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Specialist police interviewer perceptions of the Enhanced Cognitive Interview: Usefulness, confidence and witness reliability.

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Abstract

Cognitive Interviews (CI) are recognised as best practise for investigative interviews of witnesses across relevant jurisdictions worldwide; though police officers' perceptions of the usefulness of some ECI components sit awkwardly with empirical findings. This paper examines 33 Enhanced Cognitive Interview (ECI) specialist trained police officers' views which showed 'build rapport' and 'report everything' perceived as most useful. Furthermore, the study identified longer time-served officers as more confident in conducting the ECI than shorter service officers. Adult witnesses were perceived as most reliable with the ECI most useful for these witnesses while children <6 least reliable and thus less likely to benefit. The findings are discussed in relation to investigative interview training, investigative practise and research. The need for a simplified protocol for officers who are working in complex operational contexts is recognised.

Introduction

This article focuses on an important objective of investigative interviews; to obtain accurate and relevant information that result in complete accounts from witnesses, notwithstanding suspects, victims or complainants (McGurk, Carr & McGurk, 1993). Across the globe, investigators are increasingly required to demonstrate competence to levels at which they operate and it is high-ranking officers who are responsible for the successful implementation of training methods. While most investigative officers do not receive formal 'specialist' training for interactions with witnesses as a matter of course, it is likely that any interview will contain an element of conversation management; though it should be recognised that rapport-building continues to elude clear definition. Further, while research to find cognitive tools is important it should be acknowledged that continual rises likely increase cognitive demands made on

interviewers. This paper explores ECI specialist trained officers' perceptions of interviews conducted in their daily activities across witness type using a questionnaire. The work serves to renew and bridge the gap between researchers', practitioners', and policy makers', around the world, knowledge of the interface between investigative officer perceptions and practises, mapped against the empirical literature.

Background Context

In 1982, Wagstaff informed the police how they might best help witnesses to remember accurate and useful information in investigations. Since then a range of witnesses have become recognised for the important contributions they make during enquiries (Kebbell, Milne & Wagstaff, 1996), and in court (Wheatcroft & Wagstaff, 2003). When Kebbell et al. (1996) asked how often eyewitnesses provide the major leads in investigations, 36% stated 'always/almost always' and 51% responded 'usually'. Yet despite numerous years devoted to field research evidence suggests that witnesses remain vulnerable to the various ways they are questioned about events (Fisher, 1995; Fisher & Geiselman, 1992) and across contexts (Wheatcroft, Wagstaff & Kebbell, 2004; Wheatcroft & Woods, 2010). It is against this backdrop that police officers in England and Wales receive initial training in how to conduct PEACE model interviews (National Policing Improvement Agency, 2009); where the PEACE represents interview stages: Planning/Preparation, Engage/Explain, Account, Closure and Evaluation; stages which map directly onto procedures used across international contexts and investigative domains. More broadly, while this paper specifies police officers, it must be remembered that many civilian officers' roles, such as obtaining e/composite images of witnesses/suspects, may also involve cognitive interview procedures employing PEACE (Kebbell & Wagstaff, 1999). First, we turn our

attention to research which concerns the standard components of the ECI and what research tells us of their usefulness.

ECI Componential Efficacy

The ECI has been rigorously compared with other memory enhancement methods (Fisher, Brennan & McCauley, 2002; Geiselman, Fisher, MacKinnon, & Holland, 1985) and widely accepted to improve recall (the subsequent re-accessing of past events/information previously encoded and stored), both in-field and in-laboratory (Kohnken, Milne, Memon & Bull, 1999; Memon, Meissner & Fraser, 2010; Stein & Memon, 2006). Further, evidence suggests that, if used appropriately, the procedure does not influence incorrect responses/susceptibility to leading questions, or disrupt confidence-accuracy relationships (Dornburg & McDaniel 2006; Köhnken et al. 1999; Wright & Holliday, 2007). The procedural elements are 'report everything' (RE), 'context reinstatement' (CR), 'change perspective' (CP), 'change order' (CO), and 'build rapport' (BR). However, more recently, the investigative interviewing literature has looked broadly toward the development of a tool-belt incorporating potentially useful aspects as, the Sketch Reinstatement of Context procedure (Dando, 2009b) and Self-Administered Interview (SAI; Gabbert, Hope & Fisher, 2009). While the tool-belt approach may offer benefits, police officers still conceive such, rightly or wrongly, as a restrictive set of operational techniques. Importantly, around a decade earlier, Kebbell and Milne (1998) found police interviewers most frequently employed the RE and CR techniques, with CR reported most widely used (Clifford & George, 1996). Indeed, one study suggested that CR alone yields as much information as the complete ECI (Milne, 1997); this and other work demonstrates the superior usefulness of CR (Hammond, Wagstaff & Cole, 2006; Milne & Bull, 2002). Turning to other components, Clifford and George (1996) surveyed police officers and found

