EXPLORING THE INFLUENCE OF COURTROOM QUESTIONING AND PRE-TRIAL PREPARATION ON ADULT WITNESS ACCURACY

In adversarial systems considerable faith continues to be placed in the capacity of cross-examination to expose flaws and errors in witness testimony. At the same time, a substantial body of research suggests that questioning techniques commonly used in cross-examination can both mislead and confuse witnesses – children and adults - undermining the accuracy and completeness of evidence presented in legal proceedings (for discussion see Ellison, 2001; Wheatcroft & Wagstaff, 2003). Court observation and analysis of trial transcripts have, for example, revealed how witnesses are commonly confronted with complex questions containing multiple parts, negatives, double-negatives and advanced vocabulary and/or legal terminology (Brennan & Brennan, 1988; Kebbell et al, 2003, Taylor, 2004; Zajac & Cannan, 2009). Unsurprisingly, studies indicate that such questions can be difficult to decipher and respond to with accuracy (Perry et al, 1995; Kebbell & Giles, 2000; Wheatcroft et al, 2001; Wheatcroft et al, 2004; Zajac & Hayne, 2006). Leading questions which contain pre-suppositional statements and often implicitly demand a 'yes' or 'no' response have similarly been shown to have an adverse influence on accuracy when compared to more open questioning strategies (Loftus, 1975; Gudjonsson, 1992).

In England and Wales, witness familiarisation courses aim, inter alia, to acquaint witnesses with the standard questioning techniques employed by lawyers in the course of cross-examination and to provide witnesses with practical advice on how best to approach the interaction (Bond & Solon, 1999; Stockdale & Gresham, 1995). Despite a cautious view of witness familiarisation, the courts have endorsed this practice, approving the right of barristers to prepare witnesses for the experience of giving evidence (R v Momodou [2005] 2 All ER 571). Exponents maintain that pre-trial preparation has a beneficial impact on the ability of inexperienced witnesses to monitor comprehension of lawyers' questions and provide accurate testimony (for discussion see Ellison, 2007). More specifically, familiarisation is said to put witnesses 'on their guard' with the result that they are more likely to seek clarification and less likely to be confused or unduly influenced by the form of cross-examination questions.

In a context in which witness familiarisation has attracted little empirical attention, this Arts and Humanities Research Council funded project sought to evaluate the basis of these claims.

Summary of Key Findings

- The use of complex vocabulary and syntax during cross-examination was associated with reduced adult witness accuracy

- Prepared witnesses were significantly more likely than their unprepared counterparts to provide correct responses to cross-examination questions

- Prepared witnesses were additionally more likely to seek clarification during cross-examination

- Prepared witnesses were typically appreciative of the guidance they received prior to questioning

Method

Sixty adult participants recruited from the community watched a 5 minute video depicting a criminal offence and were then individually cross-examined about its contents according to four conditions by a qualified barrister in a mock courtroom environment. Participants in Group One underwent a 'lawyerese'-scripted cross-examination, containing complex vocabulary, leading and multipart questions and double negatives. In Group Two, participants underwent a simply phrased cross-examination which – while containing leading and multipart questions - employed less complex vocabulary and contained no double negatives but was otherwise identical to the lawyerese script. After viewing the video event and prior to questioning, Groups Three and Four received a leaflet entitled A Guide to Cross-examination. In outline, this document contained a short explanation of the two-fold function of cross-examination - to test evidence and elicit information favourable to the cross-examiner's case - and practical guidance to assist participants when answering questions which included directions to listen carefully to questions, to ask for clarification if a question was not fully understood and to answer all questions truthfully. The leaflet also included an example of a leading question, a question containing a double negative and a multipart question, and, in reference to leading and multipart questions, advice that participants should not agree with a suggestion ventured by the cross-examiner unless it was accurate. Participants in Group Three then underwent the same scripted cross-examination as participants in Group One while participants in Group Four underwent the same scripted cross-examination as participants in Group Two. The cross-examinations were recorded, transcribed and scored for accuracy.

