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Investigating the Effects of Investigative Interview techniques and Defendant IQ on Mock Jurors' Judgements based on Confession Evidence.

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April 2017

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## ABSTRACT

Confession Evidence is one of the most valuable forms of evidence to jurors (Leo and Cutler, 2016). Research has shown that the risk of obtaining a false confession is increased when coercive interviewing techniques are used with a defendant with low IQ (Garrett, 2008). This research aimed to investigate whether mock jurors are aware of coercive interviewing techniques and the risks of these when used with a potentially vulnerable suspect. Questionnaires were used to study the effects of 'Interview Technique' and 'Defendant IQ' on mock jurors' 'Perceptions of Confession Evidence' and 'Judgements of Guilt'. 172 participants were presented with a police interview extract and an 'Offender Profile', in order to manipulate the independent variables 'Interview technique' and 'Defendant IQ', before filling out a questionnaire. A 2x2 independent MANOVA was conducted to analyse data. Results indicated that participants in the US condition were more likely to perceive the confession as false but gave higher ratings of guilt compared to UK conditions. Defendant IQ did not seem to effect mock jurors' perceptions of confession evidence but they gave higher ratings of guilt for 'Average IQ' defendants compared to 'Low IQ' defendant conditions. Results revealed that 'Interview technique' and 'Defendant IQ' are important factors involved in mock jurors' judgements. Further study is required to gain a comprehensive understanding of all potential factors involved in the process of juror judgement-making.

| KEY WORDS: | FALSE CONFESSIONS | JUROR JUDGEMENTS | PERCEPTIONS OF CONFESSIONS | INTERVIEW TECHNIQUES | DEFENDANT IQ |
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**Introduction**

An investigation into a crime is a process that consists of various stages (Gudjonsson, 1992). During the enquiry stage, police use different methods to gather information from witnesses, victims and suspects (Gudjonsson, 1992). The most crucial method of information gathering for police is the interviewing of suspects (Schollum, 2005) whereby the 'interviewer' aims to manage a conversation with the suspect to encourage them to reveal information about what happened during a criminal offence (Hall, 2004). One of the main goals of a police interview with suspects is to elicit a confession in order to gain a straight-forward conviction (Larmour et al., 2015).

There are various theoretical models of interviewing outlined within police practice literature (Gudjonsson and Pearse, 2011). The most prominent models of interviewing are the Reid technique and the PEACE model (Gudjonsson and Pearse, 2011). The Reid technique's primary goal is to encourage self-incriminating admissions and confessions from suspects (Inbau et al., 2013). This technique utilises coercive methods including minimizing the seriousness of the offence, contesting denials and presenting false evidence to suspects (Inbau et al., 2013).

The main aim of a suspect interview should be to investigate whether or not the suspect had any involvement in the criminal offence (Roberts, 2012). However, the Reid technique does not take this investigative approach (Moore and Fitzsimmons, 2011). Instead, this technique immediately assumes the suspect's guilt and aims to elicit details from the interviewee that will support this assumption of guilt (Moore and Fitzsimmons, 2011). The main way to do this is to elicit a full confession from the suspect.

In legal terms, a confession is a suspect's recognition of their own guilt or involvement in a criminal act (Chapman, 2013) and this type of evidence often forms a vital part of a legal case (The Crown Prosecution Service, 2011). However, many studies have shown that coercive methods of interviewing, like the Reid technique, increase the risk of a false confession (Porter, 2011). A false confession is a suspect's acknowledgement of having committed a crime that they either did not commit or are unaware of having committed (Ofshe and Leo, 1997).

The Reid technique is the most prominent interrogation method used in the USA despite it lacking empirical foundation (Moore and Fitzsimmons, 2011). Leo et al. (2006) state that this technique has produced false confessions that have accounted for '20-25%' of the exonerations made in the USA as of the year 2006.

Recent data collected from the National Registry of Exonerations revealed that, of 1,810 exonerations in the U.S, 13% of these cases involved confessions that were proven to be false through scientific evidence (Gross and Possley, 2016). Various studies have proposed that false confessions can occur due to a number of reasons including 'the nature of the interrogation and the intelligence, mental health and personality of the suspect' (Gudjonsson and Pearse, 2011:33). The risk of obtaining a false confession is significantly increased when using coercive interviewing techniques with a potentially vulnerable suspect with learning difficulties or low IQ (Garrett, 2008).

Due to these heightened risks and coercive methods, the Reid technique cannot be utilised by UK police under PACE 1984 legislation that states that 'no interviewer may try to obtain answers or elicit a statement by the use of oppression' (Police and Criminal Evidence Act, 1984:72).

The more ethical PEACE model of Investigative Interviewing is, therefore, the UK police forces' chosen method of interviewing. An increase in acquittals linked to unreliable or coerced confessions in England during the 1980s highlighted the use of coercive police interviewing techniques (Gudjonsson, 1992), such as those used with the Reid technique. This prompted the reform of police interviewing practices along with legislation (Griffiths and Milne, 2006). The introduction of PACE 1984 legislation aimed to protect vulnerable suspects from manipulative police tactics, as well as introducing a formal interview framework (Gudjonsson, 2003). The Act states that police must be able to prove that any confession was obtained in an ethical manner in order for it to be used as evidence otherwise it will be excluded from Court (PACE, 1984).

Once PACE 1984 was introduced, The England and Wales Association of Chief Police Officers along with the Home Office developed several principles of police interviewing which were combined to create a 'standardised framework for ethical interviewing known as PEACE' (Milne, Williamson and Savage, 2009:26). Different to the Reid technique, the PEACE model has a substantial amount of empirical grounding with contributions from 'legal professionals, academic researchers and police officers' (Oxburgh, Walsh and Milne, 2011:106).

