulted in interruptions, closed questioning and no planning conducted for the questioning phase.

Discussion of Training Days 3 and 4

In order to have effective accuracy questioning take place during the next training days the participants needed to receive instruction on how to break down the information supplied by the participant being interviewed. A longer delay between the viewing of the videotape and ECI would have to be implemented. Even though there was a lapse of several hours and a considerable amount of learning going on, the police officers appeared be generating a great deal of correct information about the videotapes. It was decided an attempt would be made to increase the delay to seven days between viewing the videotape and the ECI.

As there was still some confusion in the use of the terms "remember", and "believe", it was decided to retain the use of the terms "remember" and "know" and debrief all participants after the accuracy phase of the interview was complete to ascertain how the participant was using the terms. If the participant indicated they had used "know" to show they had a conscious recollection of the information it would be scored as a "remember" response and if the participant used "remember" to show no conscious recollection of information it could be scored as a "know" response.

Police officers discussed alternative methods on how to handle the "change perspective" phase. The consensus of opinion was the "change perspective" phase would have more credibility with police officers if the eyewitness is not asked to take the perspective of another person involved in the incident but to take the perspective of looking at the incident from another location. For example, an eyewitness could be instructed to recall each scene as if he/she was looking down on the scenes from above. The police officers felt this "change perspective" procedure would have more credibility when examined later in the courts. These police officers noted that careful instruction would still have to be given to ensure each eyewitness understood that he/she was to report what he/she actually saw during the witnessed event.

Procedure Changes for Training Days 5 and 6

The majority of the procedures utilized in Training Days 3 and 4 such as the formation of the groups, the viewing of the videotape and the majority of the training sections were not changed during Training Days 5 and 6. However, for Training Days 5 and 6 the delay between participants watching the videotape and being interviewed was extended to seven days. Seven days before the training the participants identified for training were randomly placed in either Group A or Group B. Group A and Group B attended different rooms each with a television and videotape cassette recorder. Each group watched different videotapes of crime enactments. All participants were instructed not to make notes during the viewing of the videotape or after the videotape was over. The participants were also asked not to discuss the videotapes with participants who had already taken the training.

Seven days after viewing the videotape the police officers attended the training day. Section 1 of the training day was eliminated as the participants had watched the crime videotapes seven days earlier.

A new section of training was added to Training Days 5 and 6 to demonstrate to participants how to record the information obtained in the ECI and how to structure the questions for "remember" or "know" and confidence level phases. The police officers were first shown the confusion that would result from failing to separate the information suppled by an eyewitness into the component parts using the following instructional material.

Failing to separate information into components. After an eyewitness provides the police officer with the movements of a man entering a yard during the ECI the police officer asks the eyewitness during the accuracy phase the following about the man's movement. "You said the man approached the gate, opened the gate, then walked through the gate. Do you 'remember' or 'know' that"? or "How confident are you using the scale of I to 7"? The eyewitness either replied "I 'remember' or 7". The problem with asking the eyewitness to respond to information which contains several components results in the police officer having no idea what component the eyewitness is actually saying he/she "remembers" or has a "7" confidence level for. Is the eyewitness indicating they "remember" or have a confidence level of "7" for (a) all three of the man's actions, (b) only the man's last action, (c) the man's first action, (d) the man's second action, or (e) any other combination of the man's actions?

To eliminate this confusion the police officers in the training day were advised to break the information supplied by each participant into the smallest component parts possible before asking if he/she "remember" or "know" the information or how confident he/she is about each part. The police officers received the following instructions which demonstrated the proper procedures to follow for breaking the information supplied by the eyewitness into the smallest components..

Correct procedure to break information into components. Using the same example of the man entering the yard, police officers were informed that when the information is supplied by the eyewitness being interviewed the components have to be immediately identified and recorded as follows.

- 1. The man approached the gate.
- 2. The man opened the gate.
- 3. The man walked through the gate.

The police officers were then advised if the components are properly identified and broken down in this manner then the questioning during the accuracy phase would be as follows:

- 1. "You said the man approached the gate. Do you "remember" or "know" that"? or "How confident are you"?
- 2. "You said the man opened the gate. "Do you "remember" or "know"? or "How confident are you"?
- 3. "You said the man walked through the gate. Do you "remember" or "know" that"? or "How confident are you"?

It was pointed out to the police officers that using this procedure makes it much easier to understand exactly what the eyewitness response means.

During Training Days 5 and 6 the police officers were instructed they were to implement the "change perspective" phase of the ECI that was recommended by the police officers in Training Days 3 and 4. The police officers were advised to have the participants adopt the perspective of looking down on the scenes in the videotape as if looking through a video camera. The participants were to be reminded when describing events from this perspective they were to report only what they actually experienced. By implementing the change perspective phase at this time I would be able to evaluate whether or not the procedure should be used in a final study.

I instructed the police officers to use the same "remember" or "know" procedure that was utilized in Pilot Study One and Training Days 1 and 2. The police officers were also instructed that once they had completed the "remember" or "know" phase, they were to go back to the beginning of their notes and repeat the same information they had covered in the "remember" or "know" phase, this time asking the participant to indicate a level of confidence. The combining of the two accuracy phases would also allow me to evaluate the effects on both the interviewer and the participant.

Results of Training Days 5 and 6

There were still problems with some of the police officers failing to follow the procedures outlined in the ECI instruction sheets. These problems were as noted in Training Days 1, 2, 3, and 4, involving (a) interrupting the participant, (b) using closed questions, and (c) no planning for the questioning phase. Again when some of these police officers recognized they had strayed from the ECI instruction sheet they attempted to get back on track. There was an improvement with the taking of notes and breaking down the information supplied during the ECI. It was also obvious the increase in the delay between the viewing of the videotape and ECI generated more errors and confabulations.

The participants who were asked to change perspective and describe the scenes as if they were looking down on the incident did not seem troubled by the procedure. Upon reviewing the participants transcripts of this phase of the ECI it appeared the participants only related what they would have seen looking down on the scenes. In some instances the information provided by the participants helped to clarify what had actually taken place. For example, a participant would say "looking down on the yard, the gate the man went through would be in the top right corner of the yard and the house was to the left of the gate as you look down".

No problems appeared to have occurred in the completion of the "remember" or "know" and confidence levels with each participant. However, conducting the "remember" or "know" and confidence levels added more time to the whole procedure than just conducting one of the accuracy phases. The only concern that arose from this combined procedure was that some participants and interviewers indicated they felt very fatigued at the end of the ECI and accuracy phases.

General Discussion of Pilot Study Two

As it was apparent after reviewing Training Days I and 2 there were going to be problems encountered trying to obtain any dependable data from the ECI and accuracy phase interviews conducted at the end of the training days that could be used to test the hypotheses. The problems with the interviewers were (a) lack of consistency demonstrated applying the ECI, (b) failure to take notes properly, (c) failure to reduce information supplied by participants into components and (d) not formulating the appropriate questions in the accuracy phase. The problem of the participants' misuse of the terms "remember" and "know" caused confusion when trying to interpret what they really were trying to express. Changing the time delay from approximately 7 hours to 7 days also changed the parameters of the study. As a result a complete analysis of all the participant interviews related to the study was not conducted.

The time spent on Pilot Study Two was beneficial as it provided some insight into the need for a well thought out training program if the ECI with incorporated accuracy phase was to be implemented and adopted by police forces. A few of the course evaluations completed immediately after the training session contained comments such as "information over-load" and "not enough time to practice the process". Some police officers, who took the course, indicated they found being both a participant and the interviewer in the same day exhausted them. Later, informal discussions with some of the police officers in the field revealed these police officers

seldom used the whole ECI. Some of these police officers felt they had learned from the training to be more effective at listening to what the eyewitnesses were saying. Others indicated they were trying to have eyewitnesses use context reinstatement, and encouraging the eyewitnesses to recall everything but that they were not attempting to implement any of the other ECI phases. However, many of these police officers did indicate they were using more open ended questions at the end of interview.

Although not specifically related to the thesis, the knowledge obtained during Pilot Study Two related to the training of police officers and others in the use of the ECI will be very beneficial in designing any further training programs. It is apparent that one day of training is certainly not enough to provide police officers, or others, with sufficient information on how memory works and to make them proficient in the use of the ECI. Adding the training around the benefits of incorporating an accuracy phase with the ECI and how to implement the procedures would add to the length of training police officers and others would need. However, more specifically for this thesis, the information obtained from Pilot Study Two combined with the information gained in Pilot Study One provided considerable insight into the implementation of the procedures that would be required to conduct a study that would allow the testing of the hypotheses.

CHAPTER THREE

"Remember" or "Know" and Confidence Levels Accuracy Study

Based on the knowledge gained from Pilot Studies One and Two I designed the following study to test the following hypotheses.

- (1) The use of "remember", a conscious recollection, or "know", no conscious recollection, judgements by an eyewitness during an accuracy phase incorporated into an ECI would allow the police officer to be more confident that a particular set of statements elicited during the ECI were correct. I hypothesized that the accuracy of the ECI could be improved by only examining interview statements assigned a "remember" judgement rather than by examining all statements combined.
- (2) Obtaining the eyewitness's levels of confidence during an accuracy phase incorporated into an ECI would allow the police officer to be more confident that a particular set of statements elicited during the ECI were correct. I hypothesized that the accuracy of the ECI could be improved by only examining interview statement assigned a high confidence level rather then by examining all statements combined.

Method

Participants

A class of first year psychology students was advised a study was being conducted of an interview method used to interview people who witness crimes. The students were advised twenty participants were required for the study. The students were informed the study would be conducted in two parts. For the first part, participants selected would have to attend a small group meeting for approximately fifteen minutes, where they would receive instructions and watch a short videotape. For the second meeting the participants who watched the videotape would individually book an interview time seven days after viewing the videotape. The students were advised of the following:

- 1. The interview would take approximately one hour and forty-five minutes.
- 2. There would be four different sessions set up to watch the videotape and conduct the interviews.
- 3. They could sign up on a first-come first-serve basis on sheets posted on the bulletin board by their psychology professor's office.
- 4. They would receive 4% towards their final marks in their psychology course if they participated in both parts of the study.

Twenty students signed up for the study. Before each videotape session the students who signed up were contacted and reminded of the time and location. One student who had signed up withdrew from the psychology course and declined to participate. Another student who had signed up and was advised of the times failed to show up for the session. The study proceeded with eighteen participants.

It was decided that, due to the problems encountered trying to use a multitude of interviewers, I would be the person who would interview all the participants using the ECI with the accuracy phases. It was felt that having only one interviewer completely familiar with all the procedures and problems would allow for more consistency in the implementation of the interview procedure during this study.

Materials

The videotape utilized in the study was an R. C. M. Police training videotape of a male unlawfully entering a dwelling house and possibly committing a homicide enactment which lasted approximately 4.5 minutes. A colour television and videotape cassette recorder was required to show the videotape. A "remember" or "know" definition and example sheet was given to the participant's to read before the "remember" or "know" phase. A tape recorder and a blank 90 minute cassette was utilized to record each participant's interview.

<u>Summary of Study Videotape</u>. The videotape was filmed at night and consisted of the following scenes.

Scene 1: This scene commences with a male standing by a tree smoking a cigarette. He is looking up at a second story window of a split level house. There is a light on in the room. A person is seen in the window moving around. The man approaches a fence with an iron gate which is closed. He stops at the gate, reaches over the gate and opens it. This man walks through the gate into the backyard and closes the gate behind him. He walks across the yard towards the house and passes some trees and shrubs which are to his left. On the way across the yard, he uses his left hand to throw a red item on the ground under the shrubs. The man approaches the side of the house, looks in a window, checks the window which appears to be locked. He moves to his left, down the side of the house and checks another large window and continues along the edge of the house and goes down several steps to a rock patio. A light is on in the room which has the sliding doors. The room appears to be a recreation room or living room. The man walks across the patio to a set of glass sliding doors which he checks. These sliding doors are unlocked and he opens them. Just prior to entering the house the man throws his cigarette on the rock patio, just outside the glass sliding door, and steps on the cigarette with his foot. He enters the room and shuts the glass sliding door and walks immediately across the room, to his right.

Scene 2: The same man walks out of a room and turns to his right. He then slowly proceeds up a set of stairs. The man keeps both hands on the handrails as he climbs the stairs.

Scene 3: This scene begins with the same man entering a well lit kitchen. There is a grey cat which walks past the man and disappears off the screen. He goes to his right walking across to the kitchen and opens the fridge door. The man then takes out a tall brown bottle. You cannot see enough of the bottle label to tell what it contains.

The man has his back to the camera. He shuts the fridge, twists off the cap on the bottle, puts the cap on the counter and takes one drink from the bottle. The man turns around from the fridge and has a large dark handled butcher knife in his right hand. You cannot tell where the knife came from as the man had his back to the camera just prior to turning around. The man lifts the knife in his right hand and waves it around. He walks away from the kitchen cupboards with the knife in his hand. The man pauses outside the kitchen and to his left is a small office type room. In the room there is a small lamp, which is on and sitting on a desk. There is an older style dial telephone on the desk. He does not enter the office, he reaches in and takes the receiver off the telephone. The man places the receiver down beside the telephone.

Scene 4: The same man is seen on the left side of a large dark room. There is a door on the left side of the room opening into a hallway. A door is open down the hallway on the right hand side and there is a light on in this room. The man is walking in the large room towards the hallway. You can see a shadow of a person in the open door of the room down the hallway. He pauses, steps back into a doorway and hides. A woman is seen coming out of the room with the light on. The woman turns left, walks down the hall and enters the dark room. The man steps back further into the doorway were he is hiding. The woman walks past the man and she does not see him. The woman walks through the large room to a door, which is on her left. The woman opens this door and walks into the room going out of sight. He hurries towards the door the woman went through, and catches the door as it is closing. The man pushes the door open and proceeds to enter the room right behind the woman. He still has the knife in his right hand. The man disappears into the room.

Scene 5: This scene is a very short scene which just shows the front of a house.

Scene 6: The same man is seen walking into the kitchen through a door. He turns left when he comes into the kitchen. He has the same knife in his hand. The

knife has blood on the blade and he has blood on his cheek. The man walks over to the kitchen sink and uses his elbows to turn on the tap. He then rinses the knife under the tap and takes down a green and yellow dish towel which is hanging on a wall rack on the right hand side of the sink. He wipes off the knife with the dishtowel. Then the man bends down in front of a dishwasher and opens the door. He pulls out the top rack of the dishwasher and puts the knife on the rack. Then he closes the dishwasher and he shuts off the taps with his elbows. Next the man uses the dishtowel to wipe off his cheek but he does not get all the blood off his cheek. He hangs the dishtowel back up in its original location and he turns from the sink.

Scene 7: This scene is the final scene in the videotape. The scene is of a dark residential street. The same man is on the side of the road walking down the street with his left hand in his pocket. A vehicle with its lights on is approaching him. The vehicle is a police car and the flashing emergency equipment is on. The man keeps walking towards the police car and the police car drives past the male. The police car continues on down the road. The videotape ends.

Procedure

Review of study videotape to identify relevant investigational information.

Newlands, George, Towell, Kernp, and Clifford (1999) had expressed a concern that Fisher et al. (1987) did not clearly explain how they determined which information supplied by participants in their laboratory study was of investigational value. In an attempt to eliminate this problem four experienced serious crime investigators of the R. C. M. Police and a senior crown counsel who has extensive experience prosecuting major cases acted as reviewers to identify all relevant investigational material in the videotape which was going to be used in this study.

To determine relevant investigational information the reviewers were only given the study videotape to view. The reviewers were each requested to view the videotape

and identify the relevant investigational information they felt they would need to obtain during an ECI from a person who would have actually witnessed the crime depicted.

The reviewers were asked to make the following assumptions.

- 1. There was only one eyewitness who witnessed all the events in the videotape.
- 2. The eyewitness did not know either the male or female person depicted in the videotape.
- 3. The eyewitness did not have any knowledge about the residence prior to witnessing the crime.

The reviewers were informed for the purpose of this study the following definitions were to be used.

- Relevant information is information provided by an eyewitness to an event which would allow a police officer and the trier of fact to discover (a) what actually happened,
 (b) the identity of all the subjects involved, and (c) the actual weapon used in the crime.
 For example, if the participant advises "the man placed the knife on the top rack of the dishwasher", this would be relevant information.
- 2. Peripheral information is information which would expand the general knowledge of the occurrence but would not aid the investigator or the trier of fact in determining what actually happened, the identity of the persons, or the actual weapon. For example, if the participant advises "the cupboards in the house were brown", this would be peripheral information. Reviewers were advised there was no need to identify in detail the peripheral information they noted on the videotape.

The reviewers were asked to categorize all the relevant information as either (a) event, (b) description of person(s), or (c) description of weapon. The reviewers were provided with the following definitions for each category.

1. An events category would consist of all the relevant information which would enable an investigator to accurately determine what happened during the videotape.

This would include movements of participants, general sequencing, interpersonal contacts, and actions. For example, the man walking toward the fence would be movement. If the man went to the fence first, then the gate, then opened the gate,...etc. this would be general sequencing. If the man and woman looked at each other and smiled this would be considered interpersonal contact. If the man stabbed the women five times this would be an action.

- 2. The description of the person(s) category would consist of any relevant information which would enable an investigator to determine the identity of the person(s) depicted in the videotape. This would include such things as physical appearance, clothing, and mannerisms. For example: "the man had brown hair, blue eyes, moustache, was wearing a brown coat and smiled all the time".
- 3. The description of the weapon category would consist of any relevant information which would enable an investigator to determine the actual weapon used during the videotape. This would include such things as general description of the knife, colour of the handle, overall length, type of blade and any markings. For example: "the knife was approximately 30 cm long, had a black handle and stainless steel blade".

The reviewers were instructed to use these definitions as a guide and that they did not have to classify each relevant piece of information into the sub-categories noted in the definitions. For example, it was not necessary for a reviewer to classify the walking as a "movement" or the man and women looking at each other as "interpersonal contact". These relevant pieces of information would reported as events.

All of the reviewers' lists were examined and there was a high level of agreement amongst them concerning the relevant information. In some instances each of the reviewers had identified additional pieces of information which he/she felt were relevant. All of the pieces of information supplied by the reviewers, no matter if they

were in agreement or not, were placed on the appropriate categories lists. The relevant information identified by the reviewers was then reduced into the component pieces. This break down of the relevant information into components was necessary as it would allow for a closer assessment of the accuracy of the information provided by each participant. The reviewers provided me with summaries of the relevant information in the videotape as shown in the following format:

"the man was standing by the tree, smoking a cigarette looking up at the window which had a light on and a person was walking around in the room".

This summary was then broken down into the following component pieces of relevant information.

- 1. Man standing by tree.
- 2. Smoking a cigarette.
- 3. Looking up at window.
- 4. A light was on in the room.
- 5. A person was walking around the room.

The relevant information components provided by the reviewers were then consolidated into lists for (a) events, (b) description of person(s), and (c) description of the weapon. For the "persons" categories two separate lists were developed; one for the description of the man, the other for description of the woman (see Appendix F for lists). The number of component pieces of relevant information for each category was as follows:

4. Description of knife9

Videotape sessions. All four videotape sessions took place in the early afternoon and were in the same room using the identical equipment. When all the participants for a session arrived, they were advised I was completing a Master's thesis in psychology and was working with Dr. P. Higham on a research project examining an interview technique used by the police for interviewing people who had witnessed a crime. My background as a police officer was also explained to the participants and I advised the participants this research could help improve how police officers conduct interviews of eyewitnesses. The participants were asked to confirm their follow up interview appointments seven days following the videotape session. All participants were provided with the room number where the interviews would be conducted. The following information was provided to each participant.

- 1. They would be watching a videotape of a crime enactment.
- 2. If they had any concerns with the videotape they could leave the room at any time.
- 3. If they had any concern after watching the videotape they could contact myself or Dr. P. Higham (our phone numbers were provided).
- 4. They were not to make any notes during the videotape, or make any notes after the videotape.
- 5. They were not to discuss the videotape with any of the participants in the study or with any of their friends.
- 6. As soon as the videotape was over they could leave.

Once the participants were provided with the instructions the videotape was shown, without any sound, to the participants. All the participants left the room immediately after the videotape.

ECI sessions. Seven days after viewing the videotape, each of the eighteen participants attended their interview at the appointed time and room. Each of the following 4 phases were conducted with each participant:

1. Phase 1 started with rapport building before the audiotape was turned on. The rapport building consisted of a short discussion about where the participants were from, what they were taking at university, and how their midterm examinations were going. I explained my background with the R. C. M. Police and discussed with them how important I felt the research was to help the police officers improve how they interview people who witness crimes. Each of the participants was advised they could ask questions before the interview started and that their participation in this study was greatly appreciated. It was explained to each participant I would be taking detailed notes while they were talking so if they would take their time describing the videotape it would be helpful. A brief discussion took place explaining the use of the tape recorder with each of the participants and determining whether or not the participant had any concerns about the interview being recorded on audiotape. Each of the participants signed the appropriate forms consenting to be interviewed and having an audiotape made of the interview.

After proper consent had been obtained each participant was advised that in a few minutes they would be asked to mentally reinstate the physical environment and their internal environment which existed at the time of the videotape session just before the videotape started. The participants were requested to think about such things as the room they were in, who was there, where they were sitting, where the television was, how the seat felt and any noises or smells present just before the videotape started. They were also asked to mentally reinstate how they were feeling physically and emotionally just before the videotape started. Participants were requested not to commence this procedure until instructed to do so.

Every participant was instructed that once they felt they had mentally reinstated the external and internal environment that existed just before the videotape started, they should visualize the videotape starting in their mind. When they saw the

videotape starting in their mind they were to explain to me, in detail, what they saw from the beginning of the videotape to the end. Each participant was advised it was important for them to tell me everything, no matter how insignificant they felt the information was, even if they only had partial recall of the information. The participants were then advised to take a moment to mentally reinstate the internal and external environment.

Each participant was allowed to provide a free narrative account of the videotape without interruption. Extensive notes were taken of the interview, and each description of the event was broken down into its smallest component in the notes. During the free narrative each participant was provided encouragement by prompts such as occasional eye contact, nodding and using phrases such as "um hum".

2. Phase 2 started immediately after Phase 1 was completed. Phase 2 involved the participant relating to me what he/she could recall about the videotape using the recall events in different order technique. In this study only recalling events in reverse order was utilized. All the participants were advised research has shown that it is sometimes helpful to recall events in reverse order. Each participant was advised the last thing the participant said in Phase 1 would be repeated back to him/her and he/she would be asked to tell me what happened just before that event and so on. Before beginning an example was provided for each participant. The example consisted of the last statement the participant had made in the free narrative part of Phase 1. For example, I could advise the participant the following: "the last thing you advised me of was the police car passed the man on the street. Tell me what happened just before that". The participants were asked if they understood how this process would work and when each participant indicated they understood the reverse order procedure was implemented. When each participant responded to the "Tell me what happened just before..." prompt he/she was allowed to start his/her description of the videotape

wherever he/she wanted. Once the participant provided the information and it was evident he/she had nothing further to say, the first piece of information the participant had provided in response to my question was repeated. The participant was then asked to relate what happened just before that. This procedure would be followed until we had moved backwards through the participant's information to the start of the videotape.

An attempt was made to use the participant's verbatim responses when formulating the question. During this phase notes were taken in the same manner as Phase 1 and the same method was utilized to show active listening and encouragement. There was no request for elaboration of points made during this phase and the participants were allowed to provide as much free narrative as they wished.

