Cognitive interviews and financial crimes

1. Introduction

Over the past decade, Cognitive Interviews (CI) have gained increased attention by scholars that seek to understand the reliability and accuracy of its application (Dando, Wilcock, Behnkle, and Milne, 2011a; Maras and Bowler, 2012; Sharman and Powell, 2013; Snook & Keating, 2010). Originally introduced in the 1980s by Geiselman et al. (1984), CI's have undergone major adjustments (Fisher and Geiselman, 1992) and are now widely used in shaping investigative interviewing in countries such as England and Wales, Australia, Canada and the United States of America (U.S.A.) (Dando, Wilcock, Milne, and Henry, 2009). In brief, CI's are based on the “psychological principles of remembering and retrieval of information from memory” (Stein and Memon, 2006, p. 597). The CI's approach consists of four mnemonic components (reconstruct the event(s), report everything, recall in a change of temporal order (CTO) and change perspective (CP)), in addition to several techniques “aimed at optimizing both the retrieval process and the social and communication aspects of an investigative interview” (Dando et al., 2011a, p. 492). They all combine in order to assist investigators in obtaining specific information about a crime.

The objective of this paper is to present an argument for CI's as a useful technique for investigators to use in order to obtain information from financial criminals.¹ In particular, the paper argues that CI's are applicable and can be sucessfully used to interview withnesses of financial crimes. To shed light on these issues, the paper first examines the theories underpinning investigative interviewing, followed by a critical evaluation of the extant literature associated with applying CI's theories to real world phenomena. The paper concludes with a discussion on policy implications and areas for future research.

¹ The terms “fraud”, “white-collar crime”, and “financial crime” will be used interchangeably throughout the paper. Given the nature of the paper, it was not necessary to disentangle the terms since all three are referred in the literature to mean fraud committed by individuals that have senior managerial positions (see Lynch, McGurrin and Fenwick, 2004; Matthews, 2005).
2. Components and Difficulties Associated with CI’s Applicability

The strategies that establish the mnemonic components of CI's have several theoretical underpinnings. Reconstructing the events or the mental reinstatements of context (MRC) as it was first coined by Geiselman et al. (1994), is employed by the interviewer to encourage the witness to recall the various psychological and physical elements of the to-be-remembered (TBR) event(s) that existed at the time of the crime (Dando & Milne, 2009, p. 150). This technique has its origin in Tulving and Thomson’s (1973) work on the encoding specificity principle (ESP). According to Tulving and Thomson (1973), the ESP provides a theoretical framework to understand how contextual information present at encoding an operation, helps to retrieve or recall cues of a particular event. The technique involves the interviewer requesting the witness to "mentally go back to the time and place" where the crime occurred and recall “the external factors (weather), emotional factors (mood, fear), and cognitive factors (thoughts)” that "existed at the time" of the criminal event (Geiselman and Fisher, 2014, p. 1 & 5).

However, it is not always advisable to request a witness (who in some cases may be the victim) to recollect the events associated with a crime (Dando and Milne, 2009, p. 151). For one, the recollection can be traumatic to the witness and can lead to further emotional harm. Consider the effects of asking either an individual (who recently witnessed a physical altercation) or a victim (who has been sexually abused) to revisit a crime scene. It may not only lead to mental and psychological harm, but can also interfere with encoding and remembering the event (Tulving and Thomson, 1973). On a more practical level, MRC techniques can be time consuming and research has shown that when the techniques are used, they are not often used correctly (Clarke and Milne, 2001; Dando and Milne, 2009; Dando, Wilcock, and Milne, 2008; Dando, Ormerod, Wilcock, and Milne, 2011b). Interviewers may find the MRC techniques less useful when dealing with populations with reduced cognitive
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abilities. For example, older adults (Dando, 2013), children and mentally challenged individuals may experience difficulties in employing the retrieval technique to recall information about a crime (Saywitz, Geiselman, and Bornstein, 1992).

Forensic interviewers usually require witnesses to report everything they can recall from a crime scene (Geiselman and Fisher, 2014). The report everything component instructs witnesses to be as complete as possible and refrain from editing the details about the TBR event, even though those details may be contradictory to a previous statement or they may be considered insignificant or irrelevant (Dando and Milne, 2009, p. 150). The report everything component is said to be valuable because it links details from different witnesses about the crime (Stein and Memon, 2005, p. 598). It serves as a form of triangulation of evidence as more witnesses of a particular event increases credibility in the courtroom (Bell and Loftus, 1989).