Two interviewing techniques based on psychological research, the Cognitive Interview and Conversation Management, have been incorporated into the PEACE model as a means of gathering information ethically rather than seeking a confession from suspects (Clarke, Milne and Bull, 2011). Various studies into the initial effectiveness of the PEACE model revealed positive results and an overall improvement in interviewing practice by police (Walsh and Bull, 2015). However, self-report studies suggested that officers had difficulty utilising demanding aspects of the model, such as building rapport with interviewees (Walsh and Bull, 2015). Clark and Milne (2001) carried out a review of the PEACE model and found that research demonstrated a decline of the model being implemented by police after initial training.

When further investigation was carried out to determine why police were not implementing the PEACE model into their interviews, many officers cited the model as being 'long winded, inflexible and constraining individual style' (Clarke and Milne, 2001:24). As controversial as this model may seem for police officers, it is important to note that many of them do accept the utility of the PEACE model and mostly adopt a positive stance regarding its use with suspects and witnesses alike (Clarke and Milne, 2001).

It is also important to understand that the model incorporates methods derived from the 'Cognitive Interview' which was developed for use with witnesses and victims (Memon, 2006). The aim of the Cognitive Interview is to build a positive rapport to encourage individuals to disclose information hence the stringent, timely nature of certain components of the PEACE model (Paulo, Albuquerque and Bull, 2016). This research, therefore, demonstrates the difficulty of adjusting police strategies to incorporate an ethical style of interviewing and ensuring that it is applied appropriately

when interviewing suspects. Leahy-Harland and Bull (2016) point out that although police were being trained to utilise the PEACE model, officers were still using oppressive techniques, were often guilt-presumptive and that false confessions were still emerging from interviews.

Nevertheless, it is critical to note that the PEACE model is merely a framework that does not explicitly state that coercive methods cannot be used and that it is entirely possible for false confessions to still occur. Gudjonsson (2010) found that many of the suspects still being interviewed by police were of low average intelligence. As previously discussed, the intelligence and suggestibility of a suspect can be a highly significant factor in the outcome of an interview and the majority of appellants who have been exonerated due to 'unreliable confessions' have had low average intelligence (Gudjonsson, 2003).

It is clear that there have been extensive efforts made by the Criminal Justice system to reduce the risk of false confessions as a result of unethical interview techniques through PACE 1984 legislation and subsequent interview models. However, it is evident from data gathered from the Court of Appeals that legislation reforms have not completely eliminated police malpractice (Bosworth, Hasselberg and Turnbull, 2016) and if false confessions do occur, it is likely that the suspect will have already made it through the Court process before it has been identified as being 'false'.

Due to this problem, the aim of this study was to identify whether mock jurors were aware of the types of interview techniques used in the U.S and U.K as well as the risks of these when interviewing a suspect of low average intelligence. Previous studies have shown that even when mock jurors are aware of coercive interview techniques they still made the decision to convict suspects regardless of this evidence (Moore and Fitzsimmons, 2011). Jones and Penrod (2016) also found that jurors' general knowledge concerning false confessions was not sufficient enough to decrease the likelihood of wrongful convictions. Despite this, Henkel, Coffman and Dailey's (2008) study found that most jurors are aware that vulnerable suspects are more likely to give a false confession. This research suggests that when jurors are presented with details about both interview technique and defendant IQ, results could be very different.

It is evident from previous studies that researchers have aimed to shed light on the effects of interviewing practices and suspect vulnerabilities, however, there is a lack of research examining the effects of both of these variables and possible interactions between them. Therefore, the rationale for this current study is to identify any potential effects of, and interactions between, the interview techniques used and the IQ of the defendant on mock jurors' perceptions of confession evidence and judgements regarding the guilt or innocence of the defendant.

It is important to investigate this because jurors are key decision makers in a criminal case and research suggests that confession evidence is highly regarded by jurors when considering evidence for a case (Leo and Cutler, 2016). In this case, results from this study could have implications for further developments in police practices and jury instructions. It will also hopefully raise awareness for aspects of a case that require close attention before judgements can be made about a suspect's guilt or innocence.

Based on the evaluation of previous literature surrounding this subject matter, the research question for this study is, 'Do Investigative Interviewing techniques and Defendant's IQ affect Mock Jurors' Perceptions of Confession Evidence and Judgements of Guilt?'. The hypotheses are,

**Experimental Hypothesis –** 'An interaction between interview techniques and defendant IQ will have a significant effect on mock jurors' perceptions of confession evidence and judgements of guilt'

**Directional Hypothesis –** 'When US interrogation techniques are used with a defendant of low IQ there will be a significant negative effect upon mock jurors' perceptions of confession evidence resulting in a 'not guilty' judgement'.

**Null hypothesis –** 'The interview technique and defendant IQ will not have a significant effect on mock jurors' perceptions of confession evidence and judgements of guilt'.

**Method**

*Design*

This study used an experimental between-subjects 2x2 multivariate factorial design. The independent variables being manipulated were Defendant IQ (Low vs. Average) and Investigative Interview technique (US vs. UK); each consisting of two levels. Both of the independent variables were manipulated between-subjects as participants were randomly assigned to one of four experimental conditions which were;

Condition One: Low IQ – US interrogation technique
Condition Two: Average IQ – US interrogation technique
Condition Three: Low IQ – UK interview technique
Condition Four: Average IQ – UK interview technique

These variables were manipulated in order to test the effects on two dependent variables which were Mock Jurors' Perceptions of Confession Evidence (PoCE) and Judgements of Guilt (JoG). The participant instructions and the descriptions of the crime, suspect and the detective carrying out the interview were all controlled and kept the same in each condition in order to reduce extraneous effects on the dependent variables. Quantitative data was collected using online questionnaires and was analyzed using SPSS. The researcher analyzed the mean differences between, and multivariate effects of, the independent variables on the dependent measures in this study.