3. Phase 3 consisted of having the participant change perspective and this procedure was implemented immediately after Phase 2. For the purpose of this study only one change perspective procedure was utilized. The change perspective procedure utilized asked each participant to look at the scenes in the videotape from a different location. Participants were advised research has shown when a person looks at events from a different perspective and describes the incident from that perspective it helps improve their recall. The participants were advised that in a moment they would be asked to think about the scenes on the videotape from a different perspective. It was explained to each participant they would be requested to look at the events in the videotape as if they were looking down on the scenes from above through a video camera. Some of the participants indicated they could not visualize looking down on the outdoor scene from the sky. Therefore, for the outdoor scenes the participants were advised they could assume they were in a helicopter with a video camera and for the inside scenes the video camera would be located in the ceiling. The participants

were instructed to only relate what they actually observed when the event was taking place. The participants were instructed to relate what they saw from the start of the videotape until the end of the videotape.

The participants were instructed to take a moment and when they were ready they could start describing to me what they saw. Notes were kept in the same manner as in Phases 1 and 2. Active listening took place and encouragement was given to each participant. Participants were allowed to provide a free narrative without any interruption or requests for clarification during this phase.

4. Phase 4 followed with each participant being asked to expand on the information he/she provided throughout Phases 1, 2, and 3. Open ended questions were utilized to allow each participant to maximize the amount of information he/she wished to provide. The participants were advised that there were certain parts of the information they provided which could be expanded on by answering a few questions. Each participant was asked if it was alright to proceed. When the participants indicated they were ready to proceed they were asked to tell me more about the man, the woman and the knife.

When the participants were asked to tell me more about the man, each participant was instructed to first think of every time they saw the man in the videotape. The participant was advised once he/she could visualize the man and was ready to proceed, he/she should start at the top of the man's head and, moving down his body, describe everything he/she could recall about the man. Once the participant completed the description of the man the same instructions were given in regard to the woman. When the participant indicated he/she could not recall anything else about the woman he/she was asked to think of all the times he/she saw the knife and to tell me everything he/she could recall about the knife. Each participant then provided a free narrative of the descriptions and no clarification of information was requested during

this phase.

The original design of this study was to ask all of the participants to tell me more about the man, the woman, and the knife. However, from the interviews conducted with the first six participants very little information was obtained about the man, the woman or the knife. A decision was then made to ask the remaining participants to tell more about the description of the man, the description of the woman and the description of the knife and I would request that the participant to tell me more about the event information he/she had provided in Phases, 1, 2, 3, and 4.

Therefore, participants 7 through 18 were also asked to tell me more about the information they had provided in regards to the events. The "tell me more" requests were formulated around the information the participant had provided during the first 3 phases (e.g., "you stated the man walked into the yard. Tell me more about that"). Information from the videotape that participants had missed providing in the ECI was not incorporated in this questioning phase. The questions asked during this phase moved from the beginning of the videotape to the end of the tape. The participant was allowed to provide a free narrative response to each of the "tell me more" questions.

In this phase notes were kept in the same manner as Phases 1, 2, and 3. As in the other phases I provided encouragement and demonstrated active listening techniques. I did not request any clarification of the information provided to the open ended questions. At the conclusion of this phase inquires were made of the participant to find out how he/she was feeling and whether or not he/she was willing to proceed to the next phase.

Accuracy phases. It was explained to each participant that there were two more phases to the study and his/her permission to proceed was required. Once the participant's permission was obtained the following accuracy phases were implemented.

1. The "remember" or "know" accuracy phase was the first accuracy phase each participant completed. At the beginning of this accuracy phase each participant was advised it was sometimes helpful for a police officer to have an understanding of whether an eyewitness can "remember" the information he/she had supplied in their interview or whether he/she "know" the information supplied. Each of the participants were given an information sheet to read which defined a "remember" response, and a "know" response and provided examples. This information sheet was the same as the one used in the pilot study and the R. C. M. Police training sessions. The participants were all asked if they understood the definitions.

Each participant was advised the notes taken during their interview would be used for this part of the study. Once the information contained in the notes was repeated back to them, the participants were informed they would be requested to indicate whether they "remember" the information or "know" the information. Every participant was informed that if he/she recalled any new information during this process he/she should report it right away.

It had been noted during the Pilot Studies One and Two all participants often repeated pieces of information in each of the four phases of the ECI. The repetition of information was also noted during the interviews of these participants. I felt if I took time to check back in the notes to try and determine whether or not a component piece of information had been mentioned in an earlier phase before proceeding with the accuracy phase the participant would have found it too disruptive. In my opinion an interruption of this type would cause the participant's concentration to be lost. It is my view that I would never be able to have the participant reach the same level of concentration he/she had achieved during the ECI and this could affect the accuracy phases. As a result the participants were instructed that during the accuracy phase if they felt they had already provided a "remember" or "know" judgement to information I

mentioned they should not try to recall how they had responded previously. The participants should just answer indicating whether they "remember" or "know" the information.

Using the notes taken during the ECI each component of information which was recorded was repeated back to the participant. The participants were asked if they "remember" or "know" the component piece of information they had supplied. All responses were recorded in the notes. For example, a participant was advised they had said "it was night". The participant was asked, "Do you 'remember' or 'know' that"? The participant could reply: "I 'remember'". The participant was advised they had said "the man had a moustache". The participant was asked: "Do you 'remember' or 'know' that"? The participant could reply: "I 'know' that". The participant's responses were recorded either as a "remember" (R) or a "know" (K) beside the component in the notes (see Appendix C copy of notes for participant 13, Phase 1 of the ECI).

At the conclusion of this part of the study the participant was asked if they were all right. Each participant was advised there was one more part of the study to be conducted and asked if he/she was ready to proceed. I noted some of the participants were beginning to show signs of fatigue by slumping in their chairs or by making facial expressions.

2. The confidence level accuracy phase commenced immediately after the "remember" or "know" accuracy phase. Each participant was advised it is important for a police officer to determine how confident an eyewitness was about the information he/she supplied. Each participant was advised the same procedure would be used as in the "remember" and "know" section. Each piece of information the participant had supplied would be repeated back to them. The participant was to use a scale between one and seven to express how confident they were about the accuracy of the component piece of information supplied, with 1 indicating "no confidence" and 7

indicating "high confidence". Each participant was asked if they understood the scale before proceeding.

The participants were again instructed that during this accuracy phase if they felt they had already provided a confidence level for information I mentioned they should not try to recall how they had responded previously. Each participant was advised he/she should just answer indicating how confident they felt they were when they hear the information. Each participant was advised if during this process they recalled any new information they should advise me of that information immediately.

The notes containing the component pieces of information taken during the ECI of each participant were used to ask the participant to indicate how confident he/she was of that information. For example, the participant was advised they said: "it was night". The participant was asked: "How confident are you"? The participant could reply: "7". The participant was advised they said: "the man had a moustache". The participant was asked: "How confident are you"? The participant could reply: "2". All the confidence levels provided by the participant were recorded in the notes.

Debriefing session. As was expected from the pilot study and the police training days it was apparent some participants had misused the "remember" or "know" definitions. All participants were debriefed about what they meant when using the terms "remember" and "know". These participants who had reversed the terminology indicated the "know" response was given when they could visualize the piece of information. In other words, the participants said they knew for sure the information was correct. When these participants used "remember" they indicated they had some recollection of the information but could not visualize it. I recorded in my notes which participants had misused the terms and this information was considered when the transcripts were analyzed.

<u>Preparation of transcripts.</u> All of the hand written notes were retained and all of the audiotapes were transcribed by an R. C. M. Police stenographer who was familiar with the preparation of transcripts of eyewitness interviews for court. The transcripts were prepared to the standard required for Criminal Court (see Appendix B for interview transcript of participant 13).

Scoring relevant and peripheral information. Score sheets for information were designed so that all the relevant information provided during each phase of the ECI could be recorded as correct, missed, "remember" or "know". The level of confidence expressed by the participant was also recorded. The score sheets allowed for the recording of the component pieces of peripheral information and whether or not the words used to describe peripheral information were correct, an error or a confabulation. All "remember" or "know" responses and levels of confidence for the peripheral information, errors and confabulations could also be recorded on the score sheet. A separate score sheet was developed in this manner for recording the (a) information for events, (b) description of male, (c) description of woman, and (d) description of knife (see Appendix E for examples of completed sheets for participant 13).

Peripheral information noted in the transcript was reduced to its component parts, in the same manner as the relevant information. The peripheral component pieces of information were listed on the scoring sheet under the heading "peripheral information" and recorded under the ECI phase the participant mentioned it. For example, assume a participant reported in Phase 1 the following peripheral information about the kitchen. "There was a cupboard which was brown and white, the cupboards were 'L' shaped". This information would be broken into (a) cupboards in kitchen, (b) cupboards were brown and white, and (c) cupboards were "L" shaped. These component pieces of peripheral information would have been recorded in Phase 1 under the heading "peripheral information". If the same component piece of peripheral

information was repeated during other phases of the ECI, it was recorded each time it appeared.

For the purpose of scoring, correct information, missed information, errors, confabulations, and assumptions are defined as follows.

- 1. Correct information is defined as accurate information provided by the participant which appeared in the videotape regardless if it is relevant or peripheral. For example: "the man was standing by a large tree". This was depicted in the videotape. Therefore, it was correct information on the score sheet either in the relevant section or peripheral section depending on the nature of the information. The number 1 was used to indicate a correct response on the score sheets (see Appendix E for completed score sheet of participant 13).
- 2. Missed relevant information is defined as information which had been identified as relevant by the reviewers and was missed by the participants. Missed relevant information was scored as an 8 on the score sheet. Missed relevant information is not being examined in this particular study (see Appendix E for completed score sheet of participant 13).
- 3. Error is defined as information provided by the participant which did not fit the fact pattern of the videctape. For example, the participant may have advised: "the man held the knife in his left hand" when in fact the man actually held the knife in his right hand. Errors were scored as a 2 on the score sheet (see Appendix E for completed score sheet of participant 13).
- 4. Confabulation is defined as information provided by the participant which was not in the videotape. For example, the participant may have reported: "the woman was in the shower" or "the woman screamed" when in fact there was not a shower shown in the videotape and there was no sound played on the tape. Confabulations were scored as a 3 on the score sheet (see Appendix E for completed score sheet of participant 13).

5. An assumption is defined as information provided by the participant where the participant drew a conclusion based on what was seen in the videotape. For example, the participant said: "the man looked scared" or "the man appeared to have been familiar with the house". These assumptions were not assigned a number or a score, but were recorded on the score sheet under assumptions. These assumptions were recorded for further reference as they are not being examined in this study (see Appendix E for completed score sheet of participant 13).

After all of the peripheral information, errors, and confabulations provided by each participant were recorded on the score sheets, the videotape crime enactment used in this study was reviewed for each separate participant. All of the peripheral component pieces of information which had been recorded on the score sheet were scored correct if the same piece of information was located on the videotape. Any information confirmed to be an error after reviewing the videotape was scored as an error on the score sheet. If the piece of information supplied by the participant was discovered to be a confabulation after viewing the videotape it was scored as a confabulation (see Appendix E for completed score sheet of participant 13).

Scoring "remember" or "know". On the score sheet in the R/K column the "remember" or "know" response provided for each component piece of information was recorded. Due to the confusion in the use of the terms "remember" and "know" by some of the participants, it was felt a more appropriate way to interpret these results would be to classify the information based on whether or not the participant had indicated he/she had a conscious recollection of the information or the participant had no conscious recollection of the information. When the participant indicated he/she had a conscious recollection of the information, it was recorded as a "remember" response on the score sheet. When the participant indicated he/she did not have a conscious recollection for the information this response was recorded as a "know"

response on the score sheet. The transcripts of the debriefing were utilized to confirm what the participants actually meant when he/she used "remember" and "know". Each piece of information provided by the participant (whether relevant, peripheral, an error or a confabulation) had been presented to the participant in the accuracy section of the actual interview. Therefore, all component pieces of information received a score of either conscious recollection "remember" or no conscious recollection "know". There were 9 participants who had not used the "remember" or "know" as defined on the "remember" or "know" definitions and example sheet.

Recording confidence levels. For every piece of relevant information, peripheral information, error and confabulations, the actual number used by the participant to indicate their level of confidence was scored. The levels of confidence ranged between 1 "no confidence" and 7 "high confidence" (see Appendix E for completed scoring sheets of participant 13).

Errors in note taking. As noted in the police training days and Fisher and Geiselman (1992) the taking of complete notes is a difficult process. Even with the experience I have had over the years taking notes and the knowledge of the previous problems encountered by some of the police officers in the training days, on occasion I missed recording a component piece of information. Because the participant was talking rapidly and even though I was trying to maintain the quality of my writing in some instances my writing was undecipherable and I was unable to repeat the component piece of information back to the participant during the accuracy phase. When this problem arose the participant could not be asked "remember" or "know" or their level of confidence. Even though the component information was missed or unreadable in the notes it was still recorded on the audiotape and showed up in the transcript of the ECI. The component which was missed or unreadable in notes but showed up in the transcript was still recorded as relevant, peripheral, correct, error or

confabulation on the appropriate score sheet. However, because the information was missed or unreadable in the notes there was no corresponding number indicating "remember" or "know" and no corresponding number indicating the confidence. I noted also in the transcripts that there were occasions where I had asked a participant to indicate whether a component piece information was a "remember" or "know" judgement but failed to ask the participant for a corresponding confidence judgement. Also, I noted that there were occasions where I had failed to ask the participant whether or not he/she had a "remember" or "know" judgement for a component piece of information but I had asked the participant a corresponding confidence judgement. The percentage of the total number of statements regarding events that did not receive "remember" or "know" judgements for Phases 1, 2, 3, and 4 were 7%, 8%, 9%, and 3%, respectively (where the Phase 4 percentage is based only on participants 7-18). The corresponding values for confidence ratings were 8%, 8%, 9%, and 7% for Phases 1 to 4, respectively (where the phase 4 percentage is based only on participants 7-18).

Misuse of "remember" or "know". It was noted during the analysis of the participants' debriefing sessions some of the participants were still misusing the terms "remember" and "know". The misuse of "remember" and "know" had not been unexpected. The responses in the debriefing session for the participants who used the terms correctly and incorrectly were very similar to those which had been obtained in the pilot study. The following conversation noted in participant 12's transcript was typical of the response I obtained from participants who used the terms correctly. The conversation was transcribed as follows:

QU: "Okay. All right. Good. Now just to go, make sure I understand the 'remember', 'know', when you were talking about 'remember', 'know' all right? Can you explain to me what you meant when you were, said you knew something and when you 'remember' something'?

AN: "When I 'remembered' something, I clearly 'remember' it happening, like I can play it back in my mind. And the things with a 'know' is.....what I thought happened. Like I 'know' he was in the kitchen looking for something, but I wasn't.....really wasn't sure what he was doing".

QU: "Kay".

AN: "But I just, I just know that he was doing that".

The following conversation noted in participant 8's transcript was typical of the response I obtained from participants who used the terms incorrectly. The conversation was transcribed as follows:

QU: "All right. Now 'remember', 'know'... okay, I got the impression from.....when you said 'remember', 'know'... that... well maybe you can explain it.......to me. When you said you 'know' something what did you mean by that?.......That was a 'know' judgement. What did you mean by the...".

AN: "As far as the video goes, I know...when...I knew something when...I guess I can just see it happening. Like I knew he did certain things. But then other... things I don't know if I just...put 'em in kind of a context...I dunno, I can't...really explain it...Well you're definite about it. Exactly, yeah. The....'remember' is kind of like filling in pieces of the puzzle that you're not quite....sure so then you associate a feeling you have...and make up a memory with......it. The things I know, I know".

The score sheets where the terms "remember" and "know" were misused were amended to properly depict what each participant had indicated during the debriefing that he/she were trying to convey with the terms.

Eyewitness clarification of facts. It was noted in the analysis of the transcripts that there were occasions where some participants would volunteer more information when he/she was asked to indicate "remember", "know", or level of confidence. For

example, participant 12 had described the package the man threw down in the free narrative of Phase 1 of the ECI as follows: "he... proceeded to drop a <u>red_object</u>" (my emphasis). During the "remember" or "know" accuracy phase of the ECI the following conversation took place with participant 12:

QU: "Dropped a red object...like a cig...".

AN: "Yeah that should be know, because I'm assuming it was red, I can't remember exactly".

QU: "Okay".

AN: "The dropping of a package I know, I... I remember...but the...".

QU: "Okay".

AN: "the color is know".

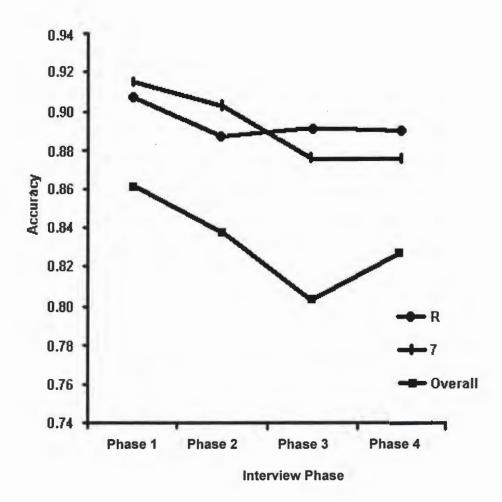
It should be noted participant number 12 was using the terms "remember" and "know" as defined in the definition sheets. When additional information was provided by the participant during this process it was noted on the score sheet as either relevant, peripheral, and error or confabulation and the appropriate "remember" or "know" and confidence level judgement was entered.

Results

Separate spread sheets were prepared for each of the eighteen participants. During the actual interviews and the analysis of the transcripts it was noted that a very limited amount of information was supplied by all the participants concerning the description of man, woman and knife during Phases 1, 2, and 3. A little more data were obtained in these three categories during Phase 4, however, it was very limited. Because of the limited amount of data produced the statistical analysis of the information conducted for these three categories revealed nothing of value. However, there was an abundance of data obtained under the events category during all four phases to test my hypotheses.

For the analyses including "remember" or "know" and confidence judgements, the main dependent variable was accuracy rates in three different conditions. First, I was interested in the accuracy for all statements made in the interview where accuracy equals correct relevant information plus correct peripheral information divided by correct relevant information plus correct peripheral information plus errors plus confabulations. Additionally, I calculated accuracy for just those statements that received "remember" judgements and also those statements that received a confidence level of "7". The same formula above was used to determine these accuracy rates, but only the relevant subset of statements (either "remember" statements or highest confidence statements) was included in the analysis.

"Remember" or "know" and confidence level judgements. I hypothesized that the accuracy of the ECI could be improved by only examining interview statements assigned either remember judgements or high confidence levels rather then by examining all statements combined. Figure 1 shows the accuracy rates for all reported relevant and peripheral units of event information, as well as the accuracy rate for only those statements that received "remember" judgements across all four phases of the ECI. Due to the fact that some component pieces of information were repeated in each phase, I examined each phase separately for all participants. Only the data from 12 participants (7 to 18) are represented in Figure 1. During Phase 4 participants 7 to 18 were not only asked to tell me more about the man, the woman and the knife they were also asked to tell me more about the events whereas participants 1 to 6 had not been asked to tell me more about the events. The accuracy rates were analyzed using a 2 (Judgement Type: remember/overall) X 4 (Interview Phase: 1, 2, 3, 4) within-subjects Analysis of Variance (ANOVA). The analysis revealed a main effect of judgement type, \underline{F} (1, 11) = 32.70, \underline{MSE} = .003, \underline{p} < .001. As shown in Figure 1 "remember" judgements yielded higher accuracy ($\underline{M} = .89$) than all judgements combined ($\underline{M} = .83$). The other



<u>Figure 1</u>. Accuracy Rates of participants 7 to 18 for: (a) all reported event information, (b) all the event statements that received "remember" judgements, and (c) all the event statements that received the highest level of confidence (7) as a function of interview phase.

90

main effect and interaction were not significant, both ps > .37.

The data for the first 6 participants were not included in the above analysis as they had not been questioned about event information during Phase 4 of the ECI. Therefore an analogous analysis was conducted including the data from just the first three phases. This 2 (Judgement Type: remember/overall) X 3 (Phase: 1, 2, 3) ANOVA also revealed a significant effect of judgement type, \underline{F} (1, 17) = 18.89, \underline{MSE} = .003, \underline{p} < .001. As with the analysis that included all four phases, statements assigned "remember" judgements were more accurate (\underline{M} =.90) than all statements combined (\underline{M} = .86). However unlike the previous analysis, the analysis that included all 18 participants also revealed a marginal main effect of phase, \underline{F} (2, 34) = 2.93, \underline{MSE} = .004, p<.07 and a marginal interaction, F(2, 34) = 3.15, MSE = .002, p < .06. There was a tendency for accuracy to decrease from Phase 1 to Phase 2, however no decrease was noted between Phase 2 and 3. (Phase 1: M = .90; Phase 2: M = .87; Phase 3: M = .87) and a tendency for the accuracy advantage of statements assigned a "remember" judgements (as opposed to all statements combined) to vary across the different phases (see Figure 1).

Figure 1 also shows the accuracy rates for statements assigned the highest level of confidence rating (7) by participants 7 to 18. An analogous 2 X 4 within-subjects ANOVA compared accuracy rates for all judgement types with only those given the highest confidence level, across all 4 phases of the interview. The analysis revealed a main effect of judgement type \underline{F} (1, 11) = 36.95, \underline{MSE} = .002, \underline{p} < .001. As with "remember" judgements, the accuracy rate for statements given the highest level of

confidence was higher (\underline{M} = .89) than the accuracy rate for all statements combined (\underline{M} = .83). The other main effect and interaction were not significant, \underline{ps} > .16.

As with the "remember" / "know" analysis, a subsequent ANOVA was conducted that eliminated phase 4 so that data from all participants could be included. This 2 X 3 within-subjects ANOVA again revealed a main-effect of judgement type, \underline{F} (1, 18) = 28.05, \underline{MSE} = .003, \underline{p} < .001. High confidence statements were more accurate (\underline{M} = .91) than all statements combined (\underline{M} = .86). The analysis also revealed a main-effect of phase, \underline{F} (2, 34) = 4.47, \underline{MSE} = .003, \underline{p} < .02. Accuracy tended to decrease across the three phases (Phase 1, \underline{M} = .91; Phase 2, \underline{M} = .88; Phase 3, \underline{M} = .87). The interaction was not significant, \underline{p} >.32.

During a review of the results one of the members of the supervising committee expressed a concern that because the "remember" and high confidence data were a subset of the overall data, using an ANOVA to test the differences between the means violated the assumption that each observation in the ANOVA is independent. The committee member thought that "the accuracy rate for statements receiving 'remember' judgements should be compared to accuracy rates for statements receiving 'know' judgements. That would yield independent observations, because the accuracy of a given statement would be represented in one and only one cell of the ANOVA" (C. Hardy, personal communication; May 31, 2000). As a result of this concern a review of the data was conducted and the analysis suggested carried out. (See Appendix D for results.)