that CP and CO were most rarely used and least useful (Kebbell, Milne & Wagstaff, 1996). The CP mnemonic is legally problematic where witness statements are concerned (Memon & Higham, 1999) with concern shown for increases in confabulation, particularly in children (Boon & Noon, 1994); perhaps it is intuitively omitted for this reason. In 2004, and in response for frontline officers to obtain information quickly, Davis, McMahon and Greenwood shortened the ECI to include only RE and CR and compared this against a full ECI and structured interview (SI). The shortened version was as effective as the ECI and more effective than the SI. Thus, the utility of a shortened procedure seems viable; though this has yet to be validated.

Despite the above, the procedure is not without criticism. In practise it is time-consuming, not only in time spent interviewing witnesses, but also in training interviewers. Moreover, because of time and complexity issues officers are known to not adhere to procedures (Kebbell & Wagstaff, 1999; Dando et al. 2009a). To date, there is little exploration of how officers view the ECI and this seems essential if we are to understand the complex interviewer/witness interface.

The ECI and Witness Type

The ECI may be the recommended technique of use for researchers (Bull, 1995; Poole & Lamb, 1998) and in Government guidelines for England and Wales in relation to vulnerable groups (NPIA, 2009; Crown Prosecution Service, 2007), but limitations are evident; e.g., young children's free reports can be restricted and leave the interviewer little information upon which to base follow-up questions (Davies, Wilson, Mitchell & Milsom, 1995). Indeed, initial studies validating the ECI were conducted with adults, claiming the ECI 'inoculates' against effects of leading questions (Geiselman, et al. 1986). However, inoculation effects have not been

consistently replicated, nor investigated with children replicated (Hayes & Delamothe, 1997). Transcripts illustrate that children are still questioned repeatedly/suggestively such that they may be misled (Taylor, 2004) despite thorough scrutiny (Peterson & Bell, 1996) compared to adults.

The importance of child evidence comes to the fore when jurists may hold misconceptions about witnesses' credibility or where stereotypical beliefs of the witness exist (Quas, Thompson & Clarke-Stewart, 2005). Research though shows that young children are capable of accurate autobiographical recall (Fivush & Shukat, 1995), memory improves from 3 years to the age of 12 (Aldridge, 1999), the strength of children's memories is good if asked neutral, direct/simple questions (Gordon, Baker-Ward & Ornstein, 2001), and lasting memories for salient events can be evident from a very young age (Howe, 2000). Moreover, Holliday and Albon (2004) found that children as young as 4 years can recall significantly more correct and complete information when interviewed using a modified ECI, than with a SI; stressing age appropriateness as key.

Unsurprisingly, research with older adults shows recall declines over time with tendencies to perform more poorly than younger counterparts; recalling less accurate/complete information (Yarmey, 1993). McMahon (2000) suggests older adults find it more difficult than younger adults to recall great amounts of detail, rather than encountering problems with confabulation and recall errors. Interestingly, Wright and Holliday (2007) found there is little difference in quality or accuracy of young-old adults (60-74) and old-old adults (75-88) despite old-old adults recalling less information. Such findings contradict police officers' beliefs who report the ECI as inappropriate for older adults because it is difficult and distressing (Wright & Holliday, 2005). The consensus view is that older people are easily confused and have impaired memories (Brimacombe, Jung, Garrioch & Allison, 2003) and are thereby

less reliable. However, the limited evidence-base exploring ECI efficacy with older adults may mean the ECI is underutilized.