With the exception of multipart questions, a simple scoring system was adopted with participants scoring 0 for an incorrect answer and 1 point for a correct answer. When answering multipart questions, participants scored 0 for an incorrect response, and were awarded one point for each part answered correctly. If a participant responded with an 'I don't know' or 'I don't remember' response, the answer was recorded but scored as neither correct nor incorrect. Each participant was asked 28 questions and, following this scheme, participants could achieve a maximum accuracy score of 35 and a maximum error score of 28. Finally, the number of times participants asked for questions to be repeated or rephrased was recorded.

As well as analysing cross-examination responses, further relevant data were gathered from two questionnaires. In the first questionnaire (completed prior to watching the video event) participants provided basic demographic information including gender, age, occupation and educational level. In the second questionnaire (completed after cross-examination) participants were invited to comment on their experience of cross-examination and, where appropriate, evaluate the helpfulness of the guide to cross-examination leaflet.

Outline of Key Findings

Witness Performance in the Absence of Familiarisation

Consistent with previous research, lawyerese style questioning was associated with reduced witness accuracy in the present study, as evidenced by mean accuracy and error scores. Participants in the complex-no familiarisation condition achieved an overall mean accuracy score of 23.13 and a mean error score of 6.00 (90 errors in total). Meanwhile, participants in the simple-no familiarisation condition made significantly fewer errors (65 in total), scoring a mean error score of 4.33 and an overall mean accuracy score of 24.67.

Graph illustrating Accuracy for Simple and Complex groups - No Familiarisation
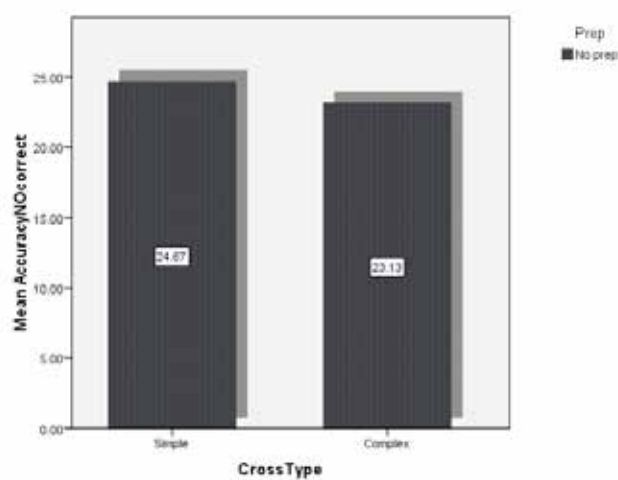
Graph illustrating Errors for Simple and Complex groups - No Familiarisation
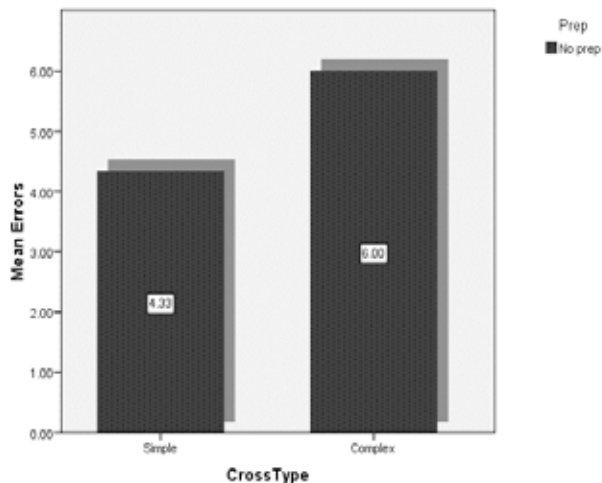
Comparing scores for individual questions, our results specifically show that participants were generally less accurate when responding to questions containing complex vocabulary and that accuracy scores decreased further when advanced vocabulary was combined with complex syntax (e.g. double negatives). Leading multipart questions (which featured in both conditions) additionally proved problematic as participants often answered such questions as if only one answer was required. Also noteworthy is the fact that participants in Groups One and Two were more likely to agree than disagree with propositional statements contained within leading questions with negative consequences for witness accuracy. This finding concurs with previous research which indicates that adults are potentially susceptible to suggestive questioning techniques of the kind used routinely in cross-examination especially when quizzed about peripheral details or facts about which they are uncertain. (Gudjonsson, 1992).