Number of correct relevant event facts. I noted, as the interviewer, at the end of each ECI and accuracy phases I was mentally and physically tired. In the debriefing of the participants, several also commented they had found the whole process very long and had trouble remaining focused. As a result of this observation I conducted a comparison of the total number of correct relevant facts (CR) obtained during Phase 1 (mental reinstatement and recall everything) of the ECI with the total number of CR obtained during all the Phases of the ECI used with each of the participants. This was done to determine if there would be any substantial loss of CR if the ECI was shortened for field use. For participants 1 through 6 the total number of CR obtained during Phase 1 was compared to the total number of CR obtained during Phases 1, 2, and 3. As Phase 4 was added during the ECI of participant 7 and continued through to participant 18 a comparison of the CR obtained in Phase 1 was compared to the total number of CR obtained in Phases 1, 2, 3, and 4 for participants 7 to 18. It was noted for participants 1 to 6 there was an average of 34 CR, or 43% of the total possible CR obtained during Phase 1 of the ECI. This value compared to 39 CR, or 49% of the total possible CR obtained during Phases 1, 2, and 3 of the ECI (see Table 1). Participants 7 to 18 were noted to have disclosed an average of 30.1 CR, or 38% of the total possible CR during Phase 1. This value compared to 39.5 CR, or 50% of the total possible CR obtained during Phases 1, 2, 3, and 4 of the ECI (see Table 1). It was noted that for participants 1 to 6 conducting all three phase only provided on average 6 more CR. In other words, 87% of the total CR reported by participants 1 to 6 was obtained in Phase 1. For participants 7 to 18 it was noted that utilizing four phases

only produced on average 10 more CR. For participants 7 to 18 there was 76% of the total CR reported by the participants was obtained in Phase 1. Police officers in the field will have to decide whether or not the extra time required to conduct the complete ECI may not be worth the effort in some cases.

<u>Table 1.</u>
Distribution of Correct Relevant Event Facts (CR) for Participants 1 to 18 through Phases, 1, 2, 3, and 4.

	Phase 1		Phase 1 to Phase 3		Phase 1 to Phase 4		Total Possible
Participants	CR	%CR	CR S	%CR	CR	%CR	CR
1 to 6	34.0	43	39.0	49	N/A	N/A	79
7 to 18	30.1	38	_	-	39.5	50.5	79

Discussion

The results of this research supported Higham and Roberts' (1996b) hypothesis that the accuracy of the ECI could be improved by only examining interview statements assigned either remember judgements or high confidence levels rather than by examining all statements combined. Also supported by the results of this research project was Koriat and Goldsmith's (1996) report that high levels of confidence are correlated with a higher percentage of correct units of information. It was discovered through this research project there was difficulty encountered by participants using the definitions of "remember" and "know" as outlined by Tulving (1985). Although there was a problem with the actual use of the terms, "remember" or "know", the results of this project still supported the position that when an eyewitness indicated they had a conscious recollection ("remember") of an event the police officer can be more confident the statement was correct. Finally, the results of this research project suggest an accuracy phase could be used effectively with a shortened version of the ECI.

The procedures used in this research project have the potential to improve the police officer's ability to evaluate the accuracy of eyewitness information obtained during an interview. Having the ability to be more confident about which information from an eyewitness is correct will assist front line police officers to formulate more effective investigational strategies. These police officers will be investing their time in following up information which they are more confident is correct. However, police officers must remain open minded during the evaluation of the eyewitness information

keeping in mind that unless there is a videotape of the crime taking place there really is no way of determining with one hundred percent accuracy whether or not any information from an eyewitness is correct or incorrect. Therefore, it would be prudent for the police officer to ensure the information he/she has little or no confidence in being correct is not forgotten. This information should be kept available to be reevaluated if new information surfaces during the investigation indicating that this information could be correct.

With an accuracy phase implemented into everyday interviews police officers responding to an initial complaint would be in a position to evaluate the information provided by an eyewitness fairly quickly. For example, a police officer responding to an armed robbery complaint wants to obtain as much information as quickly as possible from the eyewitness so it can be conveyed back to other responding police officers conducting a search for the culprit(s). In this example it is assumed the eyewitness reported that the suspect had a moustache when in fact he did not. In this case example, if there was no accuracy phase conducted by the police officer, the back up police officers responding would be advised they were looking for a suspect with a moustache. This incorrect information could result in the follow-up officers missing the actual culprit. If, however, in this case example the attending police officer conducted an accuracy phase and learned from the eyewitness that they had no conscious recollection of the moustache and they had a low confidence there was a moustache, the interviewing police officer would be in a stronger position to provide more complete information to other officers responding. In this situation the responding officers would

be informed the eyewitness described the man as having a moustache, however, they had no conscious recollection ("know") of the moustache and they had indicated a low confidence level. Therefore, the responding police officer's approach to looking for the suspect would be totally different than in the situation where there was no accuracy phase conducted.

Evewitnesses would also be in a position to benefit from the incorporation of an accuracy phase at the time they are interviewed by a police officer. Currently in Canada, the court system is so back-logged it is not uncommon for an accused to wait from eighteen months to four years before having a trial. This means the eyewitness would have to recall what happened when the actual crime was committed and relate this information to a trier of fact many months after the incident. In Canada, the eyewitness is allowed to refresh their memory from the statement they had originally provided the police officer prior to testifying. If a statement had been taken with an accuracy phase it would be more beneficial to the eyewitness than one without. In the armed robbery example the eyewitness reported the participant had a moustache when in fact he did not. Again if there was no accuracy phase conducted in the interview and if the trial for the suspect was two years later, the eyewitness would only have the information in his statement where he/she described the man as having a moustache. The eyewitness's opinions in relation to the man having a moustache may actually become stronger after he/she reads his/her statement. The eyewitness may interpret the fact that because he/she had described the moustache at the time, there must have actually been a moustache. However, if the accuracy phase had been conducted the

eyewitness would have other information available to him/her from his/her statement to assist him/her in more accurately recalling what he/she observed during the robbery. In their statement they would be reminded that at the time they described the man, they indicated no conscious recollection of moustache and had indicated a low level of confidence. In my opinion the information obtained in the accuracy phase would act as cues which would assist the eyewitness to recall the events and what he/she observed at the time of the crime.

The results of this research project also demonstrated how some eyewitnesses could use the accuracy phase of the interview to clarify certain points, which could have been misunderstood in the original ECI. For example, an eyewitness may have observed a culprit take out a brown bottle and hit a man with it. In this case example during the ECI the eyewitness stated "the man was hit with a beer bottle". The eyewitness assumed it was a beer bottle based on the colour and shape. When asked to state whether or not he/she had a conscious recollection or no conscious recollection and how confident they were about the "beer bottle" the eyewitness attempted to clarify what he/she actually saw. In this example the eyewitness confirmed he/she had a conscious recollection that the bottle was brown and shaped like a beer bottle, however he/sh had only assumed the bottle was a beer bottle. This could be crucial information for the police officer conducting the investigation for if the bottle used to hit the man was something other than a beer bottle the police officer would have to look for all brown bottles at the scene. It should be noted using the accuracy phase only provides an opportunity for this clarification to take place but it

does not ensure it will happen. There will be those eyewitnesses who will not take the time to clarify and may really believe it was a beer bottle.

In both of these examples, the moustache and the brown bottle, if the accuracy phase was conducted the eyewitness would be in a stronger position to explain to the crown prosecutor, defence counsel, judge and/or jury what he/she was thinking about at the time the information was provided to the police officer. In the case example with the moustache, without the accuracy phase, the defence counsel could ask the eyewitness if he/she had described the man as having a moustache in their original statement, the eyewitness would agree they had. The defence counsel would then argue the eyewitness had made an error, the defence counsel's client never had a moustache, therefore all of the evidence of the eyewitness should be suspect. With the accuracy phase the crown counsel could ask the eyewitness if they had informed the police officers the suspect had a moustache. The eyewitness would be able to advise the court what he/she had said to the police officer during the accuracy phase. The eyewitness would then be able to explain that at the time they may have been wrong because they had no conscious recollection and/or a low confidence level of the man having a moustache. The same would hold true with the example case involving the bottle. However, if no accuracy phase had been conducted the eyewitness would have been left with the fact they had described the bottle as a beer bottle in their original ECI. When the accuracy phase was conducted they clarified what they actually saw, which was a brown bottle that looked like a beer bottle. Again this would allow the crown prosecutor to deal with confusion during the prosecutor's examination of the

eyewitness.

I would like to point out there will still be eyewitnesses who make errors or confabulate and really feel they have a conscious recollection and a high confidence the facts they provided are accurate. The implementation of the accuracy phase does not guarantee the eyewitness will clarify or provide the police officer with the information to make the appropriate interpretation of the information. Implementing an accuracy phase not only allows a police officer to create an opportunity to assess the information supplied by an eyewitness it provides an eyewitnesss with an opportunity to clarify important details. I would suggest an eyewitness who had been interviewed and had an accuracy phase conducted would be able to inform the trier of fact more accurately as to what he/she was trying to convey to the police officer at the time of the interview. Therefore, the trier of fact would be in a more informed position to make a decision as to how much weight to put on this eyewitness's testimony.

Prior to implementation of an accuracy phase consisting of "remember" or "know" in the field, further research designed to address the misuse of the terms must be conducted. It was noted in this research project the misuse of "remember" (conscious recollection) and "know" (no conscious recollection) arose early in the pilot study and continued to occur throughout the project. I was quite surprised the first few times the misuse of terms occurred. It was apparent all the participants had read the definitions of "remember" and "know" definitions and example sheet and all the participants had been asked if they understood the terms and they all indicated they had. It was explained to all the participants how the process would work, and they all

indicated they understood. Some of the participants had no problem using the terms as defined and implementing the process as expected. Other participants consistently misused the terms from the commencement of the accuracy phase until the conclusion.

In the initial stages it appeared the participants were using "know" to indicate they had a conscious recollection of the information and "remember" to indicate they had no conscious recollection of the information. There was nothing to indicate from the responses of the participants who misused the words that they had not understood what they were expected to do. If I had not uncovered this problem the results of this research project may have been completely different. There would have been many more "know" responses being scored which would have indicated no conscious recollection when in fact there was a conscious recollection. The same would have happened with the "remember" responses being scored which would have indicated a conscious recollection when in fact there was none. If this misuse of terms were to occur in the field the result would even be more profound. For example, after an armed robbery an eyewitness incorrectly stated the robber had a moustache then during the accuracy phase the eyewitness misused the terms "remember" and "know". The eyewitness advised the police officer they could "remember" the moustache, indicating a conscious recollection, when in fact the eyewitness had no conscious recollection of the moustache and should have therefore responded "know". As a result of this misuse of terms the police officer could make an inaccurate decision about the accuracy of the eyewitnesses information and proceed down the wrong investigational path.

The only way this problem was uncovered was through the debriefing of the participants at the end of their interview session. The participants were asked to explain what they were trying to convey when using "remember" or "know". This open ended question encouraged the participant to explain in some detail what meaning he/she had been trying to convey. The participants who had not misused terms explained they were trying to convey to this researcher the information as outlined in the original definitions provided of "remember" and "know" (e.g., see scoring "remember" or "know" on p.85). On the other hand, the explanations given by those who misused the terms was somewhat surprising. In the pilot study it was noted in a transcript of debriefing phase of participant 8 when he/she used "remember" and "know" they were trying to convey the following, "0.K, a know judgement is when you know for sure and a remember judgement ... Kind of vague, like, you're not sure" (another example appears on p.86).

It appeared evident from this response and others of a similar nature that some of the participants misusing the terms appeared to be trying to express their confidence in the information, rather than whether or not they were having a conscious recollection or no conscious recollection of the information. On the other hand some participants who were misusing the term indicated that they could see the information in their mind, so they were indicating "know". By indicating they could see the information in their mind they would indicate some form of conscious recollection of the event. For example, participant 8 was noted in their transcript to explain what "know" meant to them as follows: "I know...when, I knew something when...I guess I can just see it

happening. Like I knew he did certain things...". It may be that what is occurring was the participant still had a conscious recollection of the event and was trying to indicate how strong they felt about the conscious recollection of the event.

I would suggest one explanation of the problem may well be the result of how the term "know" is used by the English speaking population. I looked up "know" in the Gage Canadian Dictionary (1983) and I noted there is no reference in the definition of know indicating the word could be used to indicate a person had no conscious recollection of information. It is abundantly clear, to me, the definition of know which is used by the members of the English speaking component of the population is to "emphasize (they) have a fact firmly in their mind, they are sure" (Gage Canadian Dictionary, 1983, p.461). It was as if the participants who misused "know"were trying to express they were very confident about the information they had supplied.

I would suggest the participants who volunteered for the study would be familiar with how the term "know" was used in every day conversation and would be using the term regularly to express how confident they were about something. As this was the expected English speaking definition of "know", why then were some participants able to adopt the studies' definitions and use them correctly for the study and not revert back to their normal use of the term? I would suggest what has occurred is the participants who were able to use the terms as defined, at the beginning of the accuracy phase, are the type of people who can follow instructions and change easily. The other participants may have been participants who can not follow new instructions easily and require some practice at a procedure before they can implement it properly.

Like some of the police officers in the police training study, some failed to follow the instruction sheet for the ECI and when this happened they reverted back to their old habits quickly. The participants who misused the terms may have found it difficult to implement the new definitions, therefore they reverted back to their everyday use of the term "know". I would suggest at the conclusion of the accuracy phase if the participants who had misused the terms were simply asked if they had used the terms properly they would have replied yes. If these same participants were asked more specifically if they had any problems with using "remember" or "know" they would indicate no, because they would not be aware they were experiencing any problems.

I would suggest the discovery of this problem causes a concern about research already conducted using the terms "remember" and "know" as defined by Tulving (1985). This present research would suggest the misuse of terms may have arisen in other research studies and gone unnoticed. The only way I uncovered the problem was when inquiries were made in the debriefing stage and the participants were allowed to use a free narrative to explain what they were trying to convey to me using the terms "remember" and "know". It is therefore important when looking at the research which is being conducted using "remember" or "know" to determine if the participants were debriefed after their participation in the study and were allowed to explain what they were trying to convey when they used the terms. For example, a word recognition study could be designed so that the participants were to respond "remember" when they had a conscious recollection of the word and "know" when they had no conscious recollection of a word. From my research there is a suggestion some obtained solely on the basis of the numbers of "remember" and "know" the researcher would have an entirely inaccurate picture of what had transpired. I would suggest even if these participants had been debriefed after their participation in the study and were not allowed to explain what they were trying to convey in response to an open ended question, their misuse of the terms could go undetected and the results of the study could have been compromised. The researcher could leave with the impression everything was done correctly when in fact it was not.

Although I have taken some time to address the problem related to the misuse of the terms this was not meant to imply an accuracy phase using the terminology was not effective; it was. It must be kept in mind that there are some people within our population who have trouble with the use of scales and would prefer to use terms to express themselves. For example, during the last study conducted in this research project participant 8 was asked his/her opinion on the use of confidence levels.

Participant number 8 advised the following:

Participant: "No I can't scale things".

Researcher: "remember know is okay for you"?

Participant: "Yeah".

However, at this point in the development of an accuracy phase the "remember" or "know" terms should not be utilized until further research has been conducted to deal with the concerns raised.

If further research is conducted in the area of using terms in an accuracy phase

a great deal of care is needed to select the terminology to be used in research and in the field. I would suggest the following points should be considered during this process.

- The terms selected should be consistently used in the manner they were defined in a standard English dictionary or the standard dictionary for the language in which the interview is conducted.
- The terms selected have to be easily recognizable by all the members of the population from the illiterate to the highly educated.
- 3. Careful consideration has to be given to the use of terms for different ethnic groups, as many countries such as Canada are made up of a wide variety of people who speak different languages and have different cultures. Terms may have to be selected from all languages to meet the needs of the population the police officers have to respond.
- 4. When further research is conducted in the matter, or when any research is conducted using terms, it is essential all the participants be debriefed at the conclusion of the accuracy phase to determine what they were trying to convey to the researcher with the use of the terms. Also when the appropriate terms have been selected and implemented in the field, police officers will also have to be trained to include a debriefing of the eyewitness after every accuracy phase to determine what the eyewitness was trying to convey with the use of the terms.

In the present research project there were no problems noted with the participant's understanding of the levels of confidence, and how they were to be used.

Even though no problems were noted, it would be prudent for police officers to debrief the eyewitness at the end of the accuracy phase to determine what they were trying to convey to the police officer with each number they used on the scale. It may be the eyewitness did not use the scale exactly the way the police officer had instructed. For example, when participant 15 was asked to indicate how confident they were about when they said: "the man was good looking" the participant advised the following: "on a scale of 1 to 10 a 4". Participant 15 had taken it upon himself/herself to change the scale being used, although this participant advised when they did change the scale others may not. Therefore, conducting a debriefing at the end ensures there is no misunderstanding of what the eyewitness was trying to convey.

The majority of the participants that were asked in this research indicated they preferred to use a confidence scale rather than the terms, "remember" or "know". I feel the use of confidence levels would allow the police officer to have a clearer understanding of how an eyewitness actually felt about the information provided. This would put the police officer in a stronger position to assign a priority for follow up to each piece of information obtained during the interview. For example, a 7 would allow a police officer to be more confident the information supplied was correct. The use of number1, 2, 3, 4, 5, and 6 would suggest different degrees of confidence and would help in the prioritization of follow up. All information with a confidence level of 7 would have a higher priority for follow up than information with a confidence level of 6.

Information with a confidence level of 6 would have a higher priority for follow up than information with a confidence level of 5 and so on. Unfortunately, with the number of

participants used in this study there was insufficient data generated from the participants in the lower confidence level to examine this further.

It is obvious at this point in the research combining a conscious recollection or no conscious recollection procedure with a confidence level scale could not be implemented until further research is conducted to rectify the misuse of terms.

However, it is important to consider whether or not to utilize both procedures during an accuracy phase as was done in this research project. Conducting a full ECI interview takes a considerable length of time and can be extremely tiring for both the police officer and the eyewitness. Adding an accuracy phase with both procedures adds to the total time of the actual interview and it is extremely hard for the police officer and the eyewitness to stay focused. In the last study of this research project participant number 5 expressed the difficulty of staying focused this way:

An: "That, that was great. Although it did...I had to pull myself back and... really listen to what you were saying cause I was kind of losing ... I dunno, I just wasn't paying to much attention by the end. By all these 'remember', 'know'... 'remember', 'know' and then all these seven to one".

The benefit of having both procedures is it would increase the information available for the police officer to evaluate the information supplied. For example, in our armed robbery example, with the confabulated moustache, if during an accuracy phase in this investigation both procedures were implemented then the police officer would learn that the participant had no conscious recollection of the moustache, and also the participant indicated a low confidence level concerning the moustache being on the man.

If both procedures were to be adopted in the accuracy phase, there is a possibility of introducing a break. However, during this study there were no breaks taken and therefore no comments can be made concerning the effect of the break on accuracy or what procedures would have to be considered to get the participant back on track.

It is my opinion an accuracy phase using confidence levels could be implemented fairly quickly in the field so long as proper training takes place around all the issues previously discussed in the discussion section of Pilot Study Two training phase of this research. It is imperative the police officers using this technique become proficient in taking notes, and have the ability to break down the information supplied into the component parts for the accuracy phase to be effective. This ability has to be combined with (a) a good understanding of the interview procedures available to interview eyewitnesses, (b) a good understanding how to use open ended questions, (c) an understanding of how memory works, (d) issues around fallibility of the police officer's memory, (e) the value of the debriefing phase at the conclusion of any interview to check on what the eyewitness was trying to convey to the police officer, and (f) procedural issues related to the implementation of an accuracy phase using a confidence scale. For the skills related to interviewing eyewitnesses to develop to a high level, it is imperative this information is taught completely at the recruit training level and then expanded on with follow up training once the police officer has been exposed to some real interviews in the field. Police officers already in the field could be updated on these procedures so long as adequate time was allowed for the training

to take place. It would be crucial that the front line officers' immediate supervisors be trained in this procedure, to ensure the quality of the procedure is maintained.

When discussing the issues of implementation of interview techniques and accuracy phase one must take into account the pressures put on the police officer's time. It is unrealistic to suggest that the complete ECI should be used in the interview of all eyewitnesses. Based on the large number of correct relevant facts obtained during the Phase 1 of the ECI it is my opinion that it is possible to shorten the ECI procedure and still incorporate an accuracy phase so it could be effectively used by first responders. Implementing this procedure would put these police officers in a better position to elicit uncontaminated relevant information and be more confident in determining which information from an eyewitnesss was correct. As a result immediate field investigative decisions could be made. A complete ECI and accuracy phase could be used by follow up investigators.

I would suggest a shortened version of the ECI made up of only the mental reinstatement and the accuracy phase consisting of only confidence levels would be very effective in the field for the first police officer on the scene. It should be pointed out that although this shorter version of the ECI would provide the first police officer on the scene with a considerable amount of information that could be used to handle the immediate crisis it will still be important to re-interview the eyewitness at a later date using the complete ECI. As the results indicated the ECI using three phases and four phases each revealed an average of 5 and 7 more relevant facts. One or more of these relevant facts obtained in the other phases of the ECI could assist the police

officer in determining what actually happened, what weapon was used, and the identity of the culprit(s). Therefore, the follow up interview would also be important to the overall completeness of the investigation.

It is my opinion that for the shortened version of the ECI to be effective in the field the following procedure would have to be implemented.

- 1. Identify and respond to the eyewitness's immediate needs.
- 2. Take time to get the eyewitness to a quiet area.
- 3. Explain to the eyewitness the need to conduct the interview.
- 4. Explain the mental reinstatement and recall everything phase.
- 5. Allow a few moments for the eyewitness to mentally reinstate the mental and physical environment just before the event.
- 6. Let the eyewitness explain what happened in a free flowing narrative, ensuring that there are no interruptions.
- 7. Take accurate notes and break information down into component pieces.
- 8. Ensure an audiotape is being made of the interview.
- 9. Ask only a few key open ended questions, such as tell me more what the man was wearing, tell me more about the weapon and so on.
- 10. Explain to the eyewitness the confidence level phase and ensure they understand how the confidence scale is to be implemented.
- 11. Repeat component pieces of information in notes and ask the eyewitness how confident they are about each individual component.

Once these steps have been completed the police officer conducting the interview will be in a position to quickly evaluate the information right at the scene.

This in turn will allow the police officer to develop immediate investigational strategies based on information they are more confident is correct. Although this procedure sounds as if it will take a great deal of time, in reality it does not, so long as the police officer conducting the process has been provided with the appropriate training and given an opportunity to carry out the procedures.

The importance of providing these skills in recruit training should be evident, as junior officers are usually the first police officers on the scene. It is essential they have the basic skills to implement the procedure when they come out of recruit field training. Having the appropriate knowledge of these skills when going into the field will allow these police officers to expand their abilities with practice in real situations. As they become more proficient at the procedure they should become very effective eyewitness interviewers. This in turn will demonstrate to citizens and the courts a high level of professionalism and improve the overall effectiveness of the investigation.

It is my opinion more research is necessary around the use of confidence levels over a wider range of the population base. The final study in this research project only involved 18 participants who were all university students and it is therefore only representative of a small portion of the population. The second area which needs to be examined is the effectiveness of the accuracy phase incorporated with just the mental reinstatement and recall everything phase of the ECI and the quantity of relevant information obtained during this phase. The following field study is proposed. In the

majority of corner stores, gas bars and major financial institutions ongoing video surveillance is being conducted. As a result there has been a tremendous increase in the number of videotapes available of armed robberies. Police officers who customarily provide first response to these situations and who are confident in the skills previously noted could be trained in the use of the ECI and accuracy phase implementation. These first responders would be able to conduct the shortened version of the ECI with the eyewitness at the scene. They could follow up the interview with open ended questions designed to elicit key information required by the first responder. Using their notes, the first responders would then implement the accuracy phase using confidence levels. These interviews need to be audio taped. A transcript of the interview, the videotape of the armed robbery and the notes will be turned over to researchers for evaluation. The relevant information could be identified by viewing the videotape. The information provided in the mental reinstatement, recall everything phase and open ended questioning phase could then be analyzed to determine the amount of relevant information and peripheral information obtained. The responses given by the eyewitness during the accuracy phase could then be checked against the videotape of the armed robbery to determine accuracy. This would be a valuable research project because the participants would be from a wide range of the population, the participants would have actually been involved in a traumatic event, and the participants would not have had an opportunity to develop cues to help them recall as they do in laboratory memory studies. This study would also allow for an evaluation of the first responder's implementation of the procedures. Once this research is in place, a component to

evaluate any terms used to describe conscious recall and no conscious recall of the information could be implemented.