As with older witnesses, research has considered ECI use with adults with learning difficulties (LD). Evidence suggests that under the right conditions (i.e., free recall) accurate testimony can be obtained from this group on par with adult witnesses (Kebbell, Hatton & Johnson, 2004). Thus, it is important to learn whether interviewing officers consider useful options with this group. As noted, witness testimony can be influenced by question type, both in police interviews and court (Wheatcroft, Wagstaff & Kebbell, 2004). It is likely therefore that any effects will be enhanced when those with LDs give evidence. While persons with LDs generally provide less information they appear to give relevant details. Still, on a cautionary note, there is a wide range of intellectual disability that fall under the general LD term, varying in nature and severity; thus, it is not entirely useful to categorise individuals with a LD, nor indeed examine the literature in broad terms.

In summary, even young children can report accurate free recall if interviewed age appropriately, some police views of older adults may be misplaced, yet less is known of the efficacy of interview strategies with LD witnesses. As professionals working with a range of witnesses one would expect ECI specialist officers might hold views consistent with empirical literature and which techniques would be most useful on a case-by-case basis.

Rationale and Hypotheses

There is obvious import in the exploration of opinions/beliefs of police interviewers using techniques as part of daily roles, yet only more recently have researchers examined police officers' actual ECI 'application' (Dando et al. 2009a). However, systematic exploration with a view to the identification of 'long-lasting' modifications

to the technique have not yet been fully undertaken; though investigation into ways of minimising officer training whilst maintaining procedural efficacy have taken place (Wagstaff, Wheatcroft, et al. 2010; Wagstaff, Wheatcroft, et al. 2011). It is now timely and essential to examine operational ECI specialist-trained officers' perceptions of the ECI to continue to inform the emphasis toward practise where *all* witnesses are interviewed in ways that maximise memory performance. It is thereby constructive to identify where academic research and police practise interface and further necessary to ascertain officers' own confidence in conducting the protocols as used. Confidence has potential to impact upon officers' use of the procedure and its conceived component parts (Kebbell, Milne & Wagstaff, 1996); perhaps impacting upon effective evidence sourcing strategies. In particular, officers may believe that certain aspects of the ECI are more useful than others and not employ those techniques as readily, giving rise to a lack of geographical uniformity of procedure and/or use/non-use with certain witnesses. Hence, this study examines police officers' perceptions of usefulness of interview techniques and confidence in conducting interviews. In relation to usefulness, officers were asked to consider this in respect of practicality and effectiveness. Whether officer rank and length of service shed any light on these perceptions and if the findings raise implications for training needs was also explored. The main hypotheses and explorations are below:

i) CR will be perceived as the most useful ECI component across a range of witnesses; CR shown to be the most effective mnemonic and it is expected that specialist interviewers would be aware of this.

ii) Adult witnesses will be perceived as most reliable with children least reliable; interviewers will intuitively consider adult witnesses to be more reliable than children.

iii) Higher-rank officers will perceive the ECI as more useful than lower ranking officers; higher-rank officers will have greater pro-specialist interview perceptions in-line with senior officer Professionalizing Investigative Practise (PIP) culture.

iv) Perceived usefulness of ECI components will be affected by the frequency of ECI use; interviewers are expected to become more familiar with the techniques as reported use increases and impact on how useful a procedure might be perceived (not necessarily employed).

v) Length of service is explored in relation to potential impact on officer own confidence ratings in conducting SI/ECI and the perceived usefulness of these procedures.

Method

Participants

Participants were operational officers who employ the ECI with witnesses in daily roles. All sourced by opportunity via their constabulary from three separate police constabularies in the North-West of England and Wales. Overall, 33 usable questionnaires were returned completed by ECI 'specialist' trained (ACPO Tier 3; Practise min. PIP Level 2) interviewers. Participation was voluntary. Respondent age ranged between 26-54 years; 22 male, and 12 female, length of service ranged from 5-31 years (M=16 years). Officer roles can be described as Detective Constable (n=19), Detective Sergeant (n=11) and Inspector (n=4).