*Participants*

This study aimed to recruit between 72 participants to test for a large effect size and 180 participants for a medium effect size at $p$=.05 as recommended by Cohen (1992). A total of 172 participants were recruited through opportunity sampling using distribution of an online survey created on Qualtrics (2005) and posted on the MMU Participation Pool. A total of 43 participants were randomly allocated to each of the four conditions. Sampling criteria dictated that participants had to be between the ages of 18 and 70 and did not suffer from any serious mental illnesses before taking part in the study, in accordance with juror eligibility criteria (Everything Legal Ltd., 2016).

*Materials*

Participants were firstly presented with an invitation letter and an information sheet that was posted on the MMU Participation Pool describing details of the study. Participants were also required to fully agree to participation by reading a consent form which enabled them to make an informed decision about whether they were able, and willing, to take part in the study. The study was split into two parts in order to manipulate and test the effects of the two independent variables.

Part One - Participants were presented with standardized instructions explaining what they would be required to do during participation. Participants were then presented with a written extract taken from a real police interview, which was either an example of the UK PEACE model of interviewing or an example of the US

Reid technique. This was necessary to test the effects of the independent variable of 'Interview technique'.

Part Two - Participants were presented with further standardized instructions detailing what to expect from the next stage of the study. They were then required to read a short 'Offender Profile' that consisted of the defendant's personal characteristics, including details about the defendant's IQ. Depending on the experimental condition, participants were either presented with a 'Low IQ' defendant or a defendant with 'Average IQ'. This was necessary to test the effects of the independent variable of 'Defendant IQ'.

Lastly, participants read a debrief sheet and were required to create a unique code to ensure anonymity before the conclusion of the study.

*Measures*

As the study was split into two parts to test the effects of the independent variables, the questionnaire that was administered in this study was also split into two parts in order to measure these effects. The questionnaire consisted of twenty-eight items in total. Part One of the questionnaire consisted of fourteen items measuring 'PoCE' and 'JoG' relevant to the effects of the independent variable 'Interview technique'. Part Two of the questionnaire was comprised of another fourteen items measuring 'PoCE' and 'JoG' relevant to the effects of the second independent variable 'Defendant IQ'. Participants were required to indicate their answers on five-point Likert scales for each of the twenty-eight items of the questionnaire.

Scales measuring mock jurors' perceptions of confession evidence in relation to interview techniques were adapted from Blandon-Gitlin, Sperry and Leo's (2011) study on jurors' perceptions of interrogation tactics and confession evidence. Najdowski, Bottoms and Vargas (2009) investigated jurors' perceptions of 'vulnerable' suspects in relation to confession evidence therefore scales were adapted from this study in order to test effects of the 'Defendant IQ' variable. Scales adapted from Redlich, Quas and Ghetti's (2008) 'Perceptions of children during a police interrogation' study were relevant as they directly measured judgements of guilt as well as perceptions of confession evidence in relation to suspect interviews and vulnerability.

The justification for combining scales from each of these studies is due to the lack of one complete measure that would directly test the variables in this current study. The three studies that scales were adapted from each identified and measured similar variables to the ones used in this current study hence why they were combined to create one complete measure. The scales that were incorporated into the questionnaire used in this study all had suitable reliability with Cronbach's Alpha ranging from '0.72' (Najdowski et al., 2009:415) to '0.94' (Blandon-Gitlin et al., 2011:245). Permission to use these scales was obtained by authors before the study commenced.

*Procedure*

Quantitative data was collected using an online questionnaire that was created using Qualtrics (2005), the link for which was distributed on the MMU Participation

Pool. Upon clicking the link, participants were directed to a new webpage where they were presented with an invitation letter, information sheet and consent form which they were required to read before clicking 'Agree' or 'Disagree' in order to consent to taking part in the study.

Following this, participants were randomly assigned to one of the four conditions and presented with Part One of the study which consisted of standardized instructions, an extract from a police interview and Part One of the questionnaire. Participants were either presented with an example of a US or UK interview during this stage of the study. On completion of Part One, participants were then presented with further instructions, an 'Offender Profile' and Part Two of the questionnaire.

Depending on the condition participants were randomized into, defendant's IQ in the 'Offender Profile' was described as either 'Low' or 'Average'. Once participants completed Part Two of the study, they were redirected to a debrief webpage which reminded them of their right to withdraw and contained contact details for the researcher, research supervisor and relevant organizations such as The Samaritans and the Manchester Victim Support helpline. On this page, participants created their unique code which was required for all contact with the researcher.

Once a suitable number of responses was collected, a Multivariate Analysis of Variance (MANOVA) was carried out to analyze data using SPSS.

*Ethics*

Ethical guidelines set out by the British Psychological Society (BPS, 2009) and MMU's Ethical Framework, as laid out by the Academic Ethics Committee, have been adhered to and an Application for Ethical Approval was filled out and approved by research supervisors before research was carried out. There were no serious ethical issues present in this research. It was noted that there could be a slight risk of distress for participants who had been involved in a similar criminal act as the one discussed in the study. To tackle this issue, participants were forewarned about this risk in the information sheet and advised that if they thought they would be negatively affected then they should avoid participation.