One of the fundamental difficulties with the report everything component, is that witnesses may guess or fabricate their accounts of the TBR event (Koriat and Goldsmith, 1996). Less synonymous, but also very important, is the idea that the “memory of an event is believed to be stored as a series of coded representations… whereby what is stored in memory is not an exact replica of the TBR event itself but a multiplicity of interconnected codes that preserve the experience” (Dando and Milne, 2009, p. 151). This is “because elements in the memory record are associated with the other elements such that recalling one detail can trigger recollection of others, and because both the interviewer and the witness will become less able to fully concentrate as the interview progresses due to fatigue” (Geiselman and Fisher, 2014, p. 5). Consequently, witnesses may give blurred and nebulous accounts of the crime and draw cues from anyone of the “coded representations” that jogged their memories (Artwohl, 2002).
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When undertaking a CTO recall, the witness is instructed to recount the events in a backword order (Oxburght and Dando, 2011, p. 137). The CTO technique is “based on the theoretical assumption that the retrieval of information from memory can be influenced by prior knowledge and the application of schemas and scripts” (Dando and Milne, 2009, p. 152). Schank and Abelson (1977) noted that the CTO's technique can avoid the negative impact(s) of script-based retrieval by preventing the recollection of events in the temporal sequence in which they occurred. Perhaps more important is that CTO facilitates an unusual mode of mentally reconstructing the events, which increases the probability of recall (Bower, 1967).

The CTO's technique is not without its drawbacks. Research suggests that the CTO's technique is one of the least applied components of CI and is more cumbersome and less useful in its application than the other three components (Clarke and Milne, 2001; Dando et al., 2011a). Another fundamental problem with the CTO's technique is that it is seen as cognitively demanding for both the interviewer and witness (Fisher and Geiselman, 1992; Kebbel, Milne, and Wagstaff, 1999). It is also documented that CTO requires lots of flexibility during the interview process, which can lead to memory lapses in the event of long pauses (Clarke and Milne, 2001).

The CP encourages witnesses to recall the TBR event from various lenses and vantage points (Dando and Milne, 2009). This technique has its foundation in Anderson and Pichert’s (1978) work on schema theory and "is based on the premise that different retrieval cues may access different aspects" of the TBR event (Memon, Meissner, and Fraser, 2010, p. 5). As part of the technique, witnesses are instructed to recall events from various perspectives to facilitate the retrieval of information. The interviewer’s role is to encourage the witness to consider and narrate the story from another person’s perspective that was at the TBR event and to recall what he or she saw (Fisher and Geiselman, 1992; Boon and Noon, 1994). The
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difficulty with this approach is that it increases the chances of witnesses guessing in order to recall the TBR event from another individual’s perspective (Dando and Milne, 2009). The problem is particularly profound with children, mentally challenged individuals and victims of crimes who may experience difficulties narrating the story from other perspectives (Saywitz et al., 1992).

3. Empirical Evidence of CI

Despite its detractors, CI's have met with empirical success and have shown in several studies using various methodologies across different population groups, to aid in recalling details significantly more than non-cognitive formats (Silverstone and Sheetz, 2007). In a meta-analysis of 55 experiments, Koehnken, Milne, Memon, and Bull (1999) found that in 53 of the experiments, the overall size effect for details recalled was stronger for CI's than parallel control interviews. In a follow up meta-analysis conducted by Memon et al. (2010), the authors found CI's to be a well-established protocol for interviewing witnesses. Memon et al. (2010) findings corroborate the findings in Koehnken et al. (1999) original meta-analysis, with a significant increase in recalling correct details of events and a smaller increase in errors.

Equally important is that the CI seems to have fared well in laboratory studies that examined its accuracy in assisting witnesses to retrieve information. Research in this area concludes that accuracy in a CI was just as high as accuracy in comparison interviews (Fisher and McCauley, 1995; Fisher and Schreiber, (2007). CI’s instructions typically, "had little to no effect on the development of false beliefs and false memories" (Sharman and Powell, 2013, p. 114). Others found that witnesses did not in any way report information inserted by the interviewers, thus enhancing the reliability and usefulness of the CI (Geiselman, Fisher, Cohen, Holland, and Surtes, 1986). CI's have also been found to aid in accuracy, albeit with the interaction with other variables, such as disguises or long periods of delay (Gwyer and
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Clifford, 1997). These findings can be attributed to the mnemonic component of "context reinstatement, which directs the witness back to the original memory" to recall the events that occurred (Geiselman and Fisher, 2014, p. 8).