Materials and procedure

Prior to the study, ethical procedures and considerations were approved via the appropriate Ethical Committee. These outlined the nature of the research activity and

noted adherence to ethical procedures as outlined by the British Psychological Society (BPS, 2009). Amongst these procedures was the protection of participant identity and confidentiality, obtaining of informed consent, and the right of participants to withdraw, at any time.

A 19 item pilot questionnaire with 10 officers attracted some minor word changes to produce the final version. Demographic and Likert responses to question items were included. The constabularies concerned were supportive in granting access to the recruitment of these, often difficult to obtain, specialist operational participants. All officers in the study had knowledge of both Standard and Enhanced interview procedures as part of a three week Tier 3 training package (including Achieving Best Evidence-ABE). A questionnaire was deemed most appropriate as this would not impact upon the operational requirements of the constabularies. Qualitative interviews would have been time consuming and operationally restrictive. First, respondents were asked to provide demographic information; age, gender, rank, and time-served. Following this, a measurable range of questions was put to the officers; the questions asked (see below) were selected for ability to shed light on the study aims and hypotheses. Responses were reported on a scale of 1-5 (for example, in a) where 1 = 'not at all' and 5 = 'very often').

a) Please indicate, in your role as a specialist interviewer, how often you use the SI on a scale of 1-5.
b) Please indicate, in your role as a specialist interviewer, how useful you believe it is to interview particular witnesses using the SI on a scale of 1-5. Officers were asked to complete this question across the range of witnesses (i.e. children aged <6 years of age; children aged >6 but <18 years; adults aged 18-

65 years; older adults aged 65+ years, and adults >18 years of age with an unspecified learning difficulty).

c) Please indicate, in your role as a specialist interviewer, how often you use the ECI on a scale of 1-5.

d) Please indicate, in your role as a specialist interviewer, how useful you believe it is to interview particular witnesses using the ECI on a scale of 1-5. Officers were asked to complete this question across the range of witnesses (as noted in b).

e) Please indicate, in your role as a specialist interviewer, how confident you are in conducting an ECI with different groups of witnesses on a scale of 1-5. Officers were asked to complete this question across the range of witnesses (as noted in b). Confidence relates to how officers perceive their own ability to conduct the ECI, as per their specialist training.

f) Please indicate, in your role as a specialist interviewer, how confident you are in conducting a SI with different groups of witnesses on a scale of 1-5. Officers were asked to complete this question across the range of witnesses (as noted in a). Confidence relates to that set out in (e).

g) Please indicate, in your role as a specialist interviewer, how reliable you believe each witness group to be on a scale of 1-5. Officers were asked to complete this question across the range of witnesses (as noted in a).

h) Please indicate, in your specialist interviewer experience, how useful each of the ECI components are on a scale of 1-5. Officers were asked to complete this question in relation to RE, CR, CP, CO and BR across the range of witnesses (as noted in b).

Participants were study briefed at the outset and fully debriefed once the questionnaires had been completed.

Results

This section will first provide a descriptive account of the data, which is subsequently arranged into groups for analysis across a range of factors as described in the method. Note that where data is collapsed across factor groups and insufficient data is available, this is expressed as a variable *n*.

Descriptive statistics of specialist interviewers' perceived usefulness of ECI components and witness reliability

Table 1 show respondent officers attributed higher ratings to usefulness for BR and RE components, with CO reported as the least useful. In terms of witness reliability, the means suggest that officers believe adults with LDs and children aged <6 are the two least reliable groups of witnesses, with adults perceived as most reliable.

[INSERT TABLE 1 HERE]

Specialist interviewer confidence and perceived usefulness of SI and ECI

Exploratory one-way ANOVAs were performed to determine whether length of service impacts upon confidence in conducting an ECI and SI (see Table 2). All data was found to be normally distributed using Levene's statistic.