Participants were informed that if they were under the age of eighteen and suffered from any serious mental illnesses then they should avoid taking part to tackle the issue of using 'vulnerable' participants. Full details of the study were provided so that participants were able to give their informed consent and they were reminded of their right to withdraw throughout the study. Participants were fully debriefed and required to create a unique, personal code to ensure anonymity. The debrief sheet provided relevant contact details for participants who wished to contact the researcher, research supervisor or if they required specialist support from organizations such as The Samaritans.

**Results**

Analyses were carried out to test the research hypotheses referred to at the introduction of this article. Seventeen items were reverse scored before analysis commenced, such as Q12 'What is the likelihood that the interview elicited a truthful confession from Mr. Thomas?'

*Descriptive Statistics*

The mean scores and standard deviations of variables were examined. Table One and Two depict these results below;

**Table 1**

***Means and Standard Deviations for Perceptions of Confession Evidence (PoCE) scores as a function of Interview techniques and Defendant IQ***

| | IQ of Defendant | | | | | |
| | **Low** | | **Average** | | | |
| | *M* | *SD* | *M* | *SD* | **Overall** | |
| | (*n* = 86) | | (*n* = 86) | | *M* | *SD* |
| **Interview Technique** | | | | | | |
| **UK** | 46.53 | 10.72 | 45.35 | 12.08 | 45.94 | 11.37 |
| **US** | 65.77 | 12.45 | 65.95 | 12.74 | 65.86 | 12.52 |
| **Overall** | 56.15 | 15.06 | 55.65 | 16.12 | | |

Table 1 shows there are differences between mean scores of PoCE as a result of the Interview technique that participants' were presented with. Participants scored higher on this scale when presented with the US condition which suggests that they perceived the confession to be more coerced in this condition than in the UK condition. Differences in scores due to the IQ of the defendant were evident but were very slight.

**Table 2**

***Means and Standard Deviations for Judgement of Guilt (JoG) scores as a function of Interview techniques and Defendant IQ***

| | IQ of Defendant | | | | | |
| | **Low** | | **Average** | | | |
| | *M* | *SD* | *M* | *SD* | **Overall** | |
| | (*n* = 86) | | (*n* =86) | | *M* | *SD* |
| **Interview Technique** | | | | | | |
| **UK** | 28.95 | 2.72 | 30.60 | 4.65 | 29.78 | 3.87 |
| **US** | 32.74 | 4.93 | 34.58 | 4.35 | 33.66 | 4.71 |
| **Overall** | 30.85 | 4.39 | 32.59 | 4.90 | | |

Table 2 shows there are differences in mean scores for JoG as a result of both independent variables. Participants presented with the US condition were more likely

to give a 'guilty' verdict than those presented with the UK condition. The IQ of the defendant also had an effect; participants presented with a defendant with 'Average IQ' were more likely to judge them as 'guilty' than participants in the 'Low IQ' condition.

*Reliability test of measures*

The reliability of the measures used in this study was tested using Cronbach's Alpha. The 'PoCE' subscale consisting of 18-items, with 5-point Likert scales, was found to have high reliability ($\alpha= .95$). The 'JoG' subscale consisting of 10-items, all with 5-point Likert scales, was found to have weak reliability ($\alpha= .45$).

*Testing of Assumptions for MANOVA*

The various assumptions of a MANOVA were then tested.

Univariate and multivariate normality – Tested using the Shapiro-Wilk test with tests of skewness. The 'PoCE' scale met this assumption ($SW= .99$, $df= 172$, $p= .127$) as $p >.01$ and skewness (.14) was below the critical value of 2.58 at $p= .01$. The 'JoG' scale did not fully meet this assumption ($SW= .97$, $df= 172$, $p= .002$) as $p <.01$, however, skewness (2.34) was below the critical value of 2.58, therefore we can assume that normality was reasonable (Stamatis, 2003).

Homogeneity of Variance – The Levene's test was examined to test this assumption. All variables were non-significant as $p>.01$; 'PoCE' - $F(3, 168)= .22$, $p= .882$ and 'JoG' - $F(3, 168)= 3.83$, $p= .011$, indicating homogeneity of variance.

Equality of Covariance – Tested using Box's M. The result of this test is lower than .05 (*Box's M*= 19.23, $p= .027$), however, Tabachnick and Fidell (2013) claim that unless this is lower than .001 it can be ignored as the test is highly sensitive.

Univariate Outliers – Identified through Box Plots. There were no significant outliers for 'PoCE' scale. There was one outlier present in the 'JoG' scale, however, when the mean (31.72) was compared with the 5% trimmed mean (31.58) this indicated that the outlier was not significantly distorting the data. Therefore, data met this assumption.

Multivariate Outliers – Identified through analysis of Mahalanobis Distance at $p=.001$ as recommended by Pallant (2010). The maximum Distance present in this data was 9.91, which is below the critical value of 13.82 therefore meeting this assumption.

Multicollinearity – Tested using correlational analyses. The two dependent variables were moderately correlated, $r(172) = .44$, $p< .001$. According to Tabachnik and Fidell (2013), the variables have an acceptable amount of multicollinearity as $r$ is neither above .7 nor below .2.

With the assumptions of the MANOVA met, the test was carried out.

*MANOVA results*

A 2 x 2 independent MANOVA was conducted to analyse data. A *p* value of .05 was used for statistical tests.

The multivariate result was significant for main effect of interview technique, $\Lambda$= .57, $F(2,167) = 64.02$, *p*=.000, $\eta_p^2 = .44$, indicating a medium effect size. The univariate *F* tests indicated that Interview Technique had a significant effect on both 'PoCE'- $F(1,168)= 118.05$, *p*=.000, $\eta_p^2 = .42$, and on 'JoG'- $F(1,168)= 35.9$, *p*=.000, $\eta_p^2 = .18$. However, the effect size was small for the main effect of Interview Technique on 'JoG'.