As mentioned, the design of this study enabled the collection of considerable data which will allow me to examine other issues related to the CI such as.

- 1. The relevant information being missed.
- 2. The amount of peripheral information obtained.
- 3. Where errors and confabulations occur during the phases.
- 4. At what point does the "tell me more" prompt become ineffective.

Concern over these issues has been generated over the last few years and requires further examination. An evaluation of the police training days is also being completed and recommendations for training will be reported.

References

- Avis, W. S., Drysdale, P. D., Gregg, R. J., Neufeldt, V. E., & Scargill, M. H. (1983). *Gage Canadian Dictionary*, (p.641). Toronto: Gage.
- Berkerian, D. L., & Dennett, J. L. (1994). *The fate of errors produced under the cognitive interview.* Paper presented at the Practical Aspects of Memory Conference, Maryland, July 1994.
- Bower, G. H., Black, J. B., & Turner, T. J. (1979). Scripts in memory for text. *Cognitive Psychology, 11*, 177-220.
- Byerstein, B. L. & Ogloff, J. R. P. (1993). Hidden memories: Fact or fantasy? *The Rational Enquirer, 6 (2),* 1-9.
- Canadian Bill of Rights. (1985). Part 1 Recognition and declaration or rights and freedoms. In *Pocket Criminal Code 2000*, (p.641). Scarbourgh: Carswell.
- Fisher, R. P., & Geiselman, R. E. (1992). *Memory-enhancing techniques for investigative interviewing: The cognitive interview,* Springfield: Charles C. Thomas.
- Fisher, R. P., Geiselman, R. E., & Raymond, D. S. (1987). Critical analysis of police interview techniques. *Journal of Police Science and Administration*, 15, 177-185.
- Fisher, R. P., Geiselman, R. E., Raymond, D. S., Jukevich, L. M., & Warthaftig, M. L. (1987). Enhancing enchanted eyewitness memory: Refining the cognitive interview. *Journal of Police Science and Administration*, *15*, 291-297.
- Fisher, R. P., Holst, V., & Pezdek, K. (1992). Scripts for typical crimes and their effects on memory for eyewitness testimony. *Applied Cognitive Psychology*, *6*, 537-587.
- Gardiner, J. M., & Java. (1993). Recognizing and remembering. In A. Collins, M. A. Conway, S. E. Gathercole, & P. E. Morris (Eds.), *Theories of Memory* (pp.163-188). Hillsdale, NJ: Erlbaum.
 - Geiselman, R. E. Prosecutors Note, no date.
- Geiselman, R. E., Fisher, R.P., Cohen, G., Holland, H., & Surtes, L. (1986). Eyewitness responses to leading and misleading questions under the cognitive interview. *Journal of Police Science and Administration*, *14*, 31-39.

- Geiselman, R. E., Fisher, R. P., Firstenberg, I., Hutton, L. A., Sullivan, A., Avertissian, I. M., & Prosk, A. (1984). Enhancement of eyewitness memory with the cognitive interview. Journal of Police Science and Administration, 12, 74-80.
- Geiselman, R. E., Fisher, R. P., MacKinnon, D. P., & Holland, H. L. (1985). Evewitness memory enhancement in police interviews: Cognitive retrieval mnemonic versus hypnosis. Journal of Applied Psychology, 70, 401-412.
- Geiselman, R. E., Fisher, R. P., MacKinnon, D. P., & Holland, H. L. (1986). Enhancement of eyewitness memory the cognitive interview. American Journal of Psychology, 99, 385-401.
- George, R. (1991). A field and experimental evaluation of three methods of interviewing witnesses and victims of crime. Unpublished Master's Thesis, Polytechnic of East London.
- George, R., & Clifford, B. (1991). A field comparison of the cognitive interview and conversation management. Paper presentation at the British Psychological Society Annual Conference, Bournemouth, U.K.
 - Harren, R. (1976). Das Vernehmungsprotokoll. Krinalistick, 7, 313-317.
 - Harris, R. (1973). The Police Academy. New York: Wiley.
- Higham, P. A., & Roberts, W. T. (1996a). Measuring recall performance. Psycologuy 7(17), witness memory.13. higham.
- Higham, P. A., & Roberts, W. T. (1996b). Analyzing states of consciousness during retrieval as a way to improve the cognitive interview. Psycologuy 7(17), witness memory.4. higham.
- Holmes, D. (1990). The evidence of repression: An examination of sixty years of research. In J. Singer (Ed.), Repression and Dissociation: Implications for Personality, Theory, Psychopathology, and Health (pp.85-102). Chicago: University of Chicago Press.
- Jacoby, L. L., & Kelley, C. M. (1988). Revealing unconscious influences: The advantages of opposition. Unpublished manuscript.
- Kebbel, M. R., & Milne, R. (1998). Police officers' perceptions of eyewitness factors in forensic situations. Journal of Social Psychology, 138, 323-330.

- Kebbel, M. R., Milne, R., & Wagstaff, C. J. (1999). The cognitive interview: A survey of its effectiveness. Psychology, Crime and Law 5, 101-115.
- Koehnken, G. (1995). Interviewing adults. In R. Bull & D. Carson (Eds) Handbook of Psychology in Legal Contexts. Chichester: Wiley.
- Koehnken, G., Mantwill, M., Aschermann, E., & Vieweg, I. (1992). Ein Vergleich des Kognitiven Interviews mit einem Strukturierten Interview und einer Kontrollgruppe ohne Training (A comparison of the cognitive interview with a structured interview and a no training control group). Universitaet Carswell Kiel: unpublished manuscript.
- Koehnken, G., Thuerer, C., & Zorberbier, D. (1994). The cognitive interview: Are interviewers memories enhanced too? Applied Cognitive Psychology, 8, 13-24.
- Koriat, A., & Goldsmith, M. (1994). Memory in naturalistic and laboratory contexts: Distinguishing the accuracy-orientated and quantity oriented approaches to memory and assessment. Journal of Experimental Psychology: General, 123, 297-316.
- Koriat, A., & Goldsmith, M. (1996). Monitoring and control processing the strategic regulation of memory accuracy. Psychological Reviews, 103, 490-517.
- Landauer, T. K. (1986). How much do people remember? Some estimates of the quantity of learned information in long term memory. Cognitive Science, 10, 477-493.
- Lanning, K. V. (1991). Ritual Abuse; A law enforcement view or perspective. Child Abuse and Neglect, 15, 171-173.
- Laurence, J. R., & Perry, C. (1983). Hypnotically created memory among highly hypnotized subjects. Science, 222, 523-524.
- Lindsay, D. S. (1990). Misleading suggestions can impair eyewitnesses' ability to remember event details. Journal of Experimental Psychology: Learning, Memory and Cognition 165 (6), 1077-1083.
- Lindsay, D. S., & Read, J. D. (1994). Psychotherapy and memories of childhood sexual abuse: A cognitive perspective. Applied Cognitive Psychology, 8, 281-338.
- Lipton, J.P. (1977). On the psychology of eyewitness testimony. Journal of Applied Psychology, 62, 90-93.
- Loftus, E.F. (1979). Eyewitness testimony. Cambridge, MA: Harvard University Press.

- Loftus, E.F., Coan, D., & Pickrell, A. (1996). Manufacturing false memories using bits of reality. In L. M. Reder (Ed.), Implicit Memory and Metacognition (pp. 197-220). Mahwah, N.J.: Erlbaum.
- Loftus, E.F., & Coan, D. (1996). The construction of childhood memories. In D. Peters (Ed.), The Child Witness In Contest: Cognitive, Social And Legal Perspectives. New York: Kluwer.
- Loftus, E.F., Manber, M., & Keating, J.F. (1983). Recollection of naturalistic events context enhancement versus negative cuing. Human Learning, 2, 83-92.
- Loftus, E.F., Miller, A.G., & Burns, H. J.(1978). Semantic integration of verbal information into a visual memory. Journal of Experimental Psychology: Human Learning and Memory, 4, 1, 19-31.
- MacKinnon, D.P., O'Reilly, K.& Geiselman, R. E, (1990). Improving eyewitness recall for licence plates. Applied Cognitive Psychology, 4, 129-140.
- McCloskey, M., & Zaragoza, M. (1985). Misleading post event information memory for events: Arguments and evidence against memory impairment hypotheses. Journal of Experimental Psychology: General, 114. 381-387.
- McEwan, J. (1993). Where the prosecution witness is a child: the Memorandum of Good Practice. Journal of Child Law, 5(1), 16-20.
- Melton, A.W. (1963). Implications of short-term memory for a general theory of memory. Journal of Verbal Learning and Verbal Behavior, 2, 1-21.
- Memon, A. (1991). Introducing the cognitive interview as a procedure for interviewing witnesses. Paper presented at the Annual Conference of the British Psychological Society, Bournemouth.
- Memon, A., & Bull, R. (1991). The cognitive interview empirical support, evaluation and practical implications. Journal of Community and Applied Social Psychology, 1, 291-307.
- Memon, A., & Bull, R. (1991). The cognitive interview: It's origins, empirical support, evaluation and practical implications. Journal of Community and Applied Social Psychology, 1, 291-307.
- Memon, A., Holley, A., Milne, R., Koehnken, G., & Bull, R. (1994). Towards: Understanding the effects of interviewer training evaluating the cognitive interview. Applied Cognitive Psychology, 8, 641-659.

- Memon, A., & Higham, P.A. (1999). A review of the cognitive interview. Psychology, Crime and Law, 5, 177-196.
- Memon, A., & Koehnken, G. (1992). Helping witnesses to remember more: the cognitive interview. No Publication noted.
- Memon, A., Wark, L., Holley, A., Bull. R., & Kohenken, G. (1996). Interviewer behavior in investigative interviews. Psychology, Crime and Law, 13, 181-201.
- Milne, R. (1997). Analysis and application of the cognitive interview. Unpublished Phd. Thesis, University of Portsmouth.
- Milne, R., & Bull, R. (1999). Investigative interviewing: Psychology and practice. Chichester: John Wiley & Sons.
- Newlands, P. J., George, R. C., Towell, N. A., Kemp, R. I., & Clifford, B. R. (1999). An investigation of description quality from real-life interviews. Psychology, Crime and Law, 5, 145-166.
- Ofshe, R. J. (1992). Inadvertent hypnosis during interrogation: False confession due to dissociative state: Misidentification multiple personality and the satanic cult hypotheses. International Journal of Clinical and Experimental Hypnosis, 40, 125-156.
- Perry, D.J., & Chapman, A.J. (1992). Applying the cognitive interview procedures to road accident witnesses. Paper presented at the annual conference of the British Psychological Society.
 - Piaget, J. (1962). Plays, Dreams And Imitation In Childhood. New York: Norton.
- Rand Corporation. (1975). The criminal investigation process. Rand Corporation technical report 1-1777,1-3. Santa Monica, California.
 - Regina v C. C. F., File No: 2518. Supreme Court of Canada, Dec.18, 1997.
- Sanders, G.S. (1986). The usefulness of eyewitness research from the perspective of police investigators. Unpublished Manuscript, State University of New York at Albany, Albany.
 - Tulving, E. (1974). Cue-dependent forgetting. American Scientist, 62, 74-82.
- Tulving, E. (1985). Memory and Consciousness. Canadian Psychology, 26, 1-12.

- Tulving, E., & Thomson, D. M. (1973). Encoding specificity and retrieval processes in episodic memory. Psychological Review, 80, 353-370.
- Wark, L., Memon, A., Holley, A., Bull, R., & Koehnken, G. (1994). The effects of participation and interview techniques on children's memory. Poster presentation, BPS Conference, Brighton.
- Wicks, R.J. (1974). Applied psychology for law enforcement and corrections officers. New York: McGraw Hill.
- Yuille, J.C. (1984). Research and the police: A Canadian example. International Review of Applied Psychology, 35, 5-23.
- Yuille, J.C., & Tollestrup, P.A. (1990). Some effects of alcohol on eyewitness memory. Journal of Applied Psychology, 75, 268-273.
- Yuille, J.C. (1998). The step-wise interview: A protocol for interviewing children. Investigative Training Manual, Ministry for Children and Families, Province of British Columbia, 134-137.

Appendix A

Informed Consent Form
Note: All research involving human participants at UNBC falls under the authority of the
Human Research Committee. The University and those conducting this research
subscribe to the ethical conduct of research and confidentiality which protect the
students best interests at all times. Presentation of data (e.g., at conferences, in
papers) will be in the form of group statistics (e.g., means, standard deviations). If
necessary to discuss particular individual subject's data no names will be used.
Researchers: If you have any questions regarding this consent for or any other
questions pertaining to this experiment contact Dr. Phil Higham at 960-6500.
Purpose: the purpose of this experiment is to investigate memory processes underlying
eyewitness memory.
Requirements: Subject willing to participate will view a videotape. They will then be
interviewed with a variant of the cognitive interview (Fisher and Geiselman, 1992) to
determine what they remember about the videotape.
<u>Duration</u> : The experiment from start to finish should take approximately one hour.

Potential Risks: There are no anticipated risks for this research.

Right to withdraw: If at any time during the experiment any student should feel uncomfortable they can withdraw without penalty.

I have read the	description of	f the experiment and	I am willing to	participate.

Name:					
Signature	Date				

Appendix B

Enhanced Cognitive Interview Participant 13

And this is subject number thirteen. All right. So...because it's sort of ya 1 QU: 2 know, we're trying to keep everything consistent, I'll be reading a lot of this to you, which I normally wouldn't kinda do. All right? So....just have a 3 listen to this first before we get started. I'd like ya to now listen to the 4 5 following instructions. All right? Seven days ago today you watched a 6 crime video for a few minutes. In a few minutes, I'll be asking you to 7 describe to me in detail everything you can about the video. When we 8 witness an event, we record the information in our minds and store it in 9 different ways. The procedures I'll be following during the interview will be 10 proven techniques to help you access as much of this stored information 11 about the video you saw. During the interview, I'll be taking detailed notes 12 all right? Here. So I'd ask that you take your time. All right? So just 13 before we get started. I just wanna explain this to ya now and so don't do 14 anything just yet, all right? 'Cause I want ya to recreate in your mind all the 15 environmental aspects that existed at the time just as the video was 16 starting. That is, recreate where you were, where you were setting, what 17 the room looked like, what the TV looked like, how the chair felt, any sounds or smells and so on. Also, think about how you were feeling 18 19 emotionally and physically just before the video started. It's important for 20 you to remember that when you're describing the video to me that you tell

- 21 me everything, no matter how irrelevant or insignificant you think it is, or
- even if you only have partial recall. All right?
- 23 AN: Uh huh.
- 24 QU: Now in a couple seconds I'll get you to recreate in your mind the
- 25 environment that we talked about. Now, once you do that, once you feel
- that you got that recreated in your mind sufficiently enough and it's just as if
- you see the video come on and you start telling me about the video.
- 28 AN: Okay.
- 29 QU: From start to finish. I don't need to know, ya know, how you were feeling,
- where you were sitting, all that kinda stuff in the room, I want ya just to
- 31 recreate that in your mind
- 32 AN: Uh huh.
- 33 QU: Okay? Ya got any questions about that?
- 34 AN: No
- 35 QU: All right. So do ya wanna take a minute then or a few seconds and think
- about that and as soon as you feel that ya have that all in your mind, then
- just start as the video comes on and tell me, from start to finish, what you
- 38 see.
- 39 AN: In...the beginning of the video...I saw a caucasian male...dark hair...maybe
- 40 around six feet tall, two hundred to two ten...wearing a white or light colored
- shirt and jeans....he was standing....it was nighttime. He was standing by a
- gate, smoking a cigarette looking in the window of a house. It was light

inside and there was a man....inside the room of the house, with the light on. It was on the second floor I think....of the house. And there was bushes around the gate. And the gate was closed. Like a wrought iron gate. He watched the man for a minute and....opened up the gate....he walked by a bush and I don't know if he threw something in the bush or, or just rubbed against it and walked towards the house. I can't recall whether the, the man that was inside the house...shut off the lights and left the room....or he just left the room, but the, the subject walked towards the house.....up to the side of the house. He looked in a window and checked to see if it was locked or not and it was locked. So he moved on to....along the side of the house. And to sliding glass doors. And checked the doors and they were open. He put out his cigarette, threw it on the ground and put it out. Went into the house....he went into the kitchen, opened up the 'fridge, took out a bottle of beer....took the top off....and possibly took a drink outta the beer...and put it down on the counter in the kitchen. Closed the 'fridge door. Then he went...oh and he, he....took a knife.....like a butcher knife....I'm not sure if it was on the counter or in the drawer and he went up....stairs....and there was someone in....the washroom of a...off the bedroom. Oh, I forgot one part...he, he....there was a den or an office....and there was a telephone there and he took the phone off the hook and then he proceeded into the bedroom and there was a woman or someone in the washroom, she came out....and went through the room and

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

65 up some stairs, a short flight of stairs into another room. He followed her...and....then....it showed him in the kitchen. He had..there was blood on 66 the knife, he washed the blood or tried to wash the blood off under the 67 68 tap....he then put the knife down in the sink...he wiped his hands...and his face with a towel that was in the kitchen....and hung the towel back up 69 70 and...left the room. And...that's all I remember. 71 QU: Okay. All right. It's sometimes helpful for a person to recall events in 72 reverse order. All right? That is, you said that the last thing you remember 73 is he left the room, so I would ask you then to tell me what happened just 74 before he left the room. You can pick wherever you want to start and 75 gimme that piece of information, then I'll continue to ask you what 76 happened just before where you started.....and work our way backward 77 through the video. All right? So the last thing that you said was that he left 78 the room. Tell me what happened just before he left the room. Now we're 79 talking about the kitchen. 80 AN: He hung the kitchen towel up. The towel up. 81 QU: And just before he hung the kitchen towel up, what happened? 82 AN: He wiped his face and his hands with the towel to try and wipe the blood. 83 He had, he had some blood on his face as well. He didn't do a very good 84 job of it either. 85 QU: And just before he wiped his face and hands with the towel, what happened just before that? 86

- 87 AN: He had the knife.....he had washed it off under the tap and placed it in the
- 88 sink.
- 89 QU: 'Kay. And just before he washed the knife off and placed it in the sink, what
- 90 happened before that?
- 91 AN: He....it showed him entering the room. Entering the kitchen.
- 92 QU: 'Kay. And just before he entered the kitchen, what happened?
- 93 AN: That was when he was in the room adjacent to the bedroom...or bedroom,
- l'm not sure....which it was....where he was...stabbed the woman.....l think.
- 95 QU: 'Kay and just before he was in the room where he stabbed the woman?
- 96 AN: He was outside of the door and watched her go from the bathroom, through
- 97 the room and up the stairs and then he followed her up the stairs
- 98 QU: Right. Just before he followed....followed her up the stairs....or watched her
- come out of the bathroom and go up the stairs and he followed her, what
- happened just before that?
- 101 AN: He was....walking through the house, towards the room and he stopped at
- the door of the, the office, or study and reached in and took the phone off of
- the hook
- 104 QU: 'Kay, just before he was walking through the house and stopped at the den
- or office and took the phone off the hook, what happened just before that?
- 106 AN: He....came from...the kitchen.
- 107 QU: Just before he came from the kitchen what happened just before that?
- 108 AN: He was in the kitchen and he took the knife from the counter or a drawer, I

- 109 can't remember which.
- 110 QU: 'Kay. All right. And just before he took the knife from the counter of the
- 111 drawer, what happened?
- 112 AN: He....had taken a beer or drink outta the 'fridge, take, taken the top off and
- he took a drink out of it and placed it on the counter.
- 114 QU: 'Kay and just before he went to the 'fridge and took out a drink....or a beer
- or a drink and took the top off and drank, drank out of it and placed it on the
- 116 counter, what happened?
- 117 AN: He was...outside.....and.....I think it showed him walking through the dining
- room.....that he had entered through the sliding glass doors...from outside.
- 119 QU: And just before he entered through the sliding glass doors from the outside,
- what happened just before that?
- 121 AN: He was outside the door and he had checked it to see if it was unlocked
- and it wasn't locked and he'd opened it and just before he went inside, he
- put..threw down his cigarette he was smoking, on the ground.
- 124 QU: And just before he threw the cigarette down on the ground what happened
- just before that?
- 126 AN: He had walked along the.....side of the house, looking in the windows and
- checking....to see if they were locked or not and he'd just come from
- another window...on the corner of the house, when he'd first approached
- the house
- 130 QU: Okay. And just before he had come from the other window and he had

131	approached the house, what happened just before that?
132 AN :	Hehad come from the gate where he'd entered the property and he had
133	brushed up against a bush that wasas he was approaching the house.
134	And he was watching the second floor window.
135 QU:	And just before he entered the property and he'd come from the gate, what
136	happened just before that?
137 AN:	He waswell he'd gone through the gatehe wasbefore he went
138	through the gate, he was standingsmoking a cigarette watching a person
139	in thewindow of the house, second floor
140 QU:	'Kay. And just before he was standing smoking a cigarette, watching the
141	woman in the house, or watching someone in the house on the second
142	floor, what, what happened before that?
143 AN:	HeI can't remember where the video started, whether he had walked up
144	to the gate or he was already standing there.
145 QU:	Good. All right. 'Kay, research has shown that it is sometimes helpful for a
146	person describing an event to mentally change perspective. All right? And
147	chaand describe that event from that perspective. So what I'd like ya to
148	do nowis to change perspective and that is to describe the events, from
149	beginning to end and start at the beginning of the video again and go to the
150	end as if you were lookingas if you were looking down through a video
151	camera positioned above the scene. So in other words, in the outside
152	scenes, you can assume you were like in a helicopter looking down on the

video and when we're talking about what's happening in the house, just 153 assume that you're looking through a video camera in the ceiling, looking 154 down. Okay? Again, it's important for you to tell me everything, no matter 155 how irrelevant, insignificant or even if you only have partial recall. All right? 156 157 Do you understand what I want you to do? 158 AN: Uh huh. 159 QU: Okay, so take a couple seconds and just think about that from that perspective and then just go ahead and start and go right through, start to 160 161 finish 'Kay. There's a man....do you want me to describe him again or....? 162 AN: 163 QU: It's up to you. 164 AN: Okay. He has dark hair and a light, white colored shirt and jeans and he's 165 standing behind a closed gate. He's smoking a cigarette.....and he's 166 looking...through the gate, across the yard into the window of a house. It's nighttime and the light is on inside the room....a room inside the house and 167 168 there's someone in the house....who he's watching. He....opens up the 169 gate...walks through the gate....walks into the yard, past some bushes. 170 He's till watching up towards the window...and he walks across the yard to 171 the side of the house and it's....like a corner of the house. He...checks the....he walks towards the left, his left.....and checks the first window he 172 173 comes to and it's locked. He keeps on walking along the side of the

house....and it's a. it's an el.....or an inner corner of the house and he walks

along and there's sliding glass doors..on the other wall and he checks them....to see if they are locked and they are not locked. He....throws his cigarette on the ground.....and.....opens up the sliding glass door. And steps inside the house. I believe it's a dining room he's in, walks through the room, it's dark...towards the kitchen, which has the light on. He walks into the kitchen....opens up the 'fridge.....takes out a, a beer, a drink in a bottle.....takes the top off...takes a drink out of it, closes the 'fridge door, puts the bottle on the counter and....looks around the kitchen. He picks up a knife...a butcher knife....and takes it with him out of the room. He.....he goes up....I don't know if he goes upstairs, but he goes through a hallway.....he passes by a....stops by a door...open door to an office room. He reaches....leans inside the room, reaches inside the room, picks up the receiver of the phone...puts it down beside the phone. He...then goes down....continues to go down the hallway...he gets to the door of a room....a bedroom I believe and he looks inside the room and...a woman comes out of a bathroom inside...like an ensuite to the bedroom. She comes out, walks around the bed and up the ... a small set of stairs on the right hand...no, the bathroom is on the left hand side and the, the stairs are on the right. She goes up the stairs, he follows her....she goes into a room at the top of the stairs and he follows her in the room and...stabs her I guess. He then...it shows him coming into the kitchen and he's holding the, the butcher knife with.....it's got blood on it. He turns on the, the kitchen

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195.

sink and runs water over the knife, places the knife down in the 197 198 sink....shuts of the water....take a towel that's hanging on the...counter side of the 'fridge...and wipes his hands, tries to wipe the blood off his hands 199 and also his face and hangs the towel back up and he then....leaves the 200 201 kitchen. And I can't remember anything after that. All right. 'Kay, now what I'd like you to do.. is to take a couple of seconds 202 QU: 203 and think about all the times you see the man and I would like you to start up at the top of his head and proceed down his body and describe to me 204 205 everything that you can recall about the man 206 AN: 'Kay, he had dark brown hair, it was....probably.....an inch or an inch and a 207 half long....short, but not really, really short, not shaved. Straight....he 208 looked like he had dark eyes.....probably a medium complexion, 209 caucasian....he had no facial hair. He was wearing a white...t-shirt....or 210 sweatshirt....he was....probably I guess....he.....not heavy build, 211 but....medium to heavy build I guess. He looked like he was about six feet 212 or so.....two hundred to two hundred and fifteen pounds..he wasn't....he 213 wasn't over, like overly weight..but he was a big....he looked like he was a 214 big guy. A little bit of a stomach. He was wearing jeans and...no belt that I 215 could see or anything and I think he was wearing running shoes.....white. I couldn't see any tattoos or any kind of...I can't remember any marks or 216 217 anything on him. Or jewelry or anything. He was pretty plainly.....that's it, I 218 think.