Field studies conducted on the use of CI's with victims and witnesses verified the technique's usefulness to gather evidence. Fisher, Geiselman, and Amador (1989) conducted a laboratory experiment by comparing trained detectives with a control group of detectives who were not trained to use the CI's technique. Fisher et al. (1989) noted that the trained detectives elicited more information after and before training and retained more information than the untrained detectives. The authors concluded that the CI reliably enhanced memory and should be useful in investigative interviews. Similarly, parallel field studies conducted by George and Clifford (1992, 1996), showed that police officers who underwent training in CI's (compared to officers who were not trained), were able to elicit more information as well as more detailed information from eyewitnesses.

CI's have also proven to be effective with vulnerable population groups (Milne, Clare, and Bull, 1999; Geiselman and Fisher, 2014; Larsson, Granhag, and Spjut, 2003; McMahon, 2000). Larsson et al. (2003) in a study on how CI's affect the recollection of information in children, found that those who were interviewed according to CI's conditions (as opposed to structured interviews), recalled significantly more correct information than children in structural interviews' conditions. Others examined the efficacy of CI's on young and older adults and found that confidence of recalling information is not significantly related to age (Mello and Fisher, 1996; McMahon, 2000). Some studies examined CI's on witnesses with learning disabilities and compared the results with adults from the general population (Brown and Geiselman, 1990; Milne et al., 1999). Even though the studies found that adults from the general population were able to recall more correct information and made fewer confabulations, CI's were very effective (rather than structured interviews) in enhancing
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recall. Overall, Milne et al. (1999) suggested that CI's is a helpful technique to assist people with learning disabilities to recollect information on events that they have witnessed (p. 81).

The forgoing literature review shows that the CI is a useful technique to elicit information from eyewitnesses on criminal events. The CI appears to yield considerably higher accuracy rates and more information (with fewer confabulations) than control and structured interviews across various methodologies and population group (Geiselman and Fisher, 2014). Although the researchers have used various methodologies across diverse groups to examine the usefulness of CI's, to the author’s knowledge, it has never been employed on sophisticated financial criminals, a group known to present difficulties to investigators as witnesses (Wells, 2013). Given the success of CI's in interviewing street criminals, one wonders how it would fare in interviewing sophisticated financial criminals. The next section will examine this question in more details.

4. Applicability to the Real World

4.1 CI's as a Practical Investigative Tool to investigate witnesses of financial crimes

There is normally a marked difference between typical street criminals and people who commit financial crimes. The behavioral traits of the types of individuals involved in street crimes are very different from those involved in financial crimes (Dodge and Geis, 2006; Murphy, 2012; Murphy and Dacin, 2011; Ramamoorti, 2008; Steir, 1981), particularly, in behaviours that has come to be known as “fraud” in the accounting literature (Cooper, Dacin, and Palmer, 2003; Matthews, 2005; Morales, Gendron, and Guénin-Paracini, 2014). The individuals who commit white-collar crimes are not classified as hardened criminals with long track records of arrest and convictions (Dorminey, Fleming, Kranacher, and Riley, 2012). These are individuals, who in many cases, live luxurious lifestyles and are not accustomed to the role of “criminal suspect”, which is so common in the classification of
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street criminals (Dellaportas, 2013; Rezaee, 2005; Neu, Everett and Rahaman, 2013). It is this feature that can be advantageous to a good interviewer when interviewing the white-collar criminal.

To begin with, the types of information sought in financial crime interviews are qualitatively different between street and white-collar crimes (Dodge and Geis, 2006; Mullen, Sinclair, and Thomas, 2012). In street crimes, witnesses are most commonly asked about their recollection of events: for example, “Can you describe the person who robbed the bank,” or “what colour was the suspect’s car?” Financial interviews, however, are concerned with recollecting details of financial transactions: the movement of money, the financial position of identified parties regarding their assets, liabilities, and cash flows (Mullen et al., 2010; Rezaee, 2005; Rezaee and Riley, 2010), and with the financial affairs of people and organizations (Ashforth and Anand, 2003; Murphy and Dacin, 2011; Price and Norris, 2009). These are the features that make CI's a likely candidate to interview financial criminals.