The multivariate result was significant for main effect of defendant IQ, $\Lambda$= .95, $F(2,167) = 4.11$, *p*=.018, $\eta_p^2 = .05$, however, the effect size was small. The univariate *F* tests indicated that Defendant IQ had a significant effect on 'JoG'- $F(1,168)= 7.25$, *p*=.008, $\eta_p^2 = .04$ but not on 'PoCE'- $F(1,168)= .07$, *p*=.785, $\eta_p^2 = .000$. Although the main effect of Defendant IQ on 'JoG' measures was significant, the effect was small.

The multivariate result was not significant for the interaction effects between Defendant IQ and Interview Technique on DVs, $\Lambda$= .99, $F(2,167)= .07$, *p*=.932, $\eta_p^2 = .001$.

*Post Hoc tests*

Univariate t-tests, with Bonferroni correction of the alpha level, were conducted for significant results to identify where differences between the IV conditions lay in relation to the two DVs. Three t-tests were conducted therefore the Bonferroni adjusted p-value used in this analysis was .017.

An independent t-test was conducted to compare 'PoCE' scores in US (*M*=65.86,*SD*=12.52) versus UK (*M*=45.94,*SD*=11.37) interview conditions. Results demonstrated a significant difference in the scores for US and UK conditions; $t(170)=10.92$, *p*=.000. The 95% confidence intervals for the mean difference between conditions were 16.32 to 25.52. Cohen's *d* was calculated as 1.66 indicating a large effect size (Cohen, 1992). This suggests that participants in the US conditions were significantly more likely to perceive the confession as 'false' than those in UK conditions.

An independent t-test was conducted to compare 'JoG' scores in US (*M*=33.66,*SD*=4.71) versus UK (*M*=29.78,*SD*=3.87) conditions. Results demonstrated a significant difference in these scores; $t(170)=5.91$, *p*=.000. The 95% confidence intervals for mean differences were 2.59 to 5.18. Cohen's *d* was calculated as 0.90 indicating a large effect size (Cohen, 1992). This suggests that participants in the US conditions were significantly more likely to give a 'guilty' verdict than those in UK conditions, despite perceiving the confession as 'false'.

An independent t-test was conducted to compare 'JoG' scores in Low IQ (*M*=30.84,*SD*=4.39) versus Average IQ (*M*=32.59,*SD*=4.90) conditions. Results demonstrated a significant difference in these scores; $t(170)= 2.46$, *p*=.015. The 95% confidence intervals ranged from -3.14 to -.34. Cohen's *d* was calculated as 0.38 indicating a medium effect size. This suggests that mock jurors' in the 'Average IQ'

condition were significantly more likely to indicate a 'guilty' verdict than those in the 'Low IQ' condition.

## Discussion

The main aim of this study was to investigate whether mock jurors were aware and able to identify factors that might increase the risk of eliciting a 'false' confession. It was specifically interested in ratings of guilt and perceptions of confession evidence when jurors were presented with details regarding the interview technique used and defendants' IQ, as well as how these factors might interact with one another to have an overall affect on mock juror judgements.

Previous research (Moore and Fitzsimmons, 2011; Henkel et al., 2008) has been carried out on the effects of these variables on mock jurors' judgements in isolation. However, no studies have so far investigated how judgements regarding confession evidence could be affected by both interview technique and defendant IQ when presented together. Based on previous research, the researcher hypothesized that when US interview techniques were used with defendants with low IQ then mock jurors would be more likely to perceive the elicited confession as 'false' resulting in a 'not guilty' verdict. The null hypothesis stated that variables would not have a significant effect on dependent variables.

The main findings from data analysis suggest that there was no interacting effect between 'Interview Technique' and 'Defendant IQ' on 'Perceptions of Confession Evidence (PoCE)' and 'Judgements of Guilt (JoG)'. This suggests that we must reject the experimental hypothesis that 'An interaction between independent variables will have a significant effect on dependent variables'. Nevertheless, despite there being no interacting effect, significant findings were found for the main effects of independent variables, therefore the null hypothesis is rejected.

It was found that 'Interview Technique' had a significant effect on both 'PoCE' and 'JoG'. Therefore, this data supports the hypothesis that 'Interview technique' will have a significant effect on dependent variables. Specifically, it was determined that mock jurors were more likely to perceive the confession as 'false' when presented with US interview techniques than UK techniques, which is consistent with the directional hypothesis.

Despite this finding, the direction of the 'Interview techniques' effect on 'JoG' was unexpected and did not meet the predictions of the researcher. The researcher hypothesized that when presented with US interview techniques, mock jurors would be more likely to give a 'not guilty' verdict. However, findings from analyses suggested the opposite, that mock jurors were more likely to give a 'guilty' verdict in US interview conditions than in UK conditions, despite being more likely to perceive the confession as 'false'.

These findings are consistent with Moore and Fitzsimmons' (2011) findings that indicated that even when mock jurors were aware of coercive interview techniques they chose to convict defendants regardless of this mitigating evidence. The results from the current study support the notion that mock jurors are aware of, and able to identify, coercive interview techniques and that the identification of such techniques can alter their perceptions of confession evidence. It is therefore interesting that despite this ability to perceive a confession as 'coerced', mock jurors will still give a 'guilty' verdict although they perceive that the evidence may be unreliable.

Reasons for this finding are varied, as Jones and Penrod (2016) suggest, it is possible that mock jurors' general knowledge concerning false confessions just may not be adequate to completely reduce the risk of wrongfully convicting an innocent person. Therefore, although mock jurors' can seemingly identify a coercive interview they may not have enough knowledge to know what to do with this information or how to apply it to their judgements.