[INSERT TABLE 2 HERE]

A main effect of service was found, F(2,29)=2.62, $p<.05$, which showed the confidence expressed in conducting an ECI is significantly lower for officers who have been with the service for a shorter period of time compared to those who had longer service. Post comparisons showed significant differences in confidence between those in short service (M=2.11, SD=1.04) compared with medium (M=3.53, SD=1.22), $p<.05$, d=1.257, and long service officers (M=3.20, SD=1.19), $p<.05$, d=0.978. No similar effect of service was shown in officers' confidence in conducting a SI, F(2,29)=.296, $p>.05$. However, a further one-way ANOVA did find a main effect of service for the perceived usefulness of the SI, F(2,29)=4.01, $p<.05$. Officers who had been in service for a shorter time (M=2.06, SD=.86) have a lower perception of the usefulness of the SI compared to officers who have been in the service for a medium or longer length of time (M=2.96, SD=.58, d=-1.250 and M=2.45, SD=.60, d=-0.534 respectively); and these latter means also differed significantly from each other ($p<.05$, d=0.864). No effects were found for the ECI, F(2,29)=1.64, $p>.05$.

Specialist interviewer ratings of perceived usefulness of ECI components and use

In relation to the components of the ECI, a 2x5 mixed ANOVA explored the effects of frequency of ECI use (not often, frequently) x cognitive component (report everything, context reinstatement, change order, change perspective and build rapport) with repeated measures on the second factor (see Table 3).

[INSERT TABLE 3 HERE]

A main effect of ECI component was found F(4,108)=12.66, $p<.001$. The ECI component perceived as most useful was BR with the least useful CO. Post hoc tests revealed that all components were perceived as less useful than BR ($p<.05$, d=0.618

for CP, *d*=1.219 for CO, *d*=0.620 for CR, and *d*=0.311 for RE, respectively). No main effect of frequency of ECI use was found, F(1,27)=2.81, *p*>.05, and no interaction was observed F(4,108)=1.24, *p*>.05.

Specialist interviewer perceived witness reliability ratings and service length

Turning to the perceived reliability of witness groups, a 3x5 mixed ANOVA was performed for length of service (short, medium and long) x witness type (children <6, children >6, adults, older adults and adults with LDs), with repeated measures on the second factor (see Table 4).

[INSERT TABLE 4 HERE]

Unsurprisingly, a main effect of witness type was found F(4,116)=56.71, *p*<.001, which showed clear differences in officers' perceived reliability between the groups. The least reliable witness group was children <6 and the most reliable, adults. Post comparisons showed significant differences *(*all, *p<.05)* in police officers' mean perceived witness reliability ratings between children <6 and children >6 (*d*=-0.931), children <6 and adults (*d*=-2.603), and children <6 and older adults (*d*=-1.822). In each comparable case children <6 were perceived as the least reliable witnesses. Similarly, differences were also found between children >6 and adults (*d*=-1.305), and children >6 and older adults (*d*=-0.743), with children >6 being perceived as less reliable. Further differences existed between older adults and adults (*d*=-0.676); older adult perceived as least reliable; and between adults and adults with LDs (*d*=2.052), and older adults and adults with LDs (*d*=1.349); adults with LDs perceived as the least reliable of witnesses. There was, however, no main effect for length of service F(2,29)=.736, *p*>.05 or interaction present, F(8,116)=.736, *p*>.05.

Specialist interviewer perceived usefulness ratings of ECI: Rank and witness type

Finally, a 2x5 mixed ANOVA was performed on the perceived usefulness data for rank (high/low) x witness type (children <6, children >6, adults, older adults and adults with LDs) with repeated measures on the second factor (see Table 5).

[INSERT TABLE 5 HERE]

A main effect of witness group was observed $F(4,124)=12.39$, $p<.01$) with the lowest perceived group being children <6 and the highest, adults. Post comparisons revealed a number of group ratings differed significantly from each other ($p<.05$). These were observed between children <6 and children >6 (d=-0.474); children <6 and adults (d=-0.858); and children <6 and older adults (d=-0.752). In all cases it was perceived that the ECI was least useful for children <6. Differences were also found between children >6 and adults (d=-0.398), and children >6 and older adults (d=-0.284); with the ECI perceived as less useful with children >6. Further effects were shown in perceived usefulness between adults LDs and older adults (d=-0.606), and adults with LDs and adults (d=-0.725); lower usefulness ratings were for those witnesses with LDs. No main effect of rank was found $F(4,124)=2.48$, $p>.05$, nor was any interaction observed, $F(4,124)=2.42$, $p>.05$.