All right. I'd like ya to do the same now with the woman....that was in the 219 QU: 220 upstairs that he followed in her room. Again, think about all the times that you saw her, start at the top of her head and just move slowly down and tell 221 me as much information as you can recall about her. 222 She had medium brown hair...it was either short or it was pulled back. She 223 AN: was wearing a robe or a housecoat....she was thin, she didn't.....I dunno 224 225 how much she...probably about five five or something, I'm not sure how 226 much she would weigh. She....the housecoat was light colored, long 227 sleeves, long in length. I can't recall much else about her 228 QU: Okay. All right. I want you to think about the knife now..and I want you to 229 tell me everything you can recall about the knife 230 AN: 'Kay. It was about..... guess a six inch long butcher knife.....dark 231 handle....and regular with the blade just on the one side. 232 QU: A regular blade? 233 AN: Yeah, a regular blade. 234 QU: 'Kav. 235 AN: That's about it All right. Okay I'm just going to take you back on some of the events and 236 QU: 237 just ask you to tell me more about some of them all right? So...you said 238 that...the man was..he was first standing looking at the house...can you tell 239 me more about that?

It was nighttime, he was standing outside of a gate....he was...there was

240 AN:

241	bushes on either side of the gate. And it looked like you could see through
242	the gate, it was, it was like or metal. Andhewas just
243	standing, smoking a cigarettewatching the, the houseand the
244	personlady upstairsroom. And it was fairly dark right where the gate
245	was. That's about it
246 QU:	All right. You said thatthe man went through the gate and walked up
247	towards the house, tell me more about that.
248 AN :	'Kay, he opened up the gateI can't recall whether he closed it behind
249	him or not. He walkedpast some bushes on the left hand side of
250	thepathway towards the house. He brushed up against the bushesit
251	looked like he brushed up against the bushes or he threw something into it
252	I can't recallor see what he did, as he was walking by them. There was
253	just a little bush by the side of the path and he walked towards the house.
254	And approached the side of the house. Andstood there and
255	lookedin a window. And then he checked to see if the window was
256	locked. And it was. And then he proceeded along the side of the house.
257	Andlooking in another window as he went and checked to see if it was
258	locked. Then he went around the corner, along the, the outside of the
259	house toand stopped at the glasssliding glass doors. And checked to
260	see if they were locked and it wasn't locked. So heopened up the
261	doorthe one on the left was the one that was slid openhe put his
262	cigarette on the groundand walked inside the house.

All right. Now you mentioned that he walked into the kitchen, think about 263 QU: that and then tell me more about that. 264 He walked into the....through the door of the kitchen....the 'fridge was on his 265 AN: immediate right....he...it was in, in, in the wall....built-in 'fridge....he opened 266 the door of the 'fridge, which opened from the left. He opened it up, 267 268 reached...looked in the 'fridge, reached in, took out a bottle of beer.....took the top off.....took a drink out of it and.....shut the 'fridge door....placed the 269 270 bottle and the cap on the counter top of his left, it's an L shaped kitchen with the 'fridge right beside the door and then the counters going to the 271 272 left....along the left hand side of the house.....beside the kitchen sink. He 273 then....looked around the kitchen. He saw a knife.....he took.....picked the 274 knife up.....then he proceeded out, out of the kitchen. 'Kay, All right. The next thing you mentioned to me was that he went into a 275 QU: 276 den or something like that and took the phone off the hook. Tell me more about that. 277 'Kay he....he was walking along a dark hallway and...there's an open door, 278 AN: 279 there's a light on in the room, it looks like a...it's a small room with a desk 280 right inside the right hand side of the door with a telephone on it. The 281 telephone's a regular...old fashioned type of telephone I guess...with the receiver that sits on top and he took it off. Then put....placed the receiver 282 right beside the phone on the....table top. He didn't....he just walked 283 inside the door and the phone was right on...right inside the door, so he 284

- 135
- didn't really go in the room all the way and then he....after he took the
- phone off the hook, he left the room....and proceeded down the hallway.
- 287 QU: All right. The next thing you said is the....you said another area where he
- sees the lady, tell me more about that.
- 289 AN: He's standing at the door to a bedroom....he's looking in the room and...on
- the left side of the room there's a door to a bathroom ensuite, or another
- room....and he sees the lady come out of the room....and she walks across
- the room and up the stairs...about five stairs or so, a short set of stairs on
- the right hand side of the room. Up to a door at the top of the stairs and
- through the door. And he....follows her. He goes across the room....and
- up the stairs and through the door after her. She doesn't see him at any
- 296 point.
- 297 QU: 'Kay. You said that he followed her into the room, can you tell me more
- 298 about that?
- 299 AN: He..followed behind her...he still had the knife in his hands. He went
- through the door....I'm not sure if he closed the door behind him or not, but
- 301 that's all it showed.
- 302 QU: All right. Then the next thing you said he was in the kitchen, tell me more
- 303 about that
- 304 AN: He walked into the kitchen and he had the knife in his hand, it had blood all
- over it and he had blood on his hands. He walked towards the kitchen sink,
- 306 turned the water on...and ran...water over the knife, the blade of the

knife....which had blood on it and....then he put the....knife down in the sink. 307 I think he put his hands in the water, shut the water off....took a towel that 308 was hanging....hanging under the counter or beside the 'fridge and wiped 309 310 his hands...and then he wiped his face with the towel and hung the towel 311 back up. And then...left the room. 312 QU: All right. You said that he left the room can you tell me more about that? 313 AN: No. I can't remember what he did after that. 314 QU: 'Kay. A couple more things, how ya doin'? 315 AN: Fine 316 QU: 'Kay now, sometimes when police officers are involved in an investigation 317 and people give them information about things that they recall and things 318 that they see, it's important for the police to determine whether or not the 319 person remembers the information they told them or if they know the 320 information they told them okay? Now what I'm gonna do is....give you 321 the...a definition of a remember judgment and a know judgment. 'Kay, I'll 322 get you to read those and if you have any questions you can ask me about 323 it. 324 AN: Sure

see what happened. Just shut this off. So what I'd like to you do then is read the definition of remember judgments and know judgments and you'll also see there's some examples all right?

Okay.

329 QU: So if you wanna do that. Take a minute and do that.

330 AN: 'Kay

331 QU: Do you understand what I want you to do?

332 AN: Yeah.

333 QU:

334

335

336

337

338

339

340

341

342

343

344

345

346

347

there? All right. So what we're going to do, some of this might seem a little bit repetitive, we're gonna go through the phases and I'm going to be asking you about the information that you gave me and I want you to tell me whether or not you remember, the specific piece of information or if you know that piece of information. Now if I've written something down wrong, then just tell me. If, as we're going through it you happen to recall something else, just let me know that okay? We'll be going through the....okay, as I mentioned we'd be going through the phases, so when I give you an event or a piece of information, don't try to remember or pardon me, don't try to, to think about what you said in the previous phase, you know it's not a contest to see if you get it right in each phase or anything like that, all right? Okay? So we'll start at the beginning. You were watching the tape, we're gonna be moving forward, this is the very first time you were telling me about it. You said the person was a caucasian, do you remember that or do you know that?

348 AN: I remember

349 QU: He was a male?

350 AN: I remember

351 QU: He's a male. Dark hair?

352 AN: Remember

353 QU: Six foot?

354 AN: Remember

355 QU: Two hundred to two ten?

356 AN: Remember

357 QU: He had on a light colored shirt?

358 AN: Remember. Can I ask you a question?

359 QU: Sure.

360 AN: Between remember and know...if you know something that's....would it be

like something that maybe I didn't quite recall, but recalled if somebody had

362 told me the information?

363 QU: 'Kay well....a remember event is like ya have a conscious...you can....

364 AN: You can visualize it?

365 QU: visualize it.

366 AN: Okay.

367 QU: All right? Does that help?

368 AN: Yeah.

369 QU: It's like you're kinda re-living it and....

370 AN: Yeah.

371 QU: Okay? All right. So light colored jeans you said.

372 AN: Light colored.....

373 QU: I'm sorry, light colored shirt?

374 AN: Yeah, remember.

375 QU: All right. He had jeans?

376 AN: Remember.

377 QU: Standing by a gate?

378 AN: Remember.

379 QU: 'Kay, he was smoking a cigarette?

380 AN: Remember.

381 QU: He....was looking in a window of a house?

382 AN: Remember.

383 QU: 'Kay. He....it was nighttime?

384 AN: Remember.

385 QU: The light was on inside the house?

386 AN: Remember.

387 QU: There was a man inside the room of the house?

388 AN: I don't know if it was a man or a woman, so that's.....

389 QU: Okay, so, but, all right....

390 AN: I know there was a person there.

391 QU: so it'd be a person?

392 AN: Yeah.

393 QU: Okay. So do you remember that or know that?

394 AN: I remember.

395 QU: All right. It was....the room was on the second floor?

396 AN: Remember.

397 QU: 'Kay, there was bushes around the gate?

398 AN: I remember.

399 QU: The gate was closed?

400 AN: Remember.

401 QU: It was a wrought iron gate?

402 AN: Remember.

403 QU: 'Kay. You said that he was watching the man inside?

404 AN: The per..yeah.

405 QU: Change that to person?

406 AN:

407 QU: Okay. So he was watching the person inside?

408 AN: Uh huh. I remember, yeah.

409 QU: He opened the gate?

410 AN: I guess....I know that he did.

411 QU: Okay, he walked by a bush?

412 AN: I remember.

413 QU: You said he threw or rubbed against the bush? Threw something or rubbed

414 against the bush?

415 AN: Remember.

416 QU: He walked towards the house?

417 AN: Know that. Yeah, I know that he...

418 QU: You..said...you're not sure if the man in the house shut the light off?

419 AN: 'Kay, so...

420 QU: It'd be the person?

421 AN: Yeah.

422 QU: 'Kay.

423 AN: I guess know.

424 QU: Then you indicated that the man in the house, which we're now changing to

425 person I would assume, that the man left the room?

426 AN: I know that.

427 QU: 'Kay. The man who was standing outside walked towards....or standing

outside the gate walked towards the house?

429 AN: Remember.

430 QU: He was up, up beside the house?

431 AN: Remember.

432 QU: Looked in a window?

433 AN: I remember.

434 QU: Checked to see if it was locked?

435 AN: Remember.

436 QU: It was locked?

437 AN: Remember.

438 QU: And he walked along the side of the house?

439 AN: I remember.

440 QU: Walked to some sliding glass doors?

441 AN: Remember.

442 QU: He checked and they were open?

443 AN: Remember, Unlocked.

444 QU: Or unlocked.

445 AN:

446 QU: So that you...

447 AN: The door was closed.

448 QU: Yeah. It was unlocked?

449 AN: Yeah, I remember that.

450 QU: Okay. He put out his cigarette?

451 AN: Remember.

452 QU: He threw it on the ground?

453 AN: Remember.

454 QU: Butted it out?

455 AN: Know.

456 QU: 'Kay. He went into the house?

457 AN: Remember.

458 QU: Went into the kitchen?

459 AN: Remember.

460 QU: Opened the 'fridge?

462 QU: Took out a bottle of beer?

463 AN: Remember.

464 QU: Took the top off?

465 AN: Remember.

466 QU: Took a drink?

467 AN: Remember.

468 QU: Put it on the counter?

469 AN: I remember.

470 QU: Closed the 'fridge door?

471 AN: Know.

472 QU: Took a knife?

473 AN: I remember.

474 QU: Like a butcher knife?

475 AN: Remember.

476 QU: And you said you weren't sure if it was on the counter or on the drawer...or

in a drawer. So we'll leave that if you're not sure He went upstairs?

478 AN: Know.

479 QU: There was someone in the washroom, off the bedroom?

480 AN: Remember.

481 QU: Just before that....you said he went to like a den or an office?

482 AN: Remember.

483 QU: Took the phone off the hook?

484 AN: Remember.

485 QU: Then he was into the....the he was back in....you talked about back in a

486 room...that the woman was in the washroom?

487 AN: Know.

488 QU: 'Kay, she came out?

489 AN: Remember.

490 QU: She walked through the room?

491 AN: Remember.

492 QU: Up some short stairs?

493 AN: Remember.

494 QU: Into another room?

495 AN: Remember.

496 QU: That he followed her?

497 AN: Remember.

498 QU: 'Kay, the next thing is he's in the kitchen?

499 AN: Remember.

500 QU: Blood on the knife?

501 AN: Remember.

502 QU: Washed the blood off under the tap?

503 AN: Remember.

504 QU: Put the knife in the, in the sink?

505 AN: Remember.

506 QU: Wiped his hands?

507 AN: Remember.

508 QU: Wiped his face?

509 AN: Remember.

510 QU: He used the towel from the kitchen?

511 AN: Remember.

512 QU: Hung the towel back up?

513 AN: Remember

514 QU: Left the room?

515 AN: Remember

516 QU: 'Kay now you talked in reverse order so we'll do the same thing. The last

thing you said was...he...left the room and you said that just before that he

518 hung the kitchen towel up?

519 AN: Remember.

520 QU: Wiped his face and hands on the towel?

521 AN: Remember.

522 QU: Tried to remove the blood, but had blood on his face as well?

523 AN: Remember.

524 QU: Didn't do a good job gettin' the blood off?

525 AN: Remember.

526 QU: Washed the knife off under the tap?

528 QU: Placed it in the sink?

529 AN: Remember.

530 QU: 'Kay. And....just before that it showed him entering the kitchen?

531 AN: I remember.

532 QU: Before that he was in the room adjacent to the bedroom or bath or

533 bathroom or bedroom or bathroom, sorry?

534 AN: I remember.

535 QU: That's where he stabbed the woman?

536 AN: I know that.

537 QU: He was outside of the door before that?

538 AN: Remember.

539 QU: He watched her go from the bathroom to the bedroom?

540 AN: Remember.

541 QU: He followed her up the stairs?

542 AN: Remember.

543 QU: Part of that he was walking through the house to, to, towa....to the room?

544 AN: Remember.

545 QU: He stopped at the door to an office?

546 AN: Remember.

547 QU: Reached in, took the phone off the hook?

548 AN: Remember.

549 QU: Came from the kitchen? Before that.

550 AN: Know.

551 QU: 'Kay before that he was in the kitchen and took a knife from the counter or a

552 drawer?

553 AN: Remember.

554 QU: And just before that he had a beer or a drink.....a drink outta the 'fridge?

555 AN: Remember.

556 QU: Before that he got...took the top off the drink?

557 AN: Remember.

558 QU: And before that....or then he took a drink out of it?

559 AN: Remember.

560 QU: And he placed it on the counter?

561 AN: Remember.

562 QU: And just before that.....he was outside or pardon me.....just before the

kitchen he was walking through the dining room?

564 AN: Remember.

565 QU: 'Kay. He had entered through a sliding open door from the outside? Glass

door from the outside?

567 AN: Remember.

568 QU: Before that he was....he was outside, he was checking a window to see if it

was open?

570 AN: Remember

571 QU: Just before that....he put his cigarette on the ground and stepped on it?

572 AN: Remember.

573 QU: Just before that he walked along the side of the house looking at windows

and checking them?

575 AN: Remember.

576 QU: 'Kay. 'Kay and just before that he had come from another one and he had

577 checked it? Corner, sorry.

578 AN: Remember.

579 QU: Pardon?

580 AN: Remember.

581 QU: Just before that he had come from the gate when he entered the property?

582 AN: Remember.

583 QU: He had brushed up against the bush or?

584 AN: Remember.

585 QU: As he approached the house, right? When he was doing that he was

586 watching the second floor?

587 AN: Remember.

588 QU: He had gone through the gate before that?

589 AN: Remember.

590 QU: Before that he was standing, smoking a cigarette?

591 AN: Remember.

592 QU: He was watching a person...in the second floor.....

594 QU: in the window?

595 AN: Uh huh.

596 QU: 'Kay, all right. So this is from a different perspective. How ya doin', okay?

597 AN: Uh huh.

598 QU: The first thing you said was there was a man?

599 AN: Uh huh, remember.

600 QU: Okay. Dark hair?

601 AN: I remember.

602 QU: Light shirt?

603 AN: Remember.

604 QU: Jeans?

605 AN: Remember

606 QU: Standing behind a gate.....closed gate?

607 AN: Remember.

608 QU: Smoking a cigarette?

609 AN: Remember

610 QU: Looking through the gate?

611 AN: Remember.

612 QU: Looking across the yard into the windows?

613 AN: I guess I know that

614 QU: 'Kay. It was night?

616 QU: The lights were on in the room?

617 AN: Remember.

618 QU: Someone was in the house, walking around?

619 AN: Remember

620 QU: He opens up the gate?

621 AN: Remember.

622 QU: He walks through the gate?

623 AN: Remember

624 QU: He's.....walks into the yard?

625 AN: Remember.

626 QU: Past some bushes?

627 AN: Remember

628 QU: Still watching up towards the window?

629 AN: Know

630 QU: Walks across the yard up to the side of the house?

631 AN: Remember.

632 QU: It's like a corner of the house that he walks to?

633 AN: Remember

634 QU: You were using your hands to make an L?

635 AN: Yeah.

636 QU: 'Kay, he walks towards his left?

637 AN: Remember

638 QU: Checks the first window he comes to?

639 AN; Remember.

640 QU: Walks along the side of the house?

641 AN: Remember

642 QU: 'Kay, there's like an inner corner like an L..with sliding glass doors on it?

643 AN: Uh huh, remember.

644 QU: He checks to see if it's locked?

645 AN: Remember.

646 QU: It's not locked?

647 AN: Remember

648 QU: Throws his cigarette on the ground?

649 AN: Remember.

650 QU: Opens the sliding glass door?

651 AN: Remember.

652 QU: Steps inside?

653 AN: Remember.

654 QU: You believe it's the dining room?

655 AN: Know

656 QU: He walks through a door?

657 AN: Know

658 QU: Into the kitchen?

660 QU: The kitchen light's on?

661 AN: Pardon me?

662 QU: The kitchen light is on?

663 AN: Remember

664 QU: He walks into the kitchen?

665 AN: Remember.

666 QU: Opens the 'fridge?

667 AN: Remember.

668 QU: Takes out a beer or a drink?

669 AN: Remember.

670 QU: It's in a bottle?

671 AN: Remember.

672 QU: He takes the top off?

673 AN: Remember.

674 QU: Takes a drink?

675 AN: Remember.

676 QU: Closes the 'fridge door?

677 AN: Know

678 QU: Puts the bottle on the counter?

679 AN: Remember.

680 QU: Looks around the kitchen?

682 QU: Picks up the butcher knife?

683 AN: Know

684 QU: Takes it with him outta the room?

685 AN: Remember.

686 QU: Goes through a hallway?

687 AN: Remember.

688 QU: He stops by an open door?

689 AN: Remember.

690 QU: It's an office or a den?

691 AN: Remember.

692 QU: He reaches in?

693 AN: Remember.

694 QU: Picks up the receiver?

695 AN: Remember.

696 QU: Puts it down beside the phone?

697 AN: Remember

698 QU: And he's in a hallway?

699 AN: Remember.

700 QU: The....he goes...a door to some sort of a bedroom?

701 AN: I remember.

702 QU: Looks inside?

703 AN: Remember.

704 QU: Woman comes out of the bathroom?

705 AN: Remember.

706 QU: You said it was like an ensuite?

707 AN: Yeah, remember.

708 QU: Walks around the bed? She does.

709 AN: Remember.

710 QU: Up a small set of stairs?

711 AN: Remember

712 QU: It's...the bathroom is on her left?

713 AN: On....the left of the bedroom.

714 QU: Oh, okay

715 AN: Of the room.

716 QU: So do ya....

717 AN: Yeah, I....

718 QU: remember that?

719 AN: remember that.

720 QU: Okay, so she walks up the stairs, which is to the right?

721 AN: Right. Remember.

722 QU: She goes up the stairs and he follows?

723 AN: Remember

724 QU: 'Kay. She goes into the room?

726 QU: 'Kay, he follows her into the room?

727 AN: Remember

728 QU: 'kay, he stabs her?

729 AN: Know.

730 QU: He comes into the kitchen?

731 AN: Remember.

732 QU: Holding a butcher knife?

733 AN: Remember.

734 QU: There's blood on it?

735 AN: Remember

736 QU: Turns on the sink?

737 AN: Remember.

738 QU: Runs water over the knife?

739 AN: I remember

740 QU: Places knife in the sink?

741 AN: Remember.

742 QU: Shuts the water off?

743 AN: Know.

744 QU: Towel hanging on the counter beside the 'fridge?

745 AN: I remember

746 QU: He washes hands?

747 AN: Remember.

748 QU: Tries to wipe off some blood off, off his face?

749 AN: Remember.

750 QU: Hangs the towel up?

751 AN: I remember.

752 QU: Leaves the kitchen?

753 AN: Remember

754 QU: All right. Now we're gonna do the description of the man, the same thing.

755 Think about the man. Dark brown hair?

756 AN: I remember.

757 QU: One inch to one and a half inch long?

758 AN: I remember.

759 QU: Short, but not, not shaved?

760 AN: Remember

761 QU: Straight hair?

762 AN: Remember.

763 QU: Light dark eyes?

764 AN: Wait a minute.

765 QU: Sorry.

766 AN: Remember

767 QU: 'Kay. Medium complexion?

768 AN: Remember.

769 QU: Caucasian?

770 AN: Remember.

771 QU: No facial hair?

772 AN: Remember

773 QU: Wearing a white t-shirt or sweatshirt?

774 AN: I remember.

775 QU: Not heavy, but medium to heavy?

776 AN: Remember.

777 QU: Six foot?

778 AN: I don't know actually how tall he was, so..... I would know.

779 QU: 'Kay. Two hundred to two fifteen?

780 AN: Know.

781 QU: 'Kay. Wasn't overweight, just a big guy?

782 AN: Remember.

783 QU: Had a little bit of belly showing?

784 AN: Remember.

785 QU: Wearing jeans?

786 AN: Remember.

787 QU: No belt?

788 AN: Remember.

789 QU: Running shoes?

790 AN: Know.

791 QU: White?

792 AN: Know

793 QU: No tattoos?

794 AN: Remember.

795 QU: No marks?

796 AN: Remember

797 QU: No jewelry?

798 AN: Remember.

799 QU: Cleanly dressed?

800 AN: Know.

801 QU: The woman, you said medium dark....or medium brown hair?

802 AN: Remember.

803 QU: Sort of....short or pulled back?

804 AN: Remember

805 QU: Wearing a robe or housecoat?

806 AN: Remember.

807 QU: She was thin?

808 AN: I remember.

809 QU: Five five?

810 AN: Know

811 QU: Housecoat was a light color?

812 AN: Know

813 QU: It had long sleeves?

814 AN: Remember

815 QU: Long in length?

816 AN: Remember

817 QU: The knife....you said the knife was about a six inch long butcher knife?

818 AN: I remember.

819 QU: Dark handle?

820 AN: Remember.

821 QU: Regular blade like on one side?

822 AN: Remember.

823 QU: 'Kay, then we just asked...to clarify some things here, expand on some

areas. All right? So we started at the beginning....you said you seen the

man, it was night?

