

**Forensic interviewing of mentally disordered suspects: The impact of interview style on investigation outcomes.**

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## **Abstract**

The investigative interviewing of a vulnerable suspect is a complex task. Current best practice advocates for the use of open questions in obtaining a free recall. However, those with mental health conditions have limited cognitive abilities, and there is emerging evidence that suggests open questions may not always be suitable for the vulnerable interviewee. This study examined the impact of two different interview models (best practice v modified interview) on the type of investigation relevant information obtained within an experimental vulnerable 'suspect' sample. A sample of 108 University students participated; of those, 47 self-reported mental health conditions and 61 confirmed no presence of mental health issues. The sample consisted of 18 male and 90 female participants, with an average age of 24.1 years. Participants engaged in two tasks; 'stealing' a mobile phone and some exam scripts. Each participant was then subject to either a best practice (containing largely open questions) or a modified interview (containing largely closed questions). Vulnerable participants provided a significantly higher and more accurate amount of investigation relevant information during the modified interview rather than the best practice interview. In addition, participants that have mental health conditions sought more clarifications during the best practice interviews. Our findings challenge current best practice in that vulnerable participants performed worse in interviews containing more open questions than closed questions. These findings add to the emerging evidence base that vulnerable individuals may require an alternative method of questioning, including the use of closed questions as 'scaffolding' during an investigative interview.

**Keywords:** investigative interviewing, modified interview, question types, vulnerability, suspects

## Introduction

The term 'vulnerability' can be defined within the context of the criminal justice system as, "psychological characteristics or mental state which renders an [individual] prone, in certain circumstances, to providing information which is inaccurate, unreliable or misleading" (Gudjonsson, 2006, p.68). This term encompasses not only learning difficulties but also mental health conditions, as well as heightened states of suggestibility, compliance and acquiescence (Gudjonsson, 2018). In reality, rates of comorbidity are high (Sartorius, 2013).

Increasing numbers of vulnerable individuals are coming into contact with the criminal justice system (Sirdifield & Brooker, 2012). Attempts are in place to divert vulnerable individuals away from the criminal justice system and into the health and social care sectors (Bradley, 2009). Criminal justice liaison and diversion schemes operate to identify vulnerable individuals whose involvement with the criminal justice system may not be in the public interest given the potential impact of custodial environments on their vulnerability (Jacobson & Talbot, 2009). Indeed, research has documented that the risk of re-offending and the impact upon an individual's mental health can be reduced if they are diverted away from the criminal justice system (James et al., 2002) and provided with the necessary support in the community (Jacobson & Talbot, 2009). Despite Lord Bradley's recommendations that all police custody suites should have access to liaison and diversion services (Bradley, 2009), many vulnerable individuals still progress through the criminal justice system and are over-represented in custody both within the UK (Sirdifield & Brooker, 2012) and in other countries (Hofvander, Anckarsater, Wallinius, & Billstedt, 2017).

When an individual encounters the criminal justice system, their first point of contact is typically with a police officer (Bradley, 2009), and will most likely involve a police interview (Oxburgh & Ost, 2011). Investigative interviewing is a complex task (Farrugia & Gabbert, 2019). Although many countries worldwide have their own interview/interrogation methods (Walsh, Oxburgh, Redlich, & Myklebust, 2016), the most widely accepted and used within England and Wales is the PEACE model of interviewing (Williamson, 2006). A mnemonic for the five stages of interviewing: Planning and preparation, Engage and explain, Account, clarify and challenge, Closure, and Evaluation, the emphasis is on obtaining accurate and reliable information (see Clarke & Milne, 2015, for a full discussion). In addition to this framework of interviewing, the Police and Criminal Evidence Act, and the associated Codes of Practice (Home Office, 2008) provide a legislative framework for the exercise of police powers in England and Wales including the interviewing of vulnerable suspects (see Code C).

Obtaining an accurate and reliable account is crucial within the investigative interviewing stage (Clarke & Milne, 2015; Farrugia & Gabbert, 2019; Oxburgh, Myklebust, & Grant, 2010). A substantial amount of psychological research has indicated that this can be obtained through appropriate questioning techniques, such as the use of open and probing questions; these question types, in particular, have been reported to produce longer, more detailed, and more accurate information when compared to inappropriate questions such as closed questions (Oxburgh et al., 2010; Snook, Luther, Quinlan, & Milne, 2012). However, research has also documented that vulnerable suspects do not respond well to traditional policing tactics, (Gudjonsson, 2018), including the investigative interview. For example, this vulnerable cohort sought more clarification for open questions and tended to provide more investigation relevant information to closed questions (Farrugia & Gabbert, 2019).