While our participants evidently failed to understand or follow some questions asked during cross-examination, requests for clarification were exceptional across the complex-no familiarisation condition (n =1) and the simple-no familiarisation condition (n =1). Questionnaire responses revealed two main reasons for this result. A sizeable number of participants indicated that they were simply "too intimidated" to signal their confusion or were inhibited by the quick-fire pace of cross-examination. At the same time, many participants indicated that they had not sought clarification as they had, to their mind, "fully understood" all the questions they had been asked. An examination of individual accuracy scores nevertheless revealed that respondents falling within this category made numerous errors when

responding to complex questions and often failed to spot the different components of multipart questions. These results suggest, in turn, that adult witnesses may frequently fail to identify confusing questions asked during cross-examination.

The Effects of Familiarisation

Mean accuracy (number correct) for each condition was compared across the conditions (cross-examination type and preparation) by means of a 2 (complex / simple) x 2 (preparation / no preparation) ANOVA. A significant main effect of preparation was found, $F= 6.97$ (1,56), $p< .02$. Correct responses were found to be higher in the preparation group (M=26.23, SD=3.64) compared with those witnesses who received no preparation (M=23.90, SD=3.22). Thus, those participants who read the guide to cross-examination leaflet prior to questioning were significantly more likely to provide correct responses to cross-examination questions. Participants in the complex-plus familiarisation condition achieved an overall mean accuracy score of 25.60 while participants in the simple-plus familiarisation condition achieved a mean accuracy score of 26.87; a descriptive increase shown for preparation utilised with simpler question conditions. No main effect was observed for cross-examination type, $F=2.51$ (1,56), $p> .05$, and no interaction was found, $F=0.02$ (1,56), $p> .05$. See graph for illustration.


Graph illustrating Mean Accuracy for Preparation and Cross Type
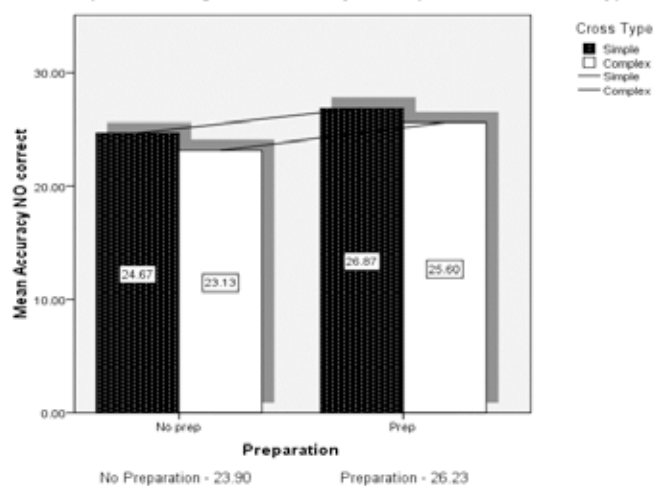
Mean errors were also compared across the conditions (cross-examination type and preparation) by means of a 2 (complex / simple) x 2 (preparation / no preparation) ANOVA. A significant main effect of preparation on the number of errors witnesses made was found, $F= 9.06$ (1,56), $p<.01$. Witness errors were lower in

the prepared group (M=3.40, SD=2.16) compared with those witnesses who received no preparation (M=5.17, SD=2.46). Participants in the complex-plus familiarisation condition made 54 errors (M=3.60), while those in the simple-plus familiarisation condition attained the lowest error score (M=3.20), making 48 errors in total; as illustrated in the graph below. No main effect was found for cross-examination type, F=3.10 (1,56), p>.05, nor was an interaction observed, F= 1.16 (1,56), p>.05.