826 AN: Remember.

827 QU: He was standing outside the gate?

828 AN: Remember.

829 QU: Bushes were on the other side of the gate?

830 AN: Remember.

831 QU: It looked like you could see through the gate?

832 AN: Remember.

833 QU: Wrought iron, metal?

834 AN: Remember.

835 QU: Standing smoking a cigarette?

836 AN: Remember.

837 QU: Watching the house?

838 AN: Remember.

839 QU: There's a person in the upstairs room?

840 AN: Remember

841 QU: the gate was?

842 AN: Remember.

843 QU: He opened the gate?

844 AN: Remember.

845 QU: You said you can't recall if he closed it?

846 AN: Know.

847 QU: He walked by some bushes?

848 AN: Remember.

849 QU: They were on the left hand side of the pathway towards the house, the

bushes? 850

I remember. 851 AN:

He brushed up against the bushes? 852 QU:

853 AN: Remember.

854 QU: Or he threw something?

855 AN: Remember.

856 QU: All right. It was....they were low bushes by the side of the path?

857 AN: Remember.

858 QU: Walked toward the house?

859 AN: Remember. Or know....know.

860 QU: He approached the side of the house and looked in the window?

861 AN: Remember.

862 QU: He checked to see if it was locked?

863 AN: Remember.

864 QU: He moved along the side of the house?

865 AN: Remember.

866 QU: Looked in another window?

867 AN: Remember.

868 QU: Checked to see if it was locked?

869 AN: Remember. Or....yeah. Remember

870 QU: Then he moved around the corner, along the outside of the house?

871 AN: Know

872 QU: He stopped by some glass sliding doors?

873 AN: Remember.

874 QU: Checked to see if they were locked, it wasn't?

875 AN: Remember.

876 QU: He opened up the glass, sliding doors?

877 AN: Remember

878 QU: He opened the, the....part of the sliding door on the left side?

880 QU: Just before that he put his cigarette on the ground?

881 AN: Remember

882 QU: And he walked inside?

883 AN: Remember.

884 QU: Then we talked about the kitchen again. You said he walked in through

the door?

886 AN: Remember.

887 QU: The 'fridge was to his immediate right?

888 AN: Remember.

889 QU: It was a built-in 'fridge?

890 AN: Remember

891 QU: He opened the door?

892 AN: Remember

893 QU: The door opened from the left?

894 AN: Remember.

895 QU: He looked in?

896 AN: Remember.

897 QU: He reached in the 'fridge?

898 AN: Remember.

899 QU: Took out a bottle of beer?

900 AN: Remember

901 QU: He took the top off?

902 AN: Remember.

903 QU: Took a drink out of it?

904 AN: Remember

905 QU: Shut the 'fridge door?

906 AN: Know

907 QU: Placed the bottle and the cap on the counter to his left?

908 AN: Remember.

909 QU: It was an L shaped kitchen?

910 AN: Remember.

911 QU: The 'fridge was by the door?

912 AN: Remember

913 QU: And the counter was to the left?

914 AN: Remember

915 QU: 'Kay. He was beside the kitchen sink?

916 AN: Remember.

917 QU: Looked around the kitchen?

918 AN: Remember

919 QU: Saw a knife?

920 AN: Remember. Know

921 QU: Picked the knife up?

922 AN: Remember.

923 QU: Proceeded out of the kitchen?

924 AN: Remember.

925 QU: 'Kay, he walked down a dark hallway?

926 AN: Remember.

927 QU: There was an open door?

928 AN: Remember

929 QU: Light on?

930 AN: Remember.

931 QU: Looks like a small room?

932 AN: Remember.

933 QU: There was a desk on the right hand side of the wall?

934 AN: Remember.

935 QU: Telephone?

936 AN: Remember.

937 QU: An old fashioned type phone?

938 AN: Remember.

939 QU: The type the receiver's on the top?

940 AN: Remember.

941 QU: He took the receiver off the hook?

942 AN: Remember.

943 QU: Placed it, the receiver on the right of the phone?

944 AN: Remember.

945 QU: And it was beside the phone on the table top? Or sorry, right beside the

946 phone on the table top?

947 AN: Remember.

948 QU: He just walked inside...he didn't like go all the way in, he just kinda walked

949 inside?

950 AN: Remember.

951 QU: After he took the phone off, he left?

952 AN: Remember

953 QU: And he proceeded down the hall?

954 AN: Remember.

955 QU: 'Kay, then we were talking about in the bedroom. All right? He was

956 standing at the door to a bedroom?

957 AN: Remember.

958 QU: He looked in the room?

959 AN: Remember.

960 QU: On the left side of the room was a door to a bathroom or an ensuite?

961 AN: Remember.

962 QU: He sees a lady come out of the room, the bedroom?

963 AN: Remember.

964 QU: She walks across the room?

965 AN: Remember.

966 QU: She goes up some stairs?

968 QU: There are about five short stairs.....steps?

969 AN: Remember.

970 QU: They're on the right hand side?

971 AN: Remember.

972 QU: She goes.....the door's at the top of the stairs?

973 AN: Remember.

974 QU: She goes through the door?

975 AN: Remember.

976 QU: He follows her?

977 AN: Remember.

978 QU: He goes across the room?

979 AN: Remember.

980 QU: Goes up the stairs?

981 AN: Remember.

982 QU: Goes in after her?

983 AN:

984 QU: She doesn't see him?

985 AN: Remember.

986 QU: He follows her into the room?

987 AN: Remember.

988 QU: He had the knife in his hand?

989 AN: Remember.

990 QU: Went through the door?

991 AN: Remember.

992 QU: You said you weren't sure if he closed the door or not.

993 AN: Right.

994 QU: Okay. Next thing he's in the...he's walking into the kitchen with the knife

and there's blood on the knife?

996 AN: Remember

997 QU: Blood on his hands?

998 AN: Remember.

999 QU: Goes to the sink?

1000 AN: Remember

1001 QU: Turns on the water?

1002 AN: Know

1003 QU: Runs water over the blade.....

1004 AN: Remember.

1005 QU: which had blood on it?

1006 AN: Remember.

1007 QU: Puts the knife in the sink?

1008 AN: Remember.

1009 QU: Turns off the water....or sorry, washes his hands in the water?

1010 AN: Remember.

1011 QU: Shuts the water off?

1012 AN: Know.

1013 QU: And the towel is hanging under the cupboard or beside the 'fri....or under

the cupboard?

1015 AN: Remember.

1016 QU: And you said or it was beside the 'fridge?

1017 AN: Remember.

1018 QU: All right. Wiped his hands?

1019 AN: Remember.

1020 QU: Wiped his face with the towel?

1021 AN: Remember.

1022 QU: Hung the towel back up?

1023 AN: Remember.

1024 QU: And left the room?

1025 AN: Remember.

1026 QU: Good. How ya doin'?

1027 AN: Fine.

1028 QU: We got one more thing to do and then we're done, okay? Do you need a

bit of a break or anything or....?

1030 AN: I'm okay.

1031 QU: You all right? Okay. All right. So we dealt with remember/know, now I

want you to think about confidence level okay? What confidence level is, is

an individual, when they're relating information about an event they witnessed, 'kay has a certain confidence, how they feel about that piece of information. So what we're going to do is we're going to use a scale from one to seven all right, seven being I'm really confident and one being no confidence at all and then numbers between one and seven, like as, as you approach seven, showing an increase in confidence, so one I'm not confident, then two I'm a little bit confident, then three a little more confident and four I'm more confident, five, I'm more confident and six I'm more confident and seven, I'm really confident. Okay? Do you understand that?

1043 QU: 'Kay, so if you're up to it and that we'll just go through exactly the same
thing again, again don't try to recall what you said in the different phases or
anything like that. Just you...ya know, tell me how confident you are when
you hear the piece of information when I tell ya. 'Kay?

1047 AN: Does one mean.....

Uh huh.

1048 QU: One means you have no confidence at all. Like you're.....

1049 AN: I don't know if I remember or not?

1050 QU: Well yeah, it's.....

1051 AN: If I'm sure of what I said?

1052 QU: If you're sure...

1053 AN:

1033

1034

1035

1036

1037

1038

1039

1040

1041

1042 AN:

1054 QU: Yeah, if you're sure.....

1055 AN:

1056 QU: like if you have a lotta confidence that what you said......

1057 AN: Yeah.

1058 QU: Okay? Is the correct piece of information that you recall, then that's a

1059 seven

1060 AN: Okay.

1061 QU: 'Kay, if you have absolutely no confidence in what you said okay, 'cause

remember I asked you to remember everything, even if you thought it was

insignificant or had partial recall or anything like that?

1064 AN: Right.

1065 QU: And then you would tell me it was a one.

1066 AN: Okay.

1067 QU: If....sometimes other pieces of information you provide you're pretty

confident, but you're not really confident, so you would place that on a

scale of between two and six.

1070 AN: Okay.

1071 QU: Depending on how confident you felt.

1072 AN: Okay.

1073 QU: All right? Is that all right?

1074 AN: Uh huh.

1075 QU: Okay. So again just get your back....your thought process back to the, to

the beginning of the video all right? And.....we went forwards towards the

1077 end the first time. You said that it was a caucasian when the video started?

1078 He was caucasian?

1079 AN: Six.

1080 QU: He was a male?

1081 AN: Seven.

1082 QU: Dark hair?

1083 AN: Seven.

1084 QU: Six foot?

1085 AN: Five.

1086 QU: Two hundred, two ten?

1087 AN: Five.

1088 QU: Light colored shirt?

1089 AN: Seven

1090 QU: Wearing jeans?

1091 AN: Seven.

1092 QU: Standing by a gate?

1093 AN: Seven.

1094 QU: It was a wrought iron gate?

1095 AN: Five.

1096 QU: Smoking a cigarette?

1097 AN: Seven.

1098 QU: Looking in a window of the house?

1099 AN: Six.

1100 QU: There was a light on inside?

1101 AN: Seven.

1102 QU: And you originally said a man and you clarified that and said a person and

so there was a light on inside and he was looking at a person inside the

room at the house?

1105 AN: Six.

1106 QU: The room was on the second floor?

1107 AN: Five.

1108 QU: There were bushes around the gate?

1109 AN: Six.

1110 QU: The gate was closed?

1111 AN: Six.

1112 QU: The....it was a wrought iron gate?

1113 AN: Five.

1114 QU: He watched the person inside?

1115 AN: Six.

1116 QU: He opened the gate?

1117 AN: Five.

1118 QU: He walked by the bushes?

1119 AN: Seven.

1120 QU: He threw or rubbed against the bushes?

1121 AN: Seven.

1122 QU: Pardon?

1123 AN: Seven.

1124 QU: 'Kay, he walked toward the house?

1125 AN: Five.

1126 QU: Not sure, you can't recall if the man in the house shut off the light?

1127 AN: So....three.

1128 QU: You said that the person in the house left the room?

1129 AN: Two.

1130 QU: The man continued to walk towards the house?

1131 AN: Six.

1132 QU: He was up beside the house?

1133 AN: Seven.

1134 QU: He looked in the window?

1135 AN: Seven.

1136 QU: Checks to see if it's locked and it was locked?

1137 AN: Seven

1138 QU: The window was locked?

1139 AN: Six

1140 QU: He moved along the side of the house?

1141 AN: Six. Six.

Oh you said it? Sorry.....I didn't hear you. I apologize. Walks alongside 1142 QU:

the house and there's some sliding glass doors? 1143

1144 AN: Seven

He checks to see if they're unlocked? 1145 QU:

1146 AN: Seven

1147 QU: He puts out a cigarette?

1148 AN: Six

He threw the cigarette on the ground when he put it out? 1149 QU:

1150 AN: Seven

1151 QU: He walks into the house?

1152 AN: Seven.

1153 QU: Into the kitchen?

1154 AN: Seven

1155 QU: Opens the 'fridge?

1156 AN: Seven

1157 QU: Took out a bottle of beer?

1158 AN: Five.

1159 QU: Took the top off of it?

1160 AN: Five.

Took a drink? 1161 QU:

1162 AN: Seven

1163 QU: Put it on the counter?

1164 AN: Seven. 1165 QU: Closed the 'fridge door.

1166 AN: Four.

1167 QU: 'Kay and he took....a knife like a butcher knife?

1168 AN: Seven.

1169 QU: You said you weren't sure if it was on the counter or in a drawer?

1170 AN: Three.

1171 QU: He went up, upstairs?

1172 AN: Two.

1173 QU: When he was upstairs there was someone in a washroom off a bathroom?

1174 AN: Four.

1175 QU: 'Kay. Just before that, you said he went by a den or an office?

1176 AN: Seven.

1177 QU: And he took a phone off the hook?

1178 AN: Seven.

1179 QU: And then when he...you were talking about now he's back upstairs and the

1180 woman was in the washroom?

1181 AN: Four.

1182 QU: She came out?

1183 AN: Seven.

1184 QU: She went through the room?

1185 AN: Seven.

1186 QU: She went up some short stairs?

1187 AN: Seven.

1188 QU: And into another room?

1189 AN: Seven.

1190 QU: He followed her?

1191 AN: Seven.

1192 QU: He went...and he was in the kitchen?

1193 AN: Seven.

1194 QU: Has blood on the knife?

1195 AN: Seven.

1196 QU: He washed the blood off under the tap?

1197 AN: Seven.

1198 QU: He puts the knife in the sink?

1199 AN: Seven.

1200 QU: He wipes his hands....wiped his hands?

1201 AN: Seven.

1202 QU: Wiped his face?

1203 AN: Seven.

1204 QU: He used a towel in the kitchen?

1205 AN: Seven.

1206 QU: Hung the towel back up?

1207 AN: Five.

1208 QU: I'm sorry.

1209 AN: Five.

1210 QU: Left the room?

1211 AN: Seven.

1212 QU: 'Kay. Just go through reverse order here now. All right? The last thing you

said was he left the room? 'Kay. Just before that....what happened just

before that, you said he hung the kitchen towel up?

1215 AN: Five.

1216 QU: Wiped his face and hands with the towel?

1217 AN: Seven.

1218 QU: Tried removing the blood on his face?

1219 AN: Seven.

1220 QU: He didn't do a very good job at getting the blood off?

1221 AN: Seven.

1222 QU: He the knife and washed it off....under the tap?

1223 AN: Seven.

1224 QU: Placed it in the sink?

1225 AN: Seven.

1226 QU: And just before that it showed him entering the kitchen?

1227 AN: Seven.

1228 QU: Just before that he was in a room adjacent to the bedroom?

1229 AN: Seven

1230 QU: Just before that he stabbed the woman?

1231 AN: Five.

1232 QU: Just before that he was outside her door?

1233 AN: Seven.

1234 QU: Just before that he watched her come from the bathroom, upstairs into her

1235 room?

1236 AN: Seven.

1237 QU: Then he followed her up some stairs?

1238 AN: Seven.

1239 QU: Just before that he was walking through the house...to the room?

1240 AN: Five.

1241 QU: He stopped by the office door?

1242 AN: Seven.

1243 QU: He reached in, took the phone off the hook?

1244 AN: Seven

1245 QU: Before that he came from the kitchen?

1246 AN: Four

1247 QU: Just before that he was in the kitchen and took the knife from the counter or

1248 a drawer?

1249 AN: Six.

1250 QU: Just before that he had a beer or a drink out of the 'fridge?

1251 AN: Seven

1252 QU: Just before that he took the top off?

1253 AN: Five

1254 QU: Or I mean took the beer or drink outta the 'fridge, sorry and took the top

1255 off? Then he drank out of it?

1256 AN: Seven.

1257 QU: Placed it on the counter?

1258 AN: Seven.

1259 QU: Just before that...he was walking through the house, like through the dining

1260 room?

1261 AN: Four.

1262 QU: He had entered through some glass sliding doors from the outside?

1263 AN: Seven.

1264 QU: And just before that, outside, he checked to see if some windows were

unlocked? Or just before that, when he was outside the house, he checked

to see if the sliding glass doors were unlocked?

1267 AN: Seven.

1268 QU: And just before that he threw a cigarette down on the ground?

1269 AN: Seven.

1270 QU: Just before that he walked along the side of the house looking in windows

1271 and doors?

1272 AN: Five.

1273 QU: And just before he walked along, he'd come from another one around the

1274 corner and checked it?

1275 AN: Five.

1276 QU: Just before that he'd come from the gate?

1277 AN: Six.

1278 QU: When he was coming from the gate, he brushed up against the bush or

dropped as he approached the house?

1280 AN: Seven.

1281 QU: Now as he's walking up to the house he's watching the second floor?

1282 AN: Five.

1283 QU: He'd gone through....and just before that he'd gone through the gate?

1284 AN: Five.

1285 QU: I'm sorry. Just before going through the gate, he was standing there

smoking a cigarette? Sorry.

1287 AN: Seven.

1288 QU: Just before that, he was watching the person in the window on the second

1289 floor?

1290 AN: Six

1291 QU: Now when you changed perspective, looking from above. 'Kay, how are

1292 you doin'?

1293 AN: Okay.

1294 QU: Just about through. All right. Again, you said there was a man there....at

the start of the video?

1296 AN: Seven.

1297 QU: Dark hair?

1298 AN: Seven.

1299 QU: Light, white colored shirt?

1300 AN: Seven, six.

1301 QU: Wearing jeans?

1302 AN: Five.

1303 QU: Standing behind a closed gate?

1304 AN: Six.

1305 QU: Smoking a cigarette?

1306 AN: Seven.

1307 QU: Looking through the gate?

1308 AN: Six.

1309 QU: Looking across the yard and into the windows?

1310 AN: Five.

1311 QU: It was night?

1312 AN: Seven.

1313 QU: Light on in the room?

1314 AN: Seven

1315 QU: There's someone in the house he's watching?

1316 AN: Seven.

1317 QU: He opens up the gate?

1318 AN: Five.

1319 QU: Walks through the gate?

1320 AN: Six.

1321 QU: Walks into the yard?

1322 AN: Six.

1323 QU: Past some bushes?

1324 AN: Seven.

1325 QU: As, he's walking in, he's still watching up towards the house?

1326 AN: Five.

1327 QU: Walks across the yard to the...side of the house?

1328 AN: Five.

1329 QU: It's like a corner of the house, an L shape?

1330 AN: Seven.

1331 QU: He walks towards his left and checks the first window her comes to?

1332 AN: Seven

1333 QU: He walks along the side of the house? Sort of like the inner corner, where

there's sliding glass doors?

1335 AN: Five

1336 QU: Checks to see if they're locked?

1337 AN: Six.

1338 QU: They're not locked?

1339 AN: Seven.

1340 QU: Throws his cigarette on the ground?

1341 AN: Seven.

1342 QU: Opens the sliding glass doors?

1343 AN: Seven.

1344 QU: Steps inside, you believe the dining room?

1345 AN: Six.

1346 QU: He walks through the door into the kitchen?

1347 AN: Six.

1348 QU: The kitchen has the light on?

1349 AN: Seven.

1350 QU: He opens the 'fridge?

1351 AN: Seven.

1352 QU: Walks towards....oh, sorry, you said before that he walks into the kitchen,

the light's on in the kitchen and he walks....okay so subject thirteen, tape

1354 two. Okay, you....the last thing you mentioned was he opened the 'fridge,

1355 you said seven? He takes a beer out or, or a drink?