Previous studies have also suggested that expert testimony can impact jurors' decisions concerning coercive interviews (Blandon-Gitlin et al., 2011). Blandon-Gitlin et al. (2011) found that when expert testimony was considered by jurors, guilty verdicts decreased and the coerciveness of interviews was more readily perceived. This suggests that mock jurors may require the support of expert witnesses to confirm their perceptions and ultimately to ensure that they make a more accurate judgement based on this evidence.

Results indicated that 'Defendant IQ' had a significant effect, albeit a small one, on 'JoG' but did not have a significant effect on 'PoCE'. Post hoc testing revealed that at a Bonferroni-adjusted significance level, 'Defendant IQ' produced a medium, significant effect on 'JoG'. These findings indicate that 'Defendant IQ' had an effect on judgements even at a more stringent significance level. Therefore, this supports the hypothesis that 'Defendant IQ' will have a significant effect on mock jurors' 'JoG', however, the hypothesis that this variable will have a significant effect on 'PoCE' has not been supported by this research.

Findings specifically indicated that mock jurors were more likely to give higher ratings of guilt for defendants with 'Average IQ' than for those with 'Low IQ'. This data shows that mock jurors consider the IQ of a defendant when making judgements concerning whether to convict or not, however, as the findings for the 'PoCE' measure were not significant there is no indication that this is due to the identification of a 'false' confession. Henkel et al. (2008) argued that jurors were aware that vulnerable suspects were more likely to give a false confession in their study but this claim is not supported by the findings from this current study.

In order to support Henkel et al's (2008) claim, research would expect to find a significant effect of 'Defendant IQ' on both dependent variable measures however, this was not the case. This seems to suggest that mock jurors are less likely to judge defendants with low IQ as 'guilty' but that the reason for this could be due to other extraneous variables that were not identified in this study. Another reason for this could be due to the manipulation of the independent variable; Defendant IQ.

In follow-up communication with some participants, it was noted that the coerciveness of the US interview technique was so clear to participants that the IQ of the defendant did not have as much of an effect on their decisions. Therefore, if this study were to be repeated it would benefit from a clearer, more evident manipulation of the 'IQ' variable. The researcher initially proposed to use videos of interviews with defendants with differing IQs, however, practical and ethical issues prevented the researcher from implementing this method of manipulation. It is recommended that future research should attempt to try and utilize recordings of interviews, however, difficulties may arise in being able to access such material for research purposes due to ethical constraints,

This study instead used written 'Offender Profiles' that included a few lines detailing the IQ levels of defendants. It could be that this did not provide enough information from which mock jurors could draw a conclusion. Considering these methodological problems, and in order to increase the ecological validity and generalisability of the study, it is recommended that future research should utilize video-recordings to demonstrate manipulation of IQ. Alternatively, actors could be employed to demonstrate the differing levels of intelligence in a mock courtroom procedure. This would ensure that both interview technique and defendant IQ would be manipulated at a similar level to ensure equal testing of both variables.

There could be several other reasons why mock jurors made certain decisions in this study. Two main processes of decision making are discussed by researchers. These are 'Confirmation Bias' and 'Coherence-based reasoning (CBR)' (Greenspan and Scurich, 2016).

Plotkin (2010) proposes that confirmation bias occurs when jurors' interpretation of evidence is biased to fit a narrative that they favor due to their internal beliefs. This explains why some jurors might place more weight on some piece of evidence more than another. In terms of this study, it suggests why people might perceive a confession as 'false' but convict the defendant anyway in order to fit the narrative of 'why would an innocent person confess to a crime?' This process, when applied to the criminal justice system, is termed 'Forensic confirmation bias.' (Kassin, Dror and Kukucka, 2013).

CBR describes a similar process whereby a concept known as 'bidirectional reasoning' takes place during decision-making (Greenspan and Scurich, 2016). CBR occurs when jurors try to achieve coherence when presented with potentially conflicting pieces of information (Greenspan and Scurich, 2016). According to this theory, jurors will interpret information so that it fits a conclusion that they have already made. Bidirectional reasoning occurs when the conclusion jurors have already made diffuses back to affect the perception of evidence itself. This theory also suggests that mock jurors hold certain beliefs and assumptions that affect their judgements. Therefore, these theories suggest that it may not be the 'Interview Technique' or 'Defendant IQ' that is affecting 'PoCE' or 'JoG' but that, alternatively, it could be jurors' own beliefs that are the main factor behind judgement making.

These theories might explain why 'Defendant IQ' seemed to have an effect on just the 'JoG' measure. Mock jurors' beliefs regarding false confessions could be the missing extraneous variable that could have affected results. It is proposed, therefore, that future research takes note of this suggestion and that mock jurors' beliefs are also measured in any replication of this current study.

Another problem evident from findings is the issue of reliability for the measures used in this study. The 'PoCE' scale was found to have good reliability ($\square$= .95), however, the 'JoG' scale had low reliability ($\square$= .45). It is also possible that 'JoG' and 'PoCE' scales overlapped as a correlation of .44 was found between dependent variables. This will also have effected the data as the scales could have potentially been measuring the same concept. This highlights the issue of adapting and combining scales and therefore, results from this scale must be treated with caution. Future research would benefit from a more reliable and comprehensive measure for the particular variables under investigation. Despite this methodological problem, this

study produced highly interesting results that would benefit from replication whereby the researcher could tackle the issues highlighted in this study.