Graph illustrating Mean Errors for Preparation and Cross Type

No Preparation - 5.17   Preparation - 3.40
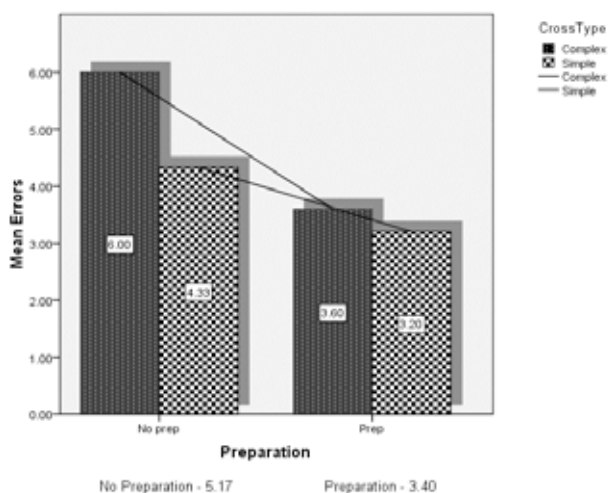
Mean accuracy of responses and errors made to multipart questions were also compared across the conditions. This analysis revealed that responses made to multipart questions overall showed a significant main effect for preparation, F=6.27 (1,56), p< .02. Participants who received the leaflet were less likely to provide single responses and were more likely to recognise an inaccurate premise embedded within a question compared to their unprepared counterparts. Accurate responses were accordingly higher in the prepared group (M=5.70, SD=2.44) compared with those witnesses who received no preparation (M=4.27, SD=1.99). No similar effect was shown however for cross-examination type, F=2.43 (1,56), p>.05, and no interaction was observed, F=.17 (1,56), p> .05.

In respect of overall errors made to multipart questions, again a significant main effect was shown for preparation, F= 5.87 (1,56), p<.02. Fewer errors were made by the prepared group (M=.97, SD=1.24) than those who received no preparation (M=1.70, SD=1.12). No main effect was observed for cross-examination type, F=2.38 (1,56), p>.05, nor was an interaction shown, F=.77 (1,56), p>.05. See graphs below for relevant illustrations.

Graph illustrating Mean Accuracy to Multiple Questions

No Preparation - 4.26   Preparation - 5.70
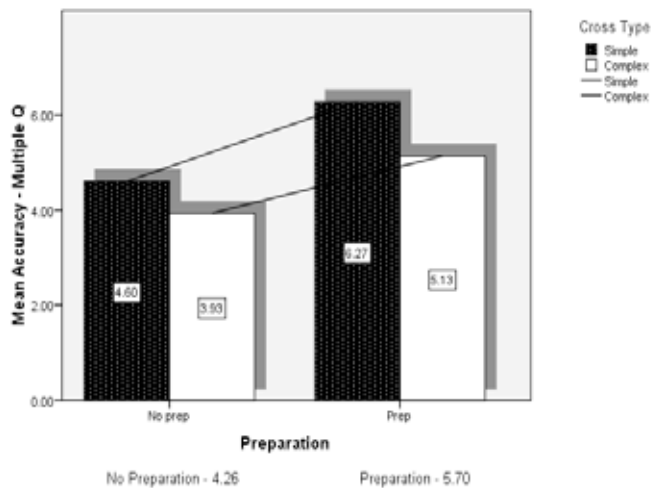
Mean Errors made to Multiple Questions