To explore the data further Pearson's correlations were conducted together with Bonferroni adjustment. A relationship was found between how confident interviewers feel in conducting a SI and a ECI (r=.53, $p<.01$); perhaps suggesting that specialist interviewers own confidence may be directed more by the development of interview experience rather than the specific interview procedures themselves. In addition, perceived reliability of witnesses was positively related to interviewer

confidence in conducting both the SI (r=.53, p<.05) and ECI (r=.46, p<.05); suggesting that how interviewers generally view witnesses could well be reflected in their own confidence in conducting interviews, or that interviewers who are confident in their interviewing skills view witnesses as more reliable. Finally, interviewer confidence in conducting the ECI was related to the perceived reliability of children >6 (r=.42, p<.05); adults (r=.50, p<.01); older adults (r=.50, p<.01); and adults with LDs (r=.40, p<.05). Therefore, interviewers may inappropriately project their own feelings of adequacy of performance in interviews.

Discussion

One of the main drivers of this research was to investigate the parity between empirical research and police interview practise by investigating specialist interviewer perceptions of interviews with witnesses; with a primary focus on the ECI procedure.

Rejecting the hypotheses that officers would perceive CR as the most useful ECI component, and that the usefulness of components would be influenced by officer use of the procedure, was the observed differential perception of cognitive components. Instead, officers viewed BR and RE as the most useful components and CO as the least useful, regardless of frequency of ECI use. Kebbell et al. (1996) found the CR mnemonic was rated as most useful, whilst Memon and Stevenage (1996) reported RE/CR as the most 'used' components. This may suggest a shift in operational interviewing, from a keen desire to embrace the protocol earlier in its active advancement, to a more relaxed approach to what is 'workable' in operational situations. Moreover, the data sits uncomfortably with the literature, which suggests CR is the most effective mnemonic in its ability to produce single-handedly as much information as a full interview. Additionally, despite theoretical intention to include all components, the operational reality is that few of the techniques are actually 'used'

(Dando et al. 2008). As operational time is paramount this factor alone may pave the way for simplification and standardisation (see Wagstaff & Wheatcroft, 2012; Wagstaff, Wheatcroft, et al. 2011).

Further, given the weight research has placed upon CR, taken together with these findings, implication for investigative interview training is indicated. For example, training time will be best spent; earlier in officer career, on components empirically shown to be most effective, together with developments of ways of working officers find useful to enable *them* to articulate/integrate into their daily interview activities. Less surprisingly, officers deemed CO the least useful component, with a substantial proportion of respondents reporting it 'not at all useful'/'not very useful'. CP was also considered to be one of the least useful ECI tools. To reiterate, CP has been reported as problematic due to the potential for witness fabrication and confusion (Memon & Higham, 1999) and that its use makes statement use in court difficult, particularly with vulnerable witnesses (Boon & Noon, 1994). Rightly, therefore, specialist police interviewers tend not to value this component, and in this sense, officers seem aware that CP is problematic.

It was also considered that adult witnesses would be perceived as the most reliable and children least reliable and this was supported. However, fewer studies exist that focus upon ECI use with LD adults and younger children, yet as noted earlier some evidence shows these groups can provide accurate testimony. Such findings sit in opposition to perceptions shown in this study. Officers may thus have little real indication that very young children can give good accounts if asked questions in an age appropriate manner and suggestive/leading types of questioning can negatively affect testimony in forensic settings (Wheatcroft & Woods, 2010). Moreover, as shown above, LDs can provide accurate information in response to free recall approaches equal to other adult accuracy rates (Calnen & Blackman, 1992).

This suggests interviewers may be less informed of the complexities intrinsic to LDs. Positive reports in relation to such groups are to be encouraged and call attention to more experienced officer involvement at pre-interview stage. This study found higher-ranked officers rated the usefulness of the ECI for adults with LDs as greater (though not significantly) than those from lower ranks and greater credence was given by these officers to ECI usefulness across the range of witness types. In training terms, officers who believe the ECI is least useful would benefit from 'experiential uplift - EU' training built on basic and simple understandings of empirical knowledge to enable linkage between research and operational practise to flourish and develop early (i.e. PIP 1); particularly for poorly perceived groups.