Conducting investigative interviews with vulnerable suspects can be particularly problematic as different mental health conditions present different challenges. Police officers are typically trained to ask open questions that invite a free recall (Clarke & Milne, 2015) thus drawing on the episodic memory of the interviewee. Episodic memory is a unique but demanding cognitive function (Allen & Fortin, 2013). As such, a free recall involves effortful processing relying on complex processing activities that require a high level of attention as well as cognitive control (Pauls, Petermann, & Lepach, 2015). However, research has documented that those with mental health conditions tend to have cognitive deficits in these areas (Dongaonkar, Hupbach, Nadel, & Chattarji, 2019). For example, symptoms associated with mood disorders appear to interfere with effortful processing, such as a free recall task, with reported deficits in free recall and recognition (Airaksinen, Larsson, & Forsell, 2005; Pauls et al., 2015). It has been suggested that such impairments are most apparent in tasks that require much cognitive effort (Hammar & Ardal, 2012). Furthermore, episodic memory impairments are not limited to those **that** have mood disorders. Research has also documented these findings in individuals **that** have schizophrenia (Fajnerova et al., 2017), anxiety (Airaksinen et al., 2005), and obsessive-compulsive disorder (Zitterl et al., 2001). Consequently, this can lead to these individuals being prone to a 'categorical overgeneral memory', which results in the recollection and reporting of repeated events instead of a specific episode (Lemogne et al., 2006). This has implications for the types of questions that interviewers should use during the investigative interview and for the 'free recall' aspect of the suspects account. Such deficits can result in the vulnerable suspect finding it arduous to recall specific events and in the correct order, as well as difficulties in concentrating and attending to questions asked of them, and misinterpreting information (Rude, Wenzlaff, Gibbs, Vane, & Whitney, 2002). In addition to impairments that affect individuals with specific

mental health conditions, it is well documented that those who have mental health issues tend to present with heightened levels of suggestibility, compliance, and acquiescence (see Gudjonsson, 2010, for a full discussion) which have contributed to well-known miscarriages of justice (Gudjonsson, 2018). Consequently, such individuals may be particularly vulnerable of providing unreliable, misleading, or self-incriminating information, especially if they are finding it difficult to follow the particular question format.

Although the general consensus is that the use of open and probing questions produce longer, more detailed and accurate information in response (cf. closed questions), an emerging stream of research involving vulnerable interviewees is starting to suggest these question types may, in fact, be more counterproductive. For example, a number of independent studies have found that adults with an intellectual disability report fewer correct details than those without an intellectual disability when asked open questions that invite a free recall (Bowles & Sharman, 2014; Hershkowitz, 2018; Perlman, Ericson, Esses, & Isaacs, 1994; Ternes & Yuille, 2008). Research conducted with individuals that have an Autism Spectrum Disorder has found similar results; that is, that such individuals find it difficult to freely recall information without a structured support (Bowler, Gaigg, & Lind, 2011). This has been echoed in other research that has indicated that a free recall phase may be too broad to provide effective retrieval support (Bearman, Brubacher, Timms, & Powell, 2019). Furthermore, open-ended questions can yield “don’t know” responses at higher than expected rates (Danby, Brubacher, Sharman, & Powell, 2015; Melinder & Gilstrap, 2009). Although the majority of this research has focused on individuals within a witness context, other research has found similar findings within a suspect context. Recent research analysing real-life police interviews conducted with vulnerable and non-vulnerable adult suspects highlighted that those with mental health conditions tended to seek more clarification for open questions and tended to provide more information to closed questions when compared to their non-vulnerable counterparts (Farrugia & Gabbert, 2019). Thus, there appears to be a conflict between the importance of maintaining open questions as per best practice given the longer, more detailed and more accurate information these questions appear to elicit, and the need to ensure that the questions match the cognitive abilities of the vulnerable interviewee.

Given the emerging research findings, the purpose of the current study was to explore which investigative interview practice was most appropriate for those that have mental health conditions. Stemming from previous literature, we sought to build upon Farrugia and Gabbert’s (2019) results by experimentally testing two different interview models; a best practice interview containing largely open questions, and a modified interview containing largely closed questions. The aim was to explore which model not only elicited

the most amount of investigation relevant information but also the most accurate from a vulnerable sample. Although Farrugia and Gabbert's (2019) research produced some insightful findings, the analysis could not be extended to explore the accuracy of the information provided by the vulnerable suspect as the 'ground truth' was unknown; that is, the truthfulness of the suspects' accounts could not be ascertained. Thus, the ability to evaluate the quality of the information provided was limited.

Our hypotheses are as follows:

Hypothesis 1: Participants with mental health conditions will provide more investigation relevant information during the modified interview (primarily closed questions) than the best practice interview (primarily open questions).

Hypothesis 2: Participants with mental health conditions will seek more clarification during best practice interviews (primarily open questions) than the modified interview (primarily closed questions).

Given the exploratory nature regarding the accuracy of investigation relevant information within a suspect context, no hypotheses were generated. Furthermore, although previous psychological research has indicated that those with mental health problems are significantly more likely to demonstrate suggestibility, compliance, and acquiescence than those without any vulnerabilities, this has not been explored within the context of different interview models. As such, no hypotheses were generated for this aspect.