1356 AN: Seven.

1357 QU: It's in a bottle?

1358 AN: Seven.

1359 QU: Took the top off?

1360 AN: Five

1361 QU: Takes a drink?

1362 AN: Seven

1363 QU: Closes the 'fridge door?

1364 AN: Four

1365 QU: Puts the bottle on the counter?

1366 AN: Six.

1367 QU: Looks around the kitchen?

1368 AN: Five.

1369 QU: Picks up the butcher knife?

1370 AN: Six

1371 QU: Takes it...the butcher knife with him when he leaves the room?

1372 AN: Six.

1373 QU: Goes through a hallway?

1374 AN: Three.

1375 QU: Stops by an opened, an opened door?

1376 AN: Seven.

1377 QU: It's an office or a den?

1378 AN: Five.

1379 QU: He.....there's a phone in, he reaches in?

1380 AN: Five....or six, sorry.

1381 QU: Picks up the receiver?

1382 AN: Seven.

1383 QU: Puts it down beside the phone?

1384 AN: Six..

1385 QU: Then he goes down the hallway?

1386 AN: Five.

1387 QU: To a door.....to some bedroom?

1388 AN: Seven.

1389 QU: Looks inside?

1390 AN: Seven.

1391 QU: The woman comes out of the bathroom?

1392 AN: Six.

1393 QU: Walks around the bed?

1394 AN: Five.

1395 QU: Up a small set of stairs?

1396 AN: Seven.

1397 QU: And the bathroom's on the left side of the room?

1398 AN: Seven.

1399 QU: Stairs are on the right?

1400 AN: Seven.

1401 QU: Goes up the stairs?

1402 AN: Seven.

1403 QU: He follows?

1404 AN: Seven.

1405 QU: She goes into the room?

1406 AN: Seven.

1407 QU: He follows her into the room?

1408 AN: Seven.

1409 QU: He stabs her?

1410 AN: Four

1411 QU: He comes into the kitchen?

1412 AN: Six.

1413 QU: Holding the butcher knife?

1414 AN: Seven.

1415 QU: There's blood on it?

1416 AN: Seven.

1417 QU: Turns on the sink?

1418 AN: Six.

1419 QU: Runs the water over the knife?

1420 AN: Seven.

1421 QU: Places the knife in the sink?

1422 AN: Seven.

1423 QU: Shuts off the water?

1424 AN: Five.

1425 QU: Now there's a towel hanging on the counter beside the 'fridge?

1426 AN: Five.

1427 QU: Wipes off hands?

1428 AN: Seven.

1429 QU: Tries to wipe off the blood on hands and face?

1430 AN: Five.

1431 QU: Hangs the towel up?

1432 AN: One.

1433 QU: Leaves the kitchen?

1434 AN: Six.

1435 QU: 'Kay and the description of the man. 'Kay? Think about it for a second.

1436 Dark brown hair?

1437 AN: Seven.

1438 QU: Down one inch to one and a half long?

1439 AN: Six.

1440 QU: It was short, but not really short? Like now shaved? Straight?

1441 AN: Five.

1442 QU: You think he had dark eyes?

1443 AN: Three.

1444 QU: Medium complexion?

1445 AN: Five.

1446 QU: Caucasian?

1447 AN: Six.

1448 QU: No facial hair?

1449 AN: Six.

1450 QU: Wearing a white t-shirt or sweatshirt?

1451 AN: Five.

1452 QU: Not really heavy but heavy....medium to heavy build?

1453 AN: Six.

1454 QU: Six foot?

1455 AN: Four.

1456 QU: Two hundred, two fifteen?

1457 AN: Four.

1458 QU: Wasn't over weight, but a big guy?

1459 AN: Five.

1460 QU: A little bit of a belly showing?

1461 AN: Five.

1462 QU: Wearing jeans?

1463 AN: Three.

1464 QU: No belt?

1465 AN: Two.

1466 QU: Running shoes?

1467 AN: Two.

1468 QU: White running shoes?

1469 AN: Two.

1470 QU: No tattoos?

1471 AN: Three.

1472 QU: No marks?

1473 AN: Four.

1474 QU: Not jewelry?

1475 AN: Three.

1476 QU: Kind of plainly dressed?

1477 AN: Six.

1478 QU: You said six?

1479 AN: Yeah.

1480 QU: Okay. Think about the woman for a minute. Medium brown hair?

1481 AN: Four.

1482 QU: It was short or pulled back?

1483 AN: Five.

1484 QU: She was wearing a robe or a housecoat?

1485 AN: Six.

1486 QU: She was thin?

1487 AN: Five.

1488 QU: Five foot five?

1489 AN: Four.

1490 QU: Housecoat was light colored?

1491 AN: Five.

1492 QU: Long sleeved?

1493 AN: Four.

1494 QU: It was long in length?

1495 AN: Four.

1496 QU: How ya doin'?

1497 AN: Fine.

1498 QU: Five or fine? All right. The knife now all right? Think about that for a

1499 minute. A six inch long butcher knife?

1500 AN: Six.

1501 QU: Dark handle?

1502 AN: Four

1503 QU: Regular blade on one side?

1504 AN: Seven.

1505 QU: Then we went back and we just expanded on some of the....areas that we

talked about, the scenes....and then, then we'll be through. All right. It

was night?

1508 AN: Seven.

1509 QU: He was standing outside of the gate?

1510 AN: Seven.

1511 QU: The bushes were on either side of the gate?

1512 AN: Five.

1513 QU: He could look through the gate?

1514 AN: Five.

1515 QU: Wrought iron, metal?

1516 AN: Four.

1517 QU: He was standing smoking a cigarette?

1518 AN: Seven.

1519 QU: Watching the house?

1520 AN: Six.

1521 QU: Person in upstairs room?

1522 AN: Seven.

1523 QU: It was fairly dark right where the gate was?

1524 AN: Six

1525 QU: He opened the gate?

1526 AN: Five.

1527 QU: Did, did he close the gate? You can't recall if he closed the gate.

1528 AN: Three.

1529 QU: I'm sorry?

1530 AN: Three.

1531 QU: He walked past some bushes?

1532 AN: Seven.

1533 QU: They were on the left hand of the pathway going towards the house?

1534 AN: Six

1535 QU: Brushed up against the bushes?

1536 AN: Seven.

1537 QU: Or threw something in?

1538 AN: Seven. Well.....

1539 QU: He did one of those two things?

1540 AN: Yeah

1541 QU: You're confident he did one of them.....

1542 AN: Yeah.

1543 QU: you're just not sure which one. All right. They were low bushes by the side

of the path?

1545 AN: Six.

1546 QU: He walks towards the house?

1547 AN: Six.

1548 QU: He approaches the side of the house and looks in a window?

1549 AN: Six.

1550 QU: Checks to see if it's locked?

1551 AN: Six

1552 QU: He proceeds along the side of the house?

1553 AN: Five.

1554 QU: Looks in another window?

1555 AN: Three.

1556 QU: Checks to see if it's locked?

1557 AN: Three.

1558 QU: And he kinda goes around the corner on the outside of the house, the

1559 inside corner?

1560 AN: Uh huh

1561 QU: Side of the house?

1562 AN: Four.

1563 QU: He stops by some glass sliding doors?

1564 AN: Seven.

1565 QU: Checked to see if they were locked?

1566 AN: Seven.

1567 QU: They weren't locked?

1568 AN: Seven

1569 QU: Opens up the door?

1570 AN: Seven.

1571 QU: He opens one on the left side of the sliding doors?

1572 AN: Seven.

1573 QU: Puts the cigarette out on the gro....out on the ground?

1574 AN: Seven.

1575 QU: Walks inside?

1576 AN: Seven.

1577 QU: 'Kay, then we talked about in the kitchen. You say he walks in the kitchen

1578 through a door?

1579 AN: Seven.

1580 QU: The 'fridge is on his immediate right?

1581 AN: Seven.

1582 QU: It's a built in 'fridge?

1583 AN: Six

1584 QU: Opens the door?

1585 AN: Seven.

1586 QU: It opens from the left?

1587 AN: Seven.

1588 QU: He looks in?

1589 AN: Seven.

1590 QU: Reaches in?

1591 AN: Six

1592 QU: Takes out a bottle a beer?

1593 AN: Five.

1594 QU: Took the top off?

1595 AN: Four.

1596 QU: Took a drink out of it?

1597 AN: Seven

1598 QU: Shut the 'fridge door?

1599 AN: Three.

1600 QU: Puts the bottle on the counter to his left and cap on the counter to his left?

1601 AN: Six.

1602 QU: An L shaped kitchen?

1603 AN: Seen.

1604 QU: 'Fridge by the door?

1605 AN: Seven.

1606 QU: Counter was to the left?

1607 AN: Seven.

1608 QU: Beside the kitchen sink?

1609 AN: Five.

1610 QU: Looks around the kitchen?

1611 AN: Five.

1612 QU: Saw a knife?

1613 AN: Five.

1614 QU: Picked the knife up?

1615 AN: Six.

1616 QU: Proceeded out of the kitchen?

1617 AN: Seven.

Then we talked about just after he left the kitchen. You said he was 1618 QU:

walking down a dark hallway? 1619

1620 AN: Five.

There's an open door? 1621 QU:

1622 AN: Seven.

1623 QU: With a light on?

1624 AN: Seven.

1625 QU: It looked like a small room?

1626 AN: Six.

1627 QU: There was a desk on the right hand side?

1628 AN: Five.

1629 QU: There's a telephone on the desk?

1630 AN: Seven.

1631 QU: Old fashioned phone?

1632 AN: Seven.

1633 QU: He takes the receiver off and sets it on....on the top?

1634 AN: Six.

1635 QU: Places the receiver right beside the phone on the table top?

1636 AN: Six.

1637 QU: He sorta just walked in, not too far, just reached in?

1638 AN: Five.

1639 QU: He left that room?

1640 AN: Five.

1641 QU: Proceed down the hallway?

1642 AN: Four.

1643 QU: All right. And we were just talking about her room. He's standing at the

door to the bedroom?

1645 AN: Seven.

1646 QU: He's looking...looks in her room?

1647 AN: Seven.

1648 QU: To the left of the room is a door to a bathroom or an ensuite or something

like that?

1650 AN: Six.

1651 QU: Sees a lady come out of the room?

1652 AN: Six

1653 QU: She walks across the room?

1654 AN: Seven.

1655 QU: Goes up some stairs?

1656 AN: Seven.

1657 QU: There are about five short steps?

1658 AN: Five.

1659 QU: They're on the right hand side?

1660 AN: Seven.

1661 QU: There's a door at the top of those stairs?

1662 AN: Seven.

1663 QU: She goes through the door?

1664 AN: Seven.

1665 QU: He follows?

1666 AN: Seven.

1667 QU: He crosses the room?

1668 AN: Seven.

1669 QU: Up the stairs?

1670 AN: Seven.

1671 QU: Goes in after her?

1672 AN: Seven.

1673 QU: She doesn't see him?

1674 AN: Five.

1675 QU: 'Kay. He followed behind her?

1676 AN: Seven.

1677 QU: He had a knife in his hands?

1678 AN: Four.

1679 QU: He went through the door, not sure....if he closed the door or not?

1680 AN: Six.

1681 QU: He went through the door....

1682 AN: He went through the door, six. Not too sure if he closed the door, three.

1683 QU: 'Kay. Next he's in the kitchen and he walks in with the knife....walks into

the kitchen with the knife with blood on it?

1685 AN: Seven.

1686 QU: There's blood on him?

1687 AN: Seven.

1688 QU: He goes to the sink?

1689 AN: Seven.

1690 QU: Turns the water on?

1691 AN: Six.

1692 QU: 'Kay and he runs water over the blade?

1693 AN: Seven.

1694 QU: He put the knife in the sink?

1695 AN: Seven.

1696 QU: He washes his hands in the water?

1697 AN: Six.

1698 QU: Shuts the water off?

1699 AN: Four.

1700 QU: There's a towel hanging under the counter? Or beside the 'fridge?

1701 AN: Five.

1702 QU: Wipes hands?

1703 AN: Seven.

1704 QU: 'Kay, wipes face with hand...or with towel?

1705 AN: Seven.

1706 QU: Hangs the towel back up?

1707 AN: Four.

1708 QU: And he left the room?

1709 AN: Seven.

1710 QU: 'Kay. A couple questions now....

1711 AN: 'Kay.

1712 QU: we're kinda through the formal part of it all right? 'Kay, I want you to think

of animals and pets that are in a house that people might have. Does that

1714 register anything?

1715 AN: No.

1716 QU: Do you remember seeing a cat, dog or a bird?

1717 AN: A bird. No dog. Possibly a cat.

1718 QU: Where do you think you possibly saw the cat?

1719 AN: I can't recall.

1720 QU: Okay, just as he's walking in the kitchen and the camera goes kinda to the

floor and there's a big cat walks right across the screen? Do you remember

that now?

1723 AN: What did the cat look like?

1724 QU: Sort of a grevish color?

1725 AN: Yeah, okay.

1726 QU: Tail sticking up in the air. All right. The....now you mentioned that okay, he

took a beer out of the 'fridge and you seemed not to be sure about that,

what was the problem with that? You said it was a beer.

1729 AN: Well it was.....

1730 QU: Drink or....

1731 AN: it looked like a beer bottle.

1732 QU: Okay

1733 AN: But I'm not sure exactly because I couldn't see the label on it as to what it

1734 exactly was.

1735 QU: All right. Good. I want ya to think about for a second, you said the last

thing you remember when he's in the kitchen is that he...he kinda leaves

the room and that's about it. He's got the....washes.....ya know, cleans the

blood off and that. All right. Who are the normal kinda people that would

1739 attend a scene like that?

1740 AN: Oh right

1741 QU: Oh right what? Go ahead.

1742 AN: There was..wasn't there another scene with....was it....I dunno if it was an

ambulance or something heading at the house, right?

1744 QU: Can you remember a....the police?

1745 AN: Vaguely.

1746 QU: Okay.

1747 AN:

1748 QU: Right at the end.....

1749 AN: Yeah

1750 QU: just think about the end now that we've talked about the police and that,

does it....can you remember somebody walking down a street?

1752 AN: Oh right, okay, yeah. Yeah okay, the police were.....attended at the house

and the guy....walked....was walking down the street when the police drove

1754 by.

1755 QU: Right. Okay. And you mentioned a couple of times here about this white

shirt that he was wearing. You indicated in a couple of cases, that you

1757 didn't score that very high in confidence.....

1758 AN: Right.

1759 QU: Why is that?

1760 AN: It was more as to the type of shirt he was wearing, not necessarily the

1761 color.

1762 QU: Okay. Think back for a second, to the beginning of the scene.....there's a,

an emblem that says Roots and a beaver.....

1764 AN: Okay.

1765 QU: Does that register?

1766 AN: Sweatshirt. Yeah.

1767 QU: What color is it?

1768 AN: Green. Well they're usually green and dark.

1769 QU: It's actually red, bright red.

1770 AN: Red? Is it?

1771 QU: Bright red, almost orange. All right. The....it's okay, I mean it's just

interesting how these things go. 'Kay, you said that....there's certain things

1773 that we have in modern kitchens that, that help people out after they have

supper and clean up dishes.

1775 AN: Dishwashers?

1776 QU: Right. Okay, does that mean anything?

1777 AN: Oh, he put the knife in the dishwasher, that's right

1778 QU: All right. So he didn't leave it in the sink?

1779 AN: No.

1780 QU: All right.

1781 AN: Guess not.

1782 QU: That's okay, that's pretty good. You remembered an awful lot of stuff here.

1783 AN: I tried not to remember, like I tried to do what you told me to do.

1784 QU: Yeah. No, that's what's supposed to happen

1785 AN: It's hard not to do that though.

1786 QU: Yeah, all right. Just a couple a questions. On the remember/know, you

seemed not to be too sure on that.

1788 AN: Yeah, well because what I recall is what I remember. There are some

aspects that I would know....or assume that he would do.

1790 QU: Okay. So when you, when you say....know you, you did it right according to

the definitions and that but you seemed to have some, some problem with

that. Like...when...what were you trying to express to me like when....how

would you have felt better expressing it to me for example?

1794 AN: I think the way I was thinking about it was that....if you go chronologically, I,

1795 I know....or remember him doing something or I know he did something

because I've seen the whole...scene. But....if you take it one step at a

1797 time....like I know that he did....or I remember that he took the bottle out of

the 'fridge. I mean I know he did it, but I remember he did it too because

it's kind of hard to....define....if ya know....if you remember something does

that mean you specifically actually saw the whole physical

thing....happening?

1802 QU: That's what it's supposed to mean but you seemed to be bouncing back

1803

1804 AN: Yeah.

1805 QU: Does, does know....would know have been like....if he took the bottle out of

between like saying I remember, I know it, like.....

the 'fridge, I know that? Is that a better way to do it or...? Or....for your......

1807 AN: Okay.

1808 QU: The definition of know and remember as people ya know, the general

1809 population interview know?

1810 AN: Okay, if you see somebody...open a 'fridge and take something out....and

1811 you don't see what they're taking out....and then....but then you see

them..with it in their hand....I mean I remember they took something out of

the 'fridge...but I'm not sure.....and I know they have.....I remember they

1814 have a bottle in their hand....

1815 QU: Okay.

1816 AN: So I..would.....I can't say if you just looked at them taking it out of the

1817 'fridge, whether it was a bottle of beer or not. I know he had something,

so....l guess it's the wording, the way it's worded..specifically.

1819 QU: The know or the remember?

1820 AN: Yeah.

1821 QU: If you were just thinking about it, now not.....forget about the definitions, if

1822 you were just thinking about in...sort of everyday life and I came and I

asked you to tell me if you know something or if you remember

something....describe to me how you would, you woulda answer it.

1825 AN: I know something because .. well I know like my name... because I know it.

1826 It's general knowledge where I've learned it

1827 QU: Okay

1828 AN: I remember something because I have physically seen it or ...

1829 QU: Okay.

1830 AN: or done it

1831 QU: 'Kay. All right Confidence level, when we're using confidence level, I notice

1832 you were kind of four, three.... and then six, five, did you

feel that was a better was to express to me how you felt about a piece of

information you gave me, rather than the remember/know?

1835 AN: Yes, I liked it better

1836 QU: All right. Now....often times what happens is the....you work in a lawyer's

1837 office, right?

1838 AN: Yeah.

1839 QU: So often times what would happen is...say for example.....a person gives a

description initially to the police.....and..the person's writing down the

notes..and the person says, like the person who was in here before...said

that he had a moustache. Okay? Which he didn't have

1843 AN: No

1844 QU: All right, so then when we go through the....and let's assume that the

suspect is arrested, he really did in fact do it and when he's arrested he

doesn't have a moustache. So....you read the information in your statement

that you gave the police, the police doesn't ask for any clarification or 1847 anything and the confidence level is remember/know and....you then are 1848 given your statement back two years from now, before you go to 1849 Preliminary Inquiry or six months or whatever and you read it and in the 1850 statement you gave police you said a moustache. 'Kay? So....of course 1851 now Paul being in his defense mode would get up and said you said the 1852 person had a moustache, is that correct? Yes, that's in your statement. 1853 Yes. Okay, then he would produce evidence to show the person didn't 1854 have a moustache. Okay, but when I asked this person, I said to her okay, 1855 1856 do you remember or know that? She said well I, I know that. So then I asked her her confidence level about a moustache, she said that was a 1857 1858 two. So if you were reading the statement as the witness.....do you think that would help you when you had to go in and testify? Like ya know, if you 1859 didn't have....you'd be able to know you weren't sure....six months ago 1860 1861 AN: I think it would because...it's a more accurate assessment of how you felt about that particular statement. How....well how confident you were 1862 1863 about..that fact or not. So if I teach all the police officers how to do this, Paul's gonna really be 1864 QU: upset? Oh, but the defense lawyers are gonna go oh shoot..... 1865 1866 AN: help with the real story right? 1867 QU: Well a search for the truth right? Okay, thanks very much. I wanted to ask

ya, after you watchect the video okay or we were watching the video, you

1868

1869	knew that this was a memory test or experiment, is there anything that you
1870	did when you were watching to try to makeya know, so that you would
1871	remember?
1872 AN:	Well I, I made sure I paid close attention to what was going ondetails
1873	that happenedI would specifically take notice of. How the camera
1874	movedbrought certain things to attention, like particularly when he threw
1875	his cigarette downthe camera panned downtowards his cigarette.
1876	SoI, I tended to try to remember the little things, not just the, the big
1877	things.
1878 QU:	So you kind of stored that away in your mind?
1879 AN:	Yes.
1880 QU:	Okay and you know, afterwards did ya kinda think about it a little bit?
1881 AN:	I didreplay it in my mindagain, yeah.
1882 QU:	Okay now did you replay it in your mind because you, you knew that you
1883	were going to be tested?
1884 AN:	Yes.
1885 QU:	Just say for example if we
1886 AN:	Yeah
1887 QU:	Okay. All right. So if we were just in the psych. class and we came in and
1888	said we want you to watch this video and didn't tell you what it was about or
1889	anything like that, just played the video'kay and then just left, do you think

you'd replay it in your mind and stuff like that? After that? Or did you do it

1890

208

1892 experiment?

1893 AN: I..might have recalled certain details about it....in my mind again, but

1894 I....because I knew there was....I was going to be having to recall

information, I purposely did replay it in my mind

1896 QU: Okay. Yeah, that's interesting. What I'm just trying to find out of course is,

is there's quite a bit of difference between like a laboratory experiment,

when people know there's going to be a memory test, versus, ya know,

people in the real world seeing something suddenly happen......

1900 AN: Right

1901 QU: before them.

1902 AN: Right

1903 QU: Ya know..when it happens, they're not.....they haven't been told, ya know,

1904 that something's gonna happen and somebody's gonna interview you five

1905 days later, so.....

1906 AN: And I would say my attention level out in the real world would be not even

as close to be.....as when I was watching a video

1908 QU: Okay. Thanks for sharing that with me. Appreciate it.

1909

Appendix C Notes Participant 13 Enhanced Cognitive Interview Phase 1

NOTE	REMEMBER(R) OR	CONFIDENCE
	KNOW (K)	LEVEL
CAU	R	6
MALE	R	7
DR.HR.	R	7
6'	R	7
200-2:10	R	5
WHT LIGHT COL T SHIRT	R	7
JEANS	R	7
STANDING BY GATE	R	7
NIGHT TIME	R	5
SMOKING CIG	R	7
LOOKING IN WINDOW	R	7
LIGHT INSIDE	R	7
MAN INSIDE RM.(MAN-WOMAN??)	R	6
2 ND FL	R	5
BUSH AROUND GATE	R	6
GATE CLOSED	R	6
WROUGHT IRON FENCE	R	5

NOTE	REMEMBER (R) OR	CONFIDENCE
	KNOW (K)	LEVEL
WATCH MAN INSIDE	R	6
OPENED GATE	К	5
WALKING BY BUSH	R	7
THREW SOMETHING OR RUB BUSH	R	7
WALKED TOWARD HOUSE	К	5
CAN'T RECALL MAN TURN OFF LIG.	К	3
LEFT RM	K	2
TOWARD HOUSE	R	6
WALK SIDE OF HOUSE	R	7
LOOK IN WIND	R	7
CHECK TO SEE LOCKED	R	7
IT WAS	R	6
ALONG SIDE OF HOUSE	R	6
SLIDING GLASS DOORS	R	7
CHECKED/OPENED	R	7
PUT OUT CIG	R	6
THREW ON GROUND	R	7
BUTTED OUT	R	
WENT INTO HOUSE	R	7
WENT INTO KIT	R	7

NOTE	REMEMBER (R) OR	CONFIDENCE
	KNOW (K)	LEVEL
OPEN FRIDGE	R	7
TOOK OUR BOT. BEER	R	5
TOOK TOP OFF	R	5
TOOK A DRINK	R	7
PUT IT ON COUNTER	R	7
CLOSED FRIDGE DOOR	Κ .	4
TOOK A KNIFE	R	7
LOOKED BUTCHER KNIFE	R	7
NOT SURE OFF COUNTER		
NOT SURE OUT OF DRAWER		
WENT UPSTAIRS	K	2
SOMEONE IN WASHRM OFF BEDRM	R	4
DEN OR OFFICE	R	7
TOOK PH OFF HOOK	R	7
(NOTE INDECIPHERABLE)		
WOMAN IN WASHRM	К	4
WM UP SHORT STAIRS	R	7
INTO ANOTHER RM	R	7
HE FOLLOWED HER	R	7
NEXT IN KIT	R	7

NOTE	REMEMBER (R) OR	CONFIDENCE
	KNOW (K)	LEVEL
BLD ON KNF	R	7
WASHED BLD OFF	R	7
KNF IN SINK	R	7
WIPED HANDS	R	7
WIPED FACE	R	7
TOWEL IN KIT	R	7
HUNG TOW BACK UP	R	5
LEFT THE RM	R	7

Appendix D

Results of Comparison of Accuracy Rates of "Remember" Judgements Compared to Accuracy Rates of "Know" **Judgements**

As noted in the results section, one of the committee members requested another comparison be conducted comparing the accuracy rate of statements receiving "remember" judgements to that of statements receiving "know" judgements. Only data from 12 participants (7 through 18) were analyzed as they were the only participants who were interviewed about events during phase 4. Of the 12 participants only 10 participants were used in the "remember" / "know" analysis because 2 of the participants never made a "know" response in one of the phases. The "remember"/ "know" data were analyzed with a 2 (Judgement Type: remember/know) X 4 (Interview Phases 1, 2, 3, 4) within-subjects analysis of variance (ANOVA). It revealed a maineffect of judgement type, F(1,9)=16.70, MSE = .053, p<.01. "Remember" judgements yield higher accuracy ($\underline{M} = .90$) than "know" judgements ($\underline{M} = .69$). The other main effect and interaction were not significant Fs < 1.