The study also showed officers perceive older witnesses as less reliable than adults; though they did report older witnesses to be more reliable than children <6 and adults with LDs. There is certainly inadequate research in this area at a time when older adults represent an increased proportion of society. Perceptual difficulties may be related to officers' own confidence in conducting the ECI and perceived reliability in certain witness groups signalling training early career officers across witness types; to build confidence capabilities to complex interviews in later careers (Wheatcroft & Wagstaff, 2010). In support of this suggestion, medium-long time-served officers were more confident in conducting an ECI than those with shorter service. In addition, a positive relationship was shown between confidence in conducting an ECI and a SI. This is not surprising, as when officers undertake basic training (i.e. PEACE) the SI is included. However, the ECI is considered a specialist interview procedure where officers receive 'bolt-on' training to achieve specific competencies via tiers of knowledge and practical application. A further analysis found no difference between confidence ratings for performing a SI relative to length of service; most likely due to all police officers undergoing SI training. However, a

difference was observed for interviewer confidence ratings for conducting an ECI dependent upon length of service. Shorter serving officers were less confident in the ECI procedure than medium-served individuals and can easily be explained by the specialist status of the ECI. This may also, in part, reflect the length of time it can take new recruits to receive ECI training. In our experience, officers' opportunities to receive this training can differ dependent upon geographical area and resource factors. One could envisage broad benefits of a simpler procedure, empirically shown to enhance witness memory, which could be applied earlier in officers' careers, leaving less potential for interviewers to slip into inefficient and routinized techniques. Shorter periods between progressive interview development programs (IPD), where practicable, leading to repeat learning and practise, rather than current piecemeal events conducted over greater service periods seem preferable.

One difficulty with the applied nature of this research is the availability of specialist trained officers and the authors recognise this limitation. It is however problematic to gain access to staff constrained by daily activities, making this research of particular interest, at the very least, as an early indicator of the need to explore the interface between research and practise to this important investigative field. Whilst the findings are not indicative of generalisation to police officers as a whole, they do raise important questions about specialist police interviewer perceptions of the witnesses they interview and more general training issues. It is also possible that the effects and trends observed might be exaggerated with a larger sample. Further, law-enforcement agencies vary in how much and type of interview skills training officers receive; this can only increase should the tool-belt concept advance. In the authors' experiences these factors can still vary significantly from agency-agency and officer-officer. For those services wishing to promote excellence in witness interviewing, the implications seem clear; law enforcement agencies need

greater awareness of witness types and a meaningful interface with the relevant empirical literature. Finally, it is perhaps time to think differently about the number and complexity of techniques and give way to simplification and standardisation.

Conclusion

Police interviewers view the ECI as most useful when used with adults and older adults, than adults with LDs or younger children. However, the paper shows the protocol still has potential for application not as originally intended, with some components favoured above others. Moreover, specialist interviewer perceptions of the usefulness of the ECI do not align well with current research on the effectiveness of ECI components in that interviewer's, regardless of how frequently they use the ECI, perceive BR as most useful despite limited empirical evidence on how it is conducted or defined. Conversely, empirical research suggests that CR is *singularly* the most effective mnemonic aiding effective witness recall. This problem may be overcome with greater education; though this is expensive and operationally problematic. In sum, the general lack of concordance between the literature and interviewer perceptions of the ECI and witnesses have been highlighted by this paper. Some of these matters most probably relate to interviewer beliefs, some to administrative ease, some to time constraints, and others to number and complexity of available techniques. With regard to the latter, investigative agencies and interviewers require a simplified 'interviewer-friendly' protocol that includes; only known effective and empirically tested elements for memory enhancement, *and* a 'workable' uniform procedure which conveys less cognitive complexity and demand for interviewers who are working in increasingly complex operational contexts.