Despite these issues, this study was able to reach a large sample in a restricted amount of time and produced highly relevant results specifically suggestive of the importance of modifications made to police interviewing practices. It highlighted the concern that although mock jurors are able to detect coercive interview techniques they are likely to judge defendants as 'guilty' despite this information. It is also concerning that, in this study, mock jurors' perceptions were not effected by the IQ levels of defendants.

This highlights the importance of police practice and indicates that in order to decrease the risk of wrongful convictions, police should ensure that evidence is reliable and confession evidence is voluntarily obtained before court proceedings take place. The PEACE model encourages a more ethical approach to investigative interviewing but as previous research conducted by Clarke and Milne (2001) has shown, there are several problems concerning the application of an ethical interviewing method. It is clear from findings that mock jurors are still lacking in terms of making accurate judgements regarding 'false' confessions. Therefore, it lies with police to ensure that mock jurors do not get the opportunity to wrongfully convict an innocent suspect by ensuring that they continue to apply stringent, ethical methods during the investigation process.

Although findings in this research did not fully support the experimental hypothesis, significant main effect findings contradict the null hypothesis that no effects would be found. As discussed, several methodological issues could be tackled in order to rectify this and it would be worthwhile to replicate this study with these adaptations. It is evident that 'Interview technique' and 'Defendant IQ' are highly significant factors involved in the process of mock juror judgement-making. It is concerning that jurors seem to possess the ability to perceive false, coerced confessions but they are unable to adjust their judgements in accordance with this information. It is also worrying that 'Defendant IQ' had an effect on mock jurors' judgements but did not seem to alter their perceptions of confession evidence.

These findings are extremely important to consider in the wider context as it seems that mock jurors do not possess the necessary knowledge to adjust their judgements in accordance with their perceptions of evidence. Therefore, further research is absolutely required to gain a comprehensive understanding of other factors that might be involved in the process of judgement making. It can be suggested that adaptations to jury instructions could be made to incorporate these findings and ensure that jurors are made aware about the risks of false confessions and the factors that might indicate when such a confession might occur.

It must also be considered that despite PACE 1984, findings (Leahy-Harland and Bull, 2016) suggest that coercive interview methods may still be used in the UK, this begs the question of whether another reform may be required to make it an absolute requirement that the PEACE model must be used in every police interview and proof of this must be obtained for the courtroom. It is clear that, in the case of courtroom procedures involving jurors, improvements are still needed to reduce the ever-present risk of wrongfully convicting innocent individuals.

**References**

Blandon-Gitlin, I., Sperry, K. and Leo, R. (2011) 'Jurors believe interrogation tactics are not likely to elicit false confessions: Will expert witness testimony inform them otherwise?', *Psychology, Crime & Law*, 17(3), pp. 239-260

Bosworth, M., Hasselberg, I. and Turnbull, S. (2016) 'Punishment, citizenship and identity: An introduction.', *Criminology and Criminal Justice*, 16(3), pp. 257-266.

British Psychological Society. (2009) *Code of Ethics and Conduct.* [Online] [Accessed on 1st November 2016] https://beta.bps.org.uk/sites/beta.bps.org.uk/files/Policy%20-%20Files/Code%20of%20Ethics%20and%20Conduct%20%282009%29.pdf

Chapman, F.E. (2013) 'Coerced Internalized False Confessions and Police Interrogations: The Power of Coercion.', *Law and Psychology Review*, 37(1), pp. 159-192.

Clarke, C. and Milne, R. (2001) *National Evaluation of the PEACE Investigative Interviewing Course*. [Online] [Accessed on 6th October 2016] http://tna.europarchive.org/20030731071058/http://www.homeoffice.gov.uk:80/docs/peaceinterviewcourse.pdf

Clarke, C., Milne, R. and Bull, R. (2011) 'Interviewing Suspects of Crime: The Impact of PEACE training, supervision and the presence of a legal advisor.', *Investigative Interviewing and Applied Research*, 8(2), pp. 149-162.

Cohen, J. (1992) 'A power primer', *Psychological Bulletin*, 112(1), pp. 155-159.

Everything Legal Ltd. (2016) *Who is eligible for jury service?* Jury Service. [Online] [Accessed 7th November 2016] http://jury-service.co.uk/jury-service-eligibility/

Garrett, B.L. (2008) 'Judging Innocence.', *Columbia Law Review*, 108(1), pp. 55-142.

Garrett, B.L. (2010) 'The Substance of False Confessions.', *Stanford Law Review*, 62(4), pp. 1051-1118.

Greenspan, R. and Scurich, N. (2016) 'The Interdependence of Perceived Confession Voluntariness and Case Evidence.', *Law and Human Behaviour*, 40(6), pp. 650-659.

Griffiths, L. and Milne, B. (2006) 'Will it end in tiers?: police interviews with suspects in Britain.' *In* Williamson, T. (ed.) *Investigative interviewing: rights, research, regulation*. Cullompton: Willan Publishing, pp. 167-189.

Gross, S. and Possley, M. (2016) *For 50 years, You've had "The Right to Remain Silent."* 6th December. The Marshall Project. [Online] [Accessed on 10th April 2017]

Gudjonsson, G.H. (1992) *The psychology of interrogations, confessions and testimony*. New York: John Wiley & Sons.

Gudjonsson, G.H. (2003) *The psychology of interrogations and confessions: A handbook*. Chichester: John Wiley.

Gudjonsson, G.H. (2010) 'Psychological vulnerabilities during police interviews. Why are they important?', *Legal and Criminological Psychology*, 15(2), pp. 161-175.

Gudjonsson, G.H. and Pearse, J. (2011) 'Suspect interviews and false confessions.', *Current Directions in Psychological Science*, 20(1), pp. 33-37.