Recall earlier that the first two mnemonic techniques (i.e., reconstructing the events and report everything) of CI's are designed to improve the recollection of information. The combined complex nature of corporate structures and transactions, lead to blurred corporate ownership and in times of corporate malfeasance, a skilled interviewer can use CI's to conduct a memory trace that enables a witness to recall the information that is related to the overlapping elements and complexity of the event (Anderson and Pichert, 1978; Gwyer and Clifford, 1997; Larsson et al., 2003; McMahon, 2000). For example, a skilled investigator can use CI's to recall the step-by-step flow of funds and let the witness make connections to various events associated with the funds (Bucy, Formby, and Raspanti, 2008; Price and Norris, 2009).

A key feature of a CI is to ask the subject to recount the story a number of times, starting from different vantage points (Giselman and Fisher, 2014). Requesting the suspect to
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recount the story and report everything can elicit inconsistent information (Bell and Loftus, 1989; Davis, McMahon, and Greenwood, 2004; Milne and Bull, 2002). While inconsistent information can lead to confabulations when interviewing street criminal, they can prove useful in financial crime interviews. Financial crime interviews are all in the details (i.e., the devil is within the details) and because witnesses need to recall complex transactions (Pickett and Pickett, 2002), the retelling of the events may yield inconsistencies that can be brought to the attention of the investigator to investigate further (Fisher & McCauley, 1995; Fisher and Geiselman, 1992; McCornack, 1992). For example, an interviewee who is recounting the comparison of figures between departments can reveal inconsistencies that can then be examined in more detail by the interviewer (Pickett and Pickett, 2002, p. 171). Perhaps more important is that the inconsistencies may reveal parties who may have valuable information about the crime (e.g., concealing assets). This additional information can be triangulated with documentary evidence to explore new leads on the crime (ACFE, 2014, p. 30).

At times, the testimony of white-collar criminals can appear to have been coached, rehearsed, memorized and scripted (Dodge and Geis, 2006; Wells, 2014). These features make CI's a good candidate to gather information on white-collar criminality. The change order mnemonic component of a CI can mitigate these effects by changing the order of questioning (Dando and Milne, 2009; Fisher and Geiselman, 1992; Kebbell et al., 1999; Oxburght and Dando, 2011). When evidence appears to be scripted and memorized, the interviewer can ask questions to develop the story in a reverse order (Dando and Milne, 2009). A characteristic of financial crime interviews is that the suspect may at times hesitate and prevaricate (to escape detection) while figuring out what the answer should be (Gottschalk, 2014; Wells, 2014). The suspect’s prolonged hesitation will quickly make it obvious that he or she is withholding information that can be revealed by recounting the events backwards (Colomb, Ginet, Wright, Demarchi, and Sadler, 2013; Colwell, Hiscock,
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and Memon, 2002; Fisher and Geiselman, 1992). For instance, if the suspect claims that he or she cannot remember the details of an event, recalling the events backwards will allow the interviewer to point out that the suspect was able to remember minor details of the crime, but not more important ones that he or she must have surely noticed (McCornack, 1992; McCornack, Levine, Solowczuk, and Torres, 1992). It is expected that with this technique, the suspect will trip over details that he or she would not have otherwise been aware of in a structured interview (see Colwell et al., 2002).

5. Conclusion

The research underpinning the theories of CI's indicates that it is a useful technique to reliably enhance witnesses’ recollections of the TBR event under a variety of test conditions and population groups (Geiselman and Fisher, 2014). Given the success of CI's in interviewing witnesses of street crimes, to date, there has hardly been any systematic research on its usefulness with regard to financial crimes. One major area of progress to take CI's forward would be for researchers to explore its utility on witnesses associated with financial criminality. Even if a CI is deemed to be limited in its application to financial crime interviews, researchers can work to modify its usefulness. Perhaps, the mnemonic components of a CI could be streamlined to better align them and enable their applicability to financial crimes. Researchers are encouraged to take advantage of the foundation that has been set for CI’s by scholars, and work with law enforcement to evaluate the implementation of CI's in investigating financial crimes.
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Reference


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