The committee member requested a comparison of the mean confidence rating assigned to correct versus incorrect statements. Out of the 12 participants used in the confidence level analysis only 11 participants were analyzed because one of the participants did not make a mistake in one of the phases. A comparison of the mean rating assigned to correct versus incorrect statements was conducted. A 2 (Accuracy: correct/incorrect) X 4 (Interview Phase 1, 2, 3, 4) ANOVA of the confidence ratings

revealed a main-effect of accuracy, $\underline{F}(1,10) = 13.70$, $\underline{MSE} = 1.08$, $\underline{p} < .01$. Correct statements were assigned higher confidence ($\underline{M} = 6.6$) than incorrect statements ($\underline{M} = 5.7$). Again, the other main-effect and interaction were not significant, $\underline{F} < 1$.

	PH		C L	PH		C L		The state of the s	C L	PH		C L
	S	P	T			TO		R	TO	ASE	R	T
	_	1		-	1			1		_	1	0
EVENTS PARTICIPANT 13 R=5 / K=6	1	K	7	2	K	7	3	K	7	4	K	7
MALE	1	5	7	1	5	7	1	5	7	1	5	7
NIGHTTIME	1		6	8			1	5	7	1	5	7
ARTIFICAL LIGHTING	8			8			8			8		
MALE STANDING BY TREE	8			8			8			8		
LOOKING UP TO WINDOW IN HOUSE	1	5	6	1	5	6	1	5	5	1	5	
PERSON WALKING AROUND IN WINDOW	1	5	5	1	5	6	1	5	7	1	5	6
MALE SMOKING CIG	1	5	7	1	5	7	1	5	7	1	5	7
HOLDING CIG RIGHT HAND	8			8			8			8		
MALE OPENS BLACK IRON GATE	1	5	5	1	5	5	1	5	5	1	5	5
MALE ENTERS YARD	1	5	7	1	5	5	1	5	6	2	6	3 7
MALE CLOSES GATE	8			8			8			1	5	7
WALKING TOWARDS HOUSE	1	6	5	1	5	5	1	5	6	1	6	6
THROWS A PACKAGE	8			8			8			1	5	7
PACKAGE IS RED	8			8			8			8		
USES HIS LEFT HAND	8			8			8			1	5	7
UNDER SHURB SUB SAYS TREE	8			8			8			1	5	7
LEFT SIDE OF DOOR	8			8			8			1	6	6
WALKED UP TO SIDE OF HOUSE	1	5	6	1	5	5	1	5	5	1	5	6
LOOKS INTO WINDOW OF HOUSE	1	5	7	1	5	5	1	5	7	1	5	6
HEADS TOWARDS PATIO DOORS	1	5	7	1		7	1	5	5	1	6	5
GOES DOWN A COUPLE OF STEPS	8			8			6			8		
PROCEEDS BELOW GROUND PATIO AREA	8			8			8			2	5	7
CHECKS SET OF SLIDING GLASS DOORS	1	5	7	1	5	7	1	5	6	1	5	7
TOUCHEDS GLASS ON SLIDING DOOR	8			8			8	_		1	5	7
INSECURE OPENS ONE	1	5	7	1	5	7	1	5	7	1	5	7
DROPS CIG ON PATIO OUTSIDE PATIO DOOR	1	5	7	1	5	7	1	5	7	1	5	7
STEPS ON CIG	1	6	7		_			-	_	1	5	7
ENTERS HOUSE	1	5	7	1	5	7	1	5	7	1	5	7
ENTERS A REC TYPE ROOM POSS. DIN. RM	8			1	5	4	1	6	ò	8		
CLIMBS STAIRWELL	8			8			8			8		
STAIRWELL DARK	8	_	_	8	_	-	8	_	-	8	_	_
ENTERS KITCHEN OF RES	1	5	7	1	5	6	1	5	6	1	5	7

			C			C L			C			C
	Р		_	Р		_	Р		-	Р		-
	Н		1	Н		1	Н		1	Н		1
	A		'	A		•	A		•	A		
	S		т			Т	S		Т	S		1
	E	D	0		D		E	D	_	E	R	C
	_	7	O	_	R	0	_	R	0	_	1	•
EVENTS PARTICIPANT 13 R=5 / K=6	1	K	7	2	K	7	3	K	7	4	K	-
LIGHTS ON IN KITCHEN	8			8			1	5	7	8		
WALKS PAST DARK GREY CAT	8			8			8			8		
GOES TO FRIDGE	1	5	7	1	5	7	1	5	7	1	5	
OPENS FRIDGE	1	5	7	1	5	7	1	5	7	1	5	
TAKES OUT BOTTLE	1	5	5	1	5	7	1	5	7	1	5	
BOTTLE BROWN	8			8			8			8		
OPENS BOTTLE	1	5	5	1	5	5	1	5	5	1	5	
HAS A DRINK FROM BOTTLE	1	5	7	1	5	7	1	5	7	8		
HE TURNS FROM FRIDGE	8			8			8			8		
(NIFE IN HAND	1	5	7	1	5	6	1	6	6	1	5	
EAVES BOTTLE ON COUNTER	1	5	7	1	5	7	1	5	6	1	5	
MOVES OTHER AREA OF THE HOUSE	1	5	7	1	5	4	1	5	3	1	5	
T IS DARK IN THIS AREA	8			8			8			1	5	
STOPS BY DOOR TO ROOM	8			1	5	7	1	5	7	1	5	
TAKES PHONE OFF OF HOOK	1	5	7	1	5	7	1	5	7	1	5	
WALKS TO ANOTHER AREA OF HOUSE	1	5	7	1	5	5	1	5	5	1	5	
FURNITURE IN ROOM	8			8			8			8		
FEMALE COMING OUT ANOTHER ROOM	1	5	7	1	5	7	1	5	6	1	5	
SHE WALKS DOWN HALL TOWARDS MAN	8			8			8			8		
HE STEPS BACK HIDES BEHIND WALL	8			8			8			8		
SHE WALKS INTO AREA MAN IS	1	5	7	1	5	7	8			1	5	
SHEDOESN'T SEE HIM WALKDS BY	1	5	7	1	5	7	1	5	7	1	5	
FEMALE GOES INTO ANTOHER ROOM'	1	5	7	1	5	7	1	5	7	1	5	
HE FOLLOWS	1	5	7	1	5	7	1	5	7	1	5	
HE HAS KNIFIE IN HAND	8			8			8			1	5	_
NEXT VIEW MALE IS GOING INTO KITCHEN	1	5	7	1	5	7	1	5	6	1	5	
HE HAS KNIFE WITH BLOOD ON IT	1	5	7	8			1	5	7	1	5	
HE HAS BLOOD RIGHT CHEEK	8			1	5	7	1	5	5	1		
HE WAS WASHING KNIFE	1	5	_	1	5	7	1	5	7	1	5	
N THE SINK	1	5	7	1	5	7	1	5	7	1	5	
GETS DISHTOWEL	1	5	7	8			1	5	5	1	5	
HANGING ON THE RIGHT SIDE OF WALL	8			8			1	5	5	2	5	

8

ABOVE SINK

3 5 7 3 5 7 3

PUT KNIFE IN SINK

LEFT ROOM

	PH		C L	PH		C L	P H		C L 1	PH		C L
	S		T			T				AS		T
	E			E		0	E		0	E	R	0
EVENTS PARTICIPANT 13 R=5 / K=6	1	K	7	2	/ K	7	3	/ K	7	4	/ K	7
PHASE 2 PERIPHERAL	•	-	-	-	• •	-						-
WIPED IT NOT GOOD JOB WIPING				1	5	7						
STABBED WOMEN				3	_	5	-		4			
IN ROOM ADJ TO B.RM HE STAB WOMEN				3	5	7						
OUTSIDE DOOR				1	5	7						
CHECKED A WINDOW CORNER HOUSE				1		5	1	5	7			
WALKED THROUGH DINING ROOM				1	?	4			6			
HE GOES HOUSE WATCHES 2ND FLR WIN				1	5	7	1	6	7			
PHASE 3 PERIPHERAL												
WALKS ACROSS TO CORNER OF HOUSE												
WALKS THROUGH DINING ROOM												
WALKS THROUGH DOOR												
NO LIGHTS ON												
LOOKS AROUND KITCHEN												
UP A FEW STAIRS												
BATHROOM ON THE LEFT												
STAIRS ON THE RIGHT												
TURNS ON KITCHEN SINK												
SHUTS OF WATER												
LEAVES KITCHEN												
PERIPHERAL PHASE 4												
COULD SEE THROUGH GATE										1	5	5
FAIRLY DARK WHERE GATE WAS										2	5	6
BRUSHED AGAINST THE BUSHED										3	5	7
BUSH SIDE PATH HE WALKS TO HOUSE										1	5	6
IT WAS										1	5	
LOOKED IN ANOTHER WINDOW										1	5	7
OPENED THE ON ONE ON THE LEFT										1	5	7
FRIDGE WAS ON HIS IMMEDIATE RIGHT										1	5	7
BUILT IN FRIDGE										1	5	7
IT OPENED FORM THE LEFT										1	5	7
FRIDGE BY THE DOOR										1	5	7

			C			C			C	1		C
	Р		L	P		-	Р		-	Р		-
	н		1	Н		1			1			1
	A		•	A		•	Α		•	A		ľ
	S		Т	S	1	Т			T			T
	E	R	_	E	R	_		R	0		R	C
		1	_		1			1		_	1	
EVENTS PARTICIPANT 13 R=5 / K=6	1	K	7	2	K	7	3	K	7	4	K	7
SHUT THE FRIDGE DOOR										1	6	3
CAP OFF TOP ON COUNTER TO HIS LEFT										1	5	7
L SHAPED KITCHEN			- Indian							1	5	7
FRIDG. BY DR COUNTERS GO TO LF.										2	5	7
BESIDE KITCHEN SINK										2	5	5
SAW A KNIFE										3	6	5
OPEN DOOR										1	5	
LIGHT ON IN THE ROOM										1	5	7
SMALL ROOM			1							1	5	6
DESK RIGHT INSIDE										1	5	5
RIGHT HAND SIDE										1	5	5
REGULAR TELEPHONE										1	5	6
OLD FASHION ONE										1	5	7
RECEIVER ON THE TOP										1	5	6
ON THE TABLE TO										1	5	6
LEFT RM PROCEEDED DOWN THE HALL										3	5	7
STANDING AT DOOR TO BEDROOM (HE)										2	5	7
LOOKING AT THE ROOM										2	5	7
LEFT SIDE OF THE ROOM										1	5	6
UP ABOUT 5 STAIRS										2	5	5
ON RIGHT HAND SIDE OF ROOM										2	5	7
UP TO A DOOR										1	5	7
HE CROSSES ROOM										1	5	7
GOES UP THE STAIRS,										2	5	7
THROUGH THE DOOR										1	5	7
HE CLOSED THE DOOR										2	6	7
BLOOD ON HANDS										1	5	7
WALKED TO KITCHEN SINK										1	5	
PUT HANDS IN WATER										1	5	
LEFT THE ROOM										3	5	7
Assumptions												
drink is a beer												
took out bottle of beer												
stabs her I guess												

			C			C			C			C
			L			L			L			L
	P			P			P			P		
	H		1	H		1	H		1	Н		1
	A			Α			A			A		
	S		T	S		Т	S		T	S		T
	E	R	0	E	R	0	E	R	0	E	R	0
		1			1			1			1	
DESCRIPTION OF MAN	1	K	7	2	K	7	3	K	7	4	K	7
5'11" TO 6FT	1	5	5	8			8			1	6	4
200 PLUS LBS	1	5	5	8			8			1	6	4
caucasioan	1	5	6	8			8			1	5	6
STOCKY BUILD	8	1		8			8			8		
BELLY OVER BELT	8			8			8			1	5	5
COLLAR LENGTH HAIR	8			8			8			8		
DARK HAIR sus says brown	1	5	7	8			1	5	7	1	5	7
CUT AROUND EARS	8			8			8			1	5	5
SLIGHTLY WAVEY HAIR	8			8			8			8		
PARTED IN MIDDLE	8			8			8			8		
COMBED BACK	8			8			8			8		
MID 20'S EARLY 30'S	8			8			8			8		
NO GLASSES	8			8			8			8		
ROUND FACE	8			8			8			8		
CLEAN SHAVEN/	8			8			8			1	6	6
RED SWEAT SHIRT	8			8			8			8		
LONG SLEEVE SHIRT	8			8			8			8		
ROOTS ON SHIRT	8			8			8			8		
BEAVER ON SHIRT	8			8			8			8		
ATHLETICS ON SHIRT	8			8			8			8		
BLUE JEANS	1	5	7	8			1	5	5	1	5	3
TAG ON BACK OF BLUE JEANS	8			8			8			8		
RUNNIGH SHOES	8			8			8			1	6	2
DIRTYWHITE/GREYISH	8			8			8			1	6	2
RED BLUE STRIPE ON SIDE RUNNING SHOE	8			8			8			8		
SLEEVES SWEAT SHIRT PUSHED UP	8			8			8			8		
SMOKES CIG	1	5	7	1	5		1	5	7	8		
RIGHT HANDED	8			8			8			8		
WRIST WATCH ON LEFT WRIST	8			8			8			8		
NO OTHER JEWLERY NOTICED	8			8			8			1	5	3
NO GLOVES	8			8			8			8		
Phase 1 Peripheral												
wearing white or light color shirt	2	5	7				2	5	6	2	5	5

			С	1		С			С			С
		1	L			L			L			L
	P			P	1	!	P			P	1	
	Н	П	1	Н		1	H		1	H		1
	A			A	1		A			A		
	S		T	S	_	T	S	_	T	S		T
	E	R	0	E	R	0	E	R	0	E	R	0
		1			1			1	_		1	_
DESCRIPTION OF MAN	1	K	7	2	K	7	3	K	7	4	K	7
Phase 4 Peripheral												
straight hair				1				1		2		5
dark eyes										1	5	3
medium complexion										1	5	5
white sweatshirt										2	5	5
medium build										1	5	6
notoverweight but gig										1	5	5
no belt										2	5	2
no jewlery										2	5	3
no tatoos										1	5	3
plainly dressed										1	6	6

Appendix E Participant 13 Description of Woman

DESCRIPTION OF WOMAN	P H A S E	R / K	1 T O	P H A S E	R / K	C L 1 T O	P H A S E	r / k	C L 1 T O	P H A S E	R / K	C L 1 T O
5'7" TO 5"9"	8			8			8			8		
130 TO 140 LBS	8			8			8			8		
SLIM	8			8			8			8		
BLACK GLASSES	8			8			8			8		
SLIM	8			8			8			1	5	5
FEATHERED BACK	8			8			8			8		
BELOW COLLAR AT BACK	8			8			8			8		
SHORTER ON THE SIDES	8			8			8			8		
HOUSE COAT	8			8			8			1	5	6
SHORT SLEEVES	8			8			8			8		
WHITE SHEER	8			8			8			8		
HOUSE COAT OPEN	8			8			8			8		
ANKLE LENGTH	8			8			8			1	5	4
WHITE SHEER PJS	8			8			8			8		
LATE 20'S-EARLY 30'S	8			8			8			8		
DARK FEATURES	8			8			8			8		
CAUCASIAN	8			8			8			8		
PHASE 1 PERIPHERAL												
EITHER SHORT OR PULLED BACK										1	5	5
55										2	6	4
LONG SLEEVED HOUSE COAT										2	5	4
LIGHT COLORED										1	6	5

PARTICIPANT 13 DESCRIPTION KNIFE	P H A S E	R/K	1 T O	PHASE	R/K	C L 1 T O	P H A S E	R/K	C L 1 T O	P H A S E	R/K	1 T 0
KNIFE	1	5	-	1	5	-	8			1		
BUTCHER TYPE	8			8			8			8		
DARK HANDLE	8			8			8			1	5	4
STAINLESS STEEL	8			8			8			1	5	7
BLADE PT TO APPROX 2" WIDEST SPOT	8			8			8			8		
WIDE BLADE BY HANDLE	8			8			8			8		
APPROX 14 " LONG	8			8			8			8		
9" BLADE	8			8			8			8		
4" HANDLE												
PHASE 4 PERIPHERAL DETAILS												
6 " LONG										2	5	6

			С		1	С			С	-	The state of the s	С
	_		L	_		L	_		L	_		L
	P			P		4	P			Р		
	Н		1	H		1	H		1			1
	A		_	A		_	A		_	A		т
	S	0	T	_	D	- 1	S	1	T		D	0
	_	/		E	/	U	_	/	J		1	U
RELEVANT EVENT INFORMATION	1	1	7	2	1	7	3		7	4	-	7
MALE	-	1.0	-									_
NIGHTTIME												
ARTIFICAL LIGHTING		I										
MALE STANDING BY TREE												
LOOKING UP TO WINDOW IN HOUSE												
PERSON WALKING AROUND IN WINDOW												
MALE SMOKING CIG							-					
HOLDING CIG RIGHT HAND							-					
MALE OPENS BLACK IRON GATE												
MALE ENTERS YARD												
MALE CLOSES GATE									1			
WALKING TOWARDS HOUSE		-										
THROWS A PACKAGE												
PACKAGE IS RED												
USES HIS LEFT HAND									\dashv			
UNDER SHURB SUB SAYS TREE										1		
LEFT SIDE OF DOOR												
WALKED UP TO SIDE OF HOUSE									+		1	
LOOKS INTO WINDOW OF HOUSE												
HEADS TOWARDS PATIO DOORS											1	
GOES DOWN A COUPLE OF STEPS									+	-	+	
PROCEEDS TO BELOW GROUND PATIO AREA												
CHECKS ONE SET OF SLIDING GLASS DOORS											_	
TOUCHEDS GLASS ON SLIDING DOOR							-					
INSECURE OPENS ONE											1	
DROP CIG ON PATIO OUTSIDE OF PATIO DOOR												
STEPS ON CIG												
ENTERS HOUSE												
ENTERS REC TYPE ROOM OR DINNING ROOM									1			
CLIMBS STAIRWELL												
STAIRWELL DARK							-					
ENTERS KITCHEN OF RES	-											
LIGHTS ON IN KITCHEN												
WALKS PAST DARK GREY CAT												

	PHASE	1	T O		R /	T 0	PHASE	1	T 0	E	R/K	C L 1 T O 7
RELEVANT EVENT INFORMATION GOES TO FRIDGE	1	K	-	4	n	-	3	N	-	4	N	-
	1					_				-		
OPENS FRIDGE											_	
TAKES OUT BOTTLE												
BOTTLE BROWN	-											
OPENS BOTTLE HAS A DRINK FROM BOTTLE	-		_					-				
HE TURNS FROM FRIDGE	-						-					
				-								
KNIFE IN HAND	-			-								
LEAVES BOTTLE ON COUNTER	+-	-		-								
MOVES TO ANOTHER AREA OF THE HOUSE IT IS DARK IN THIS AREA	-							-				
				-								_
STOPS BY DOOR TO ROOM	-	-										
TAKES PHONE OFF OF HOOK WALKS TO ANOTHER AREA OF HOUSE	-			-								
FURNITURE IN ROOM		-		-								
SHE COMES OUT OF ANOTHER ROOM	-			-				-				-
SHE WALKS DOWN A HALLTOWARDS MAN				-								
HE STEPS BACK HIDES BEHIND WALL	-					_						
SHE WALKS INTO AREA MAN IS	-			-					_			
FEMALE DOESN'T SEE HIM AS SHE WALKDS BY	-											
FEMALE GOES INTO ANTOHER ROOM				-								
HE FOLLOWS							-					
HE HAS KNIFIE IN HAND						_						
NEXT VIEW MALE IS GOING INTO KITCHEN	1											
HE HAS KNIFE WITH BLOOD ON IT								-				
HE HAS BLOOD ON RIGHT CHEEK ON FACE												
HE WAS WASHING KNIFE												
IN THE SINK												
GETS DISHTOWEL												
HANGING ON THE RIGHT SIDE OF WALL												
ABOVE SINK												
TOWEL GREENISH YELLOW	-			-		-						
WiPES KNIFE OFF WITH TEA TOWEL												
WIPES OFF RIGHT CHEEK WITH TEA TOWEL				-		-						

RELEVANT EVENT INFORMATION	P H A S E	1	C L 1 T O 7	PHASE 2	R / K	C L 1 T O	P H A S E	R / K	C L 1 T O	P H A S E	R / K	1 T 0
PUTS KNIFE IN DISHWASHER												
USES TOP RACK OF DISHWASHER												
HANGS TEA TOWEL IN SAME SPOT												
WALKING ON STREET FACING TRAFFIC												
RIGHT HAND IN POCKET												
STREET IS DARK												
HE IS WALKING DOWN THE STREET												
POLICE CAR APPROACHING HIM												
POLICE CAR FLASHING LIGHTS												
POLICE CAR PASSES MALE												

			С			С			С			
	PHASE	R	1 T O	PHASE	R	1 T O	P H A S E	R	1 T O	PHASE	R	C L 1 T O
RELEVANT INFORAMTION MAN	1	/ K	7	2	K	7	3	K	7	4	K	7
5'11" TO 6FT	Ť	-	-	-		-						
200 PLUS LBS												
caucasioan												
STOCKY BUILD												
BELLY OVER BELT												
COLLAR LENGTH HAIR												
DARK HAIR												
CUT AROUND EARS												
SLIGHTLY WAVEY HAIR												
PARTED IN MIDDLE												
COMBED BACK												
MID 20'S EARLY 30'S												
NO GLASSES												
ROUND FACE												
CLEAN SHAVEN/												
RED SWEAT SHIRT												
LONG SLEEVE SHIRT												
ROOTS ON SHIRT												
BEAVER ON SHIRT												
ATHLETICS ON SHIRT												
BLUE JEANS												
TAG ON BACK OF BLUE JEANS												
RUNNIGH SHOES												
DIRTYWHITE/GREYISH												
RED BLUE STRIPE ON SIDE RUNNING SHOE												
SLEEVES SWEAT SHIRT PUSHED UP												
SMOKES CIG												
RIGHT HANDED												
WRIST WATCH ON LEFT WRIST												
NO OTHER JEWLERY NOTICED												
NO GLOVES												

RELEVANT INFORMATION WOMAN	P H A S E	R / K	C L 1 T O	PHASE	R / K	C 1 T 0	PHASE	R / K	C L 1 T O 7	PHASE	R / K	C L 1 T O 7
5'7" TO 5"9"												
130 TO 140 LBS												
SLIM												
BLACK GLASSES												
SLIM												
FEATHERED BACK												
BELOW COLLAR AT BACK												
SHORTER ON THE SIDES												
HOUSE COAT												
SHORT SLEEVES												
WHITE SHEER												
HOUSE COAT OPEN												
ANKLE LENGTH												
WHITE SHEER PJS												
LATE 20'S-EARLY 30'S												
DARK FEATURES												
CAUCASIAN												

			С			С			С			C
			L			L			L			L
	Р		_	Р		-	P			P		-
	Н		1	Н		1	Н		1	Н		1
	A			A			A		-	A		
	S		Т			T	S		Т	S		T
	E	R	0	E	R	0	E	R	0	E	R	0
		1			1			1.			1	
RELEVANT INFORMATION KNIFE	1	K	7	2	K	7	3	K	7	4	K	7
KNIFE												
BUTCHER TYPE												
DARK HANDLE												1
STAINLESS STEEL												
BLADE PT TO APPROX 2" WIDEST SPOT												
WIDE BLADE BY HANDLE												
APPROX 14 " LONG												
9" BLADE												
4" HANDLE												