No Preparation - 1.70   Preparation - 0.97
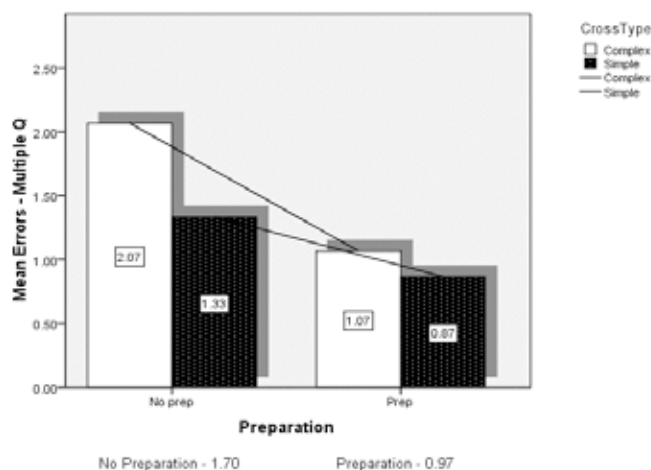
The guide to cross-examination leaflet specifically advised participants that questions could contain more than one part and gave an example of a multipart question. It may be inferred from these results that this information prompted participants to listen more attentively to cross-examination questions, which, in turn, increased their accuracy. The leaflet also provided an example of a leading question and guidance that participants should not agree with a suggestion contained within a leading question unless it was true. This may have had the effect of reducing interpersonal trust between witness and cross-examiner so that witnesses were less likely to acquiesce to misleading questions (Schooler & Loftus, 1986; Warren et al, 1991; Gudjonsson, 1992; Baxter et al, 2006). In other words, it is possible that "a suspicious cognitive set makes witnesses scrutinize the interrogator's questions more closely, and this helps them identify discrepancies between what they originally observed and what has been subsequently suggested to them" (Gudjonsson, 1992: 126). Our results lend some support to this hypothesis although
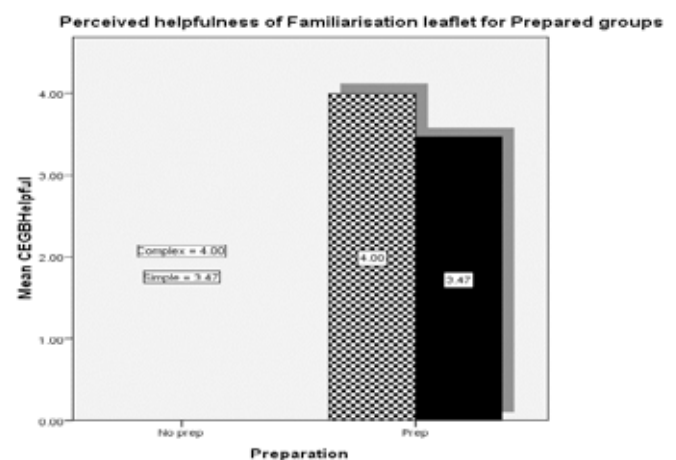
we cannot be sure that the improvements in performance were directly attributable to increased suspicion and not some other factor or a combination of factors. Increased confidence and improved comprehension monitoring may, for example, have played a part. It is important to stress, however, that in both familiarisation conditions participants continued to provide single responses to multipart questions, indicating that this question form remains potentially problematic in terms of witness accuracy in forensic settings.

Mean clarifications sought by mock witnesses for each condition were compared across the conditions and a significant main effect for preparation on the number of clarifications sought by witnesses was observed, $F = 12.72$ (1,56), $p < .01$. Clarifications were higher for those who received preparation (M=.63, SD=.85) than those who did not (M=.07, SD=.26). Fourteen prepared participants made twenty clarification requests, compared to just two requests made by two participants in the absence of familiarisation. In turn, the increased tendency of participants to signal confusion led to more correct responses as participants generally answered rephrased questions accurately. Participants confronted with lawyerese style questioning were, as might be anticipated, most likely to seek assistance (n = 9 participants), and this resulted in increased accuracy scores for questions involving complex vocabulary, in particular, with participants either querying the meaning of specific words or simply requesting that complex questions be asked "in an different way". As with multipart questions, however, it is important to note that linguistically complex questions continued to be associated with decreased witness accuracy, with participants in the simple-plus familiarisation condition outperforming other participants, as noted above.
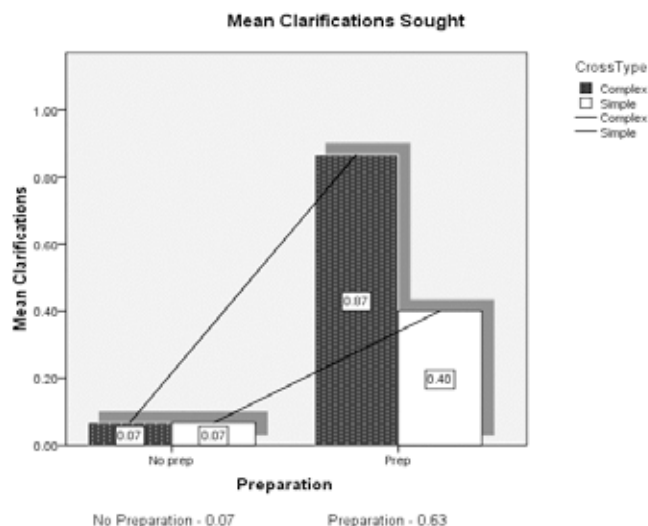
Of the thirty participants who received the leaflet, 18 rated the information it contained either 'extremely helpful' or 'very helpful' (on a 5 point scale ranging from 'not helpful' to 'extremely helpful'); 10 rated the guidance 'fairly helpful' and only 2 participants rated the leaflet 'not helpful'. Questionnaire responses indicated a higher mean perception of helpfulness for the familiarisation leaflet amongst those subject to complex cross-examination (M=4.00, SD=1.00) in comparison to those who underwent a simplified cross-examination (M=3.47, SD=.99); see graph below for illustration. Participants in the complex-plus familiarisation condition stated that they had found the guidance either 'extremely helpful' or 'very helpful' when it came to identifying different questioning techniques during cross-examination (n=10), listening carefully to questions (n= 12), asking for questions to be rephrased (n = 11) and saying what they wanted to say in response to the cross-examiner's questions (n=10). In the simple-plus familiarisation condition, responses were generally more evenly split between participants who rated the guidance 'extremely/very helpful' and those who rated the leaflet 'fairly helpful'. Notably, very few participants rated the leaflet unhelpful in any of these respects.