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TABLE 1: Descriptive statistics (means and standard deviations) for officers' perceived usefulness of ECI components and witness reliability (separated by witness group)

Witness Type (n = 32)	Report Everything (RE)	Context Reinstatement (CR)	Change Order (CO)	Change Perspective (CP)	Build Rapport (BR)	Reliability
Children <6	N/A	N/A	N/A	N/A	N/A	1.91 (.82)
Children >6	2.79 (1.72)	2.45 (1.56)	1.85 (1.20)	2.55 (1.48)	3.24 (1.80)	2.72 (.92)
Adults	3.30 (1.70)	2.97 (1.59)	2.52 (1.37)	3.30 (1.47)	3.52 (1.60)	3.81 (.64)
Older Adults	3.36 (1.75)	2.94 (1.56)	2.33 (1.36)	2.97 (1.52)	3.67 (1.65)	3.34 (.75)
Adults with LDs	2.62 (1.72)	2.34 (1.54)	1.79 (1.05)	2.30 (1.33)	3.18 (1.78)	2.22 (.91)
Overall	**3.02** (1.72)	**2.68** (1.56)	**2.12** (1.24)	**2.78** (1.45)	**3.40** (1.51)	**2.80** (.81)

Standard deviations are shown in parentheses
N/A (insufficient responses were made in relation to children<6 and component parts)

TABLE 2: Means and standard deviations for officers' confidence and perceived usefulness ratings for the standard interview (SI) and enhanced cognitive interview (ECI) X length of service

Length of Service	Confidence in Conducting ECI	Confidence in Conducting SI	Perceived Usefulness of ECI	Perceived Usefulness of SI
Short (n = 10) <5 years	2.11 (1.04)	3.20 (0.86)	2.88 (1.63)	2.06 (0.86)
Medium (n = 11) >5 years	3.53 (1.22)	3.51 (1.21)	3.60 (1.29)	2.96 (0.58)
Long (n = 11) >10 years	3.20 (1.19)	3.51 (1.04)	3.78 (0.66)	2.45 (0.60)
Overall (n = 32)	**2.97** (1.27)	**3.42** (1.03)	**3.44** (1.21)	**2.50** (0.75)

Standard deviations are shown in parentheses.

TABLE 3: Means and standard deviations for officers' ratings of perceived usefulness of ECI components and frequency of ECI use

Frequency of ECI use	ECI Component					Overall
	RE	CR	CO	CP	BR	
Not Often (n = 15)	2.31 (1.19)	1.95 (0.98)	1.79 (0.98)	2.12 (0.96)	2.72 (1.15)	**2.18** (1.05)
Frequently (n = 14)	3.00 (1.10)	2.71 (1.09)	1.86 (0.72)	2.61 (0.95)	3.27 (0.93)	**2.69** (0.96)
Overall (n = 29)	**2.64** (1.18)	**2.32** (1.09)	**1.82** (0.85)	**2.36** (0.97)	**2.99** (1.07)	

Standard deviations are shown in parentheses.

TABLE 4: Means and standard deviations for officers' perceived witness reliability ratings X length of service

Length of Service	Children Aged < 6	Children Aged > 6	Adult	Older Adult	Adults with LDs	Overall
Short (n =10) < 5 years	1.90 (.74)	2.30 (.82)	3.70 (1.06)	3.10 (.99)	2.00 (.82)	**2.60** (.20)
Medium (n =11) > 5 years	1.90 (.74)	2.90 (.88)	3.90 (.32)	3.60 (.52)	2.22 (.92)	**2.90** (.20)
Long (n =11) > 10 years	1.92 (1.00)	2.92 (1.00)	3.83 (.39)	3.33 (.65)	2.42 (1.00)	**2.88** (.18)
Overall (n =32)	**1.91** (.82)	**2.72** (.92)	**3.81** (.64)	**3.34** (.75)	**2.22** (.91)	

Standard deviations are shown in parentheses

TABLE 5: Means and standard deviations showing officers' perceived usefulness ratings for ECI X rank and X type of witness

Rank	Children Aged < 6	Children Aged > 6	Adults	Older Adults	Adults with LDs	Overall
Constable (n = 18)	2.33 (1.37)	3.28 (1.41)	3.89 (1.32)	3.67 (1.32)	2.56 (1.24)	**3.14** (.28)
DS/Inspector (n = 15)	3.33 (1.63)	3.73 (1.28)	4.07 (1.22)	4.07 (1.22)	3.73 (1.28)	**3.79** (.30)
Overall (n = 33)	**2.79** (1.56)	**3.48** (1.35)	**4.00** (1.26)	**3.85** (1.26)	**3.09** (1.25)	

Standard deviations are shown in parentheses
DS=Detective Sergeant