Henkel, L.A., Coffman, K.A.J. and Dailey, E.M. (2008) 'A survey of people's attitudes and beliefs about false confessions.', *Behavioral Sciences & the Law*, 26(5), pp. 555-584.

Inbau, F.E., Reid, J.E., Buckley, J.P. and Jayne, B.C. (2013) *Criminal interrogation and confessions*. 5th ed., Burlington: Jones & Bartlett Learning.

Jones, A.M. and Penrod, S. (2016) 'Can Expert Testimony Sensitize Jurors to Coercive Interrogation Tactics?', *Journal of Forensic Psychology Practice*, 16(5), pp. 393-409.

Kassin, S.M., Dror, I.E. and Kukucka, J. (2013) 'The forensic confirmation bias: Problems, perspectives and proposed solutions.', *Journal of Applied Research in Memory & Cognition*, 2(1), pp. 42-52.

Larmour, S.R., Bergstrøm, H., Gillen, C.T.A. and Forth, A.E. (2015) 'Behind the Confession: Relating False Confession, Interrogative Compliance, Personality Traits and Psychopathy.', *Journal of Police and Criminal Psychology*, 30(2), pp. 94-102.

Leahy-Harland, S. and Bull, R. (2016) 'Police Strategies and Suspect Responses in Real-Life Serious Crime Interviews.', *Journal of Police and Criminal Psychology*, September, pp. 1-14.

Leo, R.A. and Cutler, B.L. (2016) *False Confessions in the Twenty-First Century*. Washington: National Association of Criminal Defense Lawyers. [Online] [Accessed on 1st April 2017] https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2763910&download=yes

Leo, R.A., Drizin, S.A., Neufeld, P.J., Hall, B.R. and Vatner, A. (2006) 'Bringing reliability back in: false confessions and legal safeguards in the twenty-first century.', *Wisconsin Law Review*, 479(2006), pp. 479-539.

Memon, A. (2006) 'The Cognitive Interview.' *In* Hargie, O. (ed.) *The Handbook of Communication Skills*. 3rd ed., New York: Routledge, pp. 531-550.

Milne, B., Williamson, T. and Savage, S. (eds.) (2009) *International developments in Investigative Interviewing*. London: Willan Publishing.

Moore, T. and Fitzsimmons, C.L. (2011) 'Justice Imperiled: False Confessions and the Reid Technique.', *The Criminal Law Quarterly*, 57(1), pp. 509-542.

Najdowski, C.J., Bottoms, B.L. and Vargas, M.C. (2009a) 'Jurors' perceptions of juvenile defendants: The influence of intellectual disability, abuse history and confession evidence.', *Behavioral Sciences & The Law*, 27(3), pp. 401-430.

Ofshe, R.J. and Leo, R.A. (1997) *The Social Psychology of Police Interrogation: The Theory and Classification of True and False Confessions*. California: JAI Press. [Online] [Accessed on 15th April 2017] https://www.reid.com/pdfs/doj2301_2399.pdf

Oxburgh, G.E., Walsh, D. and Milne, B. (2011) 'The importance of applied research in investigative interviewing: A real-life perspective.', *Journal of Investigative Psychology and Offender Profiling*, 8(2), pp. 105-109.

Pallant, J. (2010) *SPSS survival manual: a step by step guide to data analysis using SPSS*. 4th ed., Maidenhead: McGraw-Hill International.

Paulo, R.M., Albuquerque, P.B. and Bull, R. (2016) 'Improving the Enhanced Cognitive Interview with a New Interview Strategy: Category Clustering Recall.', *Applied Cognitive Psychology*, 30(5), pp. 775-784.

Plotkin, H. (2010) *"Jurors vote for their views, not your evidence."* Los Angeles: YourNextJury [Online] [Accessed on 5th April 2017]

Police and Criminal Evidence Act 1984. (c.60) London: Home Office.

Porter. S. (2011) *The Confession Interview: Ethical, Legal and Psychological Implications for the IFA*. Diploma in Investigative and Forensic Accounting (DIFA), University of Toronto.

Qualtrics (2005) QUALTRICS. (11/17) [Computer Software] http://www.qualtrics.com [Accessed on 14th November 2016]

Redlich, A.D., Quas, J.A. and Ghetti, S. (2008) 'Perceptions of children during a police interrogation: Guilt, confessions and interview fairness.', *Psychology, Crime & Law*, 14(3), pp. 201-223.

Roberts, K. (2012) 'Police Interviewing of Criminal Suspects: A Historical Perspective.', *Internet Journal of Criminology*, pp. 1-17.

Schollum, M. (2005) *Investigative Interviewing: The Literature*. Wellington: Office of the Commissioner of Police. [Online] [Accessed on 28th March 2017] https://pdfs.semanticscholar.org/d5f0/0ecbc12dbe7d999a4aef05206472519b766f.pdf

Stamatis, D. (2003) *Six sigma and beyond*. Boca Raton: St. Lucie Press.

Tabachnik, B.G. and Fidell, L.S. (2013) *Using Multivariate Statistics: Pearson New International Edition*. Essex: Pearson Education Limited.

The Crown Prosecution Service (2011) *Confessions, Unfairly Obtained Evidence and Breaches of PACE*. [Online] [Accessed on 6th October 2016]

http://www.cps.gov.uk/legal/a_to_c/confession_and_breaches_of_police_and_criminal_evidence_act/

Walsh, D. and Bull, R. (2015) 'Interviewing suspects: examining the association between skills, questioning, evidence disclosure and interview outcomes.', *Psychology, Crime & Law*, 21(7), pp. 661-680.