Invited to provide further comment, participants reported that the guidance had usefully told them "what to expect" during cross-examination. Some respondents suggested that the guidance had helped them to answer questions more effectively with one participant stating, "It explained how the questions could or would be asked and therefore made them easier to answer". Other participants indicated the guidance had given them the self-assurance to "speak up" and ask for help when they needed it.

Mean Clarifications Sought

No Preparation - 0.07   Preparation - 0.63

Perceived helpfulness of Familiarisation leaflet for Prepared groups

Methodological Note

Our participants were cross-examined in a mock courtroom environment by a qualified barrister who also assisted with the scripting of cross-examination questions to promote authenticity. In addition, steps were taken to ensure that participants represented a broad cross-section of the community in terms of age and educational attainment. The limitations of the method employed in this research must nevertheless be borne in mind. The number of mock witnesses in any one cross-examination condition was relatively small and this must be taken into account when considering the findings outlined herein; though numbers were sufficient for statistical purposes. It is also necessary to exercise caution when extrapolating from an experimental context to actual forensic settings. In real cases testimony has important consequences for those involved and witnesses may accordingly feel a greater compunction to ensure that they have understood questions and given accurate answers. It is also possible that prior commitment to a version of events (e.g. in a police statement; examination in chief) may reduce suggestibility to misleading questions in a trial context (Bregman & McAllister, 1982). At the same time, however, we would suggest that it is equally possible for negative effects of complex questions observed in this study to be augmented in trial settings, where witnesses are questioned in more intimidating surroundings about experiences that may provoke strong emotions and result in greater cognitive burdens.

Another feature of real trials is that lawyers are likely to use various linguistic ploys to reassert discursive control in exchanges with witnesses. In the present study our barrister was instructed to comply with clarification requests and to rephrase questions in simpler terms when mock witnesses expressed confusion. In a courtroom, if a question fails to elicit the desired answer a witness may simply be cut off by a cross-examiner and the question repeated or reframed in equally convoluted language. In court, witnesses will accordingly be dependent on trial judges and magistrates exercising vigilance and intervening when cross-examiners engage in, what Walker terms, "communicative mischief" (Walker, 1993: 59). Lay witnesses may otherwise find themselves at an insurmountable disadvantage, regardless of the pre-trial preparation they have received.

Finally, we confined our investigation to the impact of written guidance and it is possible that familiarisation which involves experiential training (role play & mock cross-examination) would have different, perhaps more pronounced, effects on witness accuracy though this would have to be empirically tested.

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