## Method

### Design

A 2 (Participant type: mental health conditions vs. no mental health conditions) x 2 (Interview type: best practice interview vs. modified interview) between-subjects design was used, with the following dependent variables: (1) quantity of investigation relevant information, measured by the number of items of information, (2) accuracy of investigation relevant information, measured by the number of correct crime-related items of information, (3) amount of clarifications, measured by the number of occurrences, and (4) level of vulnerability, measured by the sum of instances of suggestibility, compliance, and acquiescence. Ethics was obtained from the appropriate Research Ethics Committee.

### Participants

Adopting a purposive sampling method, 110 participants were recruited from three universities in England to partake in the study in exchange for three research credits via the University's SONA System. Participants were only able to participate if they were aged 18 years and above and had a good understanding of English. Those with a Learning Difficulty or Learning Disabilities were excluded. Out of the total sample, two were excluded due to the presence of a self-reported Learning Disability. Subsequently, the final sample consisted of 108 participants (18 male and 90 female), with an average age of 24.1 years ( $SD = 7.93$ ). The sample included participants that had mental health conditions ( $n = 47$ ) and those that did not ( $n = 61$ ); this also included those that reported co-morbidity. The range of mental health conditions that participants reported are in Table 1. The participants were split equally between the two interview conditions.

Table 1 here.

### Materials

A coding framework and guide was developed based on current police interview practice in England and Wales (namely the PEACE model of interviewing; Williamson, 2006) and relevant psychological research (Farrugia &

Gabbert, 2019; Oxburgh, Ost & Cherryman, 2012). The coding framework contained four sections which focused predominately on the 'Account, clarify and challenge' phase of the PEACE model of interviewing:

The first section documented general participant demographics and interview characteristics.

The second section focused on question typology based on current classifications within the literature (see Oxburgh et al., 2010, for a full discussion). The amount of clarifications sought per question type were also coded for in this section.

The amount of investigation relevant information from the participant was counted in section three. In line with previous research (e.g. Farrugia & Gabbert, 2019; Oxburgh et al., 2012), this was separated into the following five categories: (a) person; details pertaining to relevant individuals including name, age, gender, and any other person identifying information; (b) action; details regarding offence related actions such as, "I took..." "I stole..."; (c) location; any details referring to specific locations including names of streets/buildings, or general locations such as, "upstairs on this floor..."; (d) item; any information referring to specific objects relevant to the crime such as, "mobile phone", "USB pen"; and, (e) temporal; any information relating to specific times or durations of times such as "last month", "yesterday" "five minutes". In addition to the quantity, the accuracy of investigation relevant information was also counted; this was considered on the basis of correct versus incorrect items of information.

The fourth section considered any instances of vulnerability portrayed by the participant and related specifically to suggestibility, compliance and acquiescence (Gudjonsson, 2018).

## **Procedure**

Upon arrival to the laboratory, each participant was greeted by the researcher who provided an information sheet and consent form. Each participant was instructed to complete two tasks; (a) retrieve a mobile phone from a bag, and (b) obtain exam scripts from a laptop. Both the mobile phone and bag, and the exam scripts and laptop, were placed in a designated room on the university campus. Each participant was informed of which tasks were classed as the minor transgression and the matched non-transgression at the start of their participation; participants were informed of this, so they understood which tasks the interviewing officer was 'investigating'. In order to create an immersive paradigm, this procedure was adapted from psychological research conducted in similar fields, such as detecting deception (e.g. Frank, 2008). Each participant completed both tasks, one at a



time, before engaging in a suspect interview. Participants were randomly allocated to either the best practice interview (which involved being asked open questions) or the modified interview (which involved being asked closed questions). A current serving police officer who had been briefed in both interview models conducted the interviews. The order of tasks and interview method were counterbalanced. Following the completion of the interview, the participants were debriefed and awarded their research credits.

### **Analytical Strategy**

Following participation, each interview was transcribed verbatim and read thoroughly to ensure the researcher was familiar with the interview data. The coding framework was then applied following the operational definitions within the coding guide. This focused on each utterance from the interviewer and the interviewee. Instances of question type, including frequencies of any questions that required clarification and the amount of investigation relevant information were counted. Where the participant mentioned the same items of investigation relevant information on more than one occasion, the repeated information was ignored; that is, the item of information was only coded and counted once. In addition, the accuracy of the information obtained (e.g. correct v incorrect) was recorded. Furthermore, interviewee characteristics such as suggestibility, compliance and acquiescence were coded and counted in accordance with the Gudjonsson Suggestibility Scale (Gudjonsson, 1997; Gudjonsson & Clarke, 1986), e.g. if a participant changed their response following negative feedback from the interview or repetitive questioning, or if there were instances of 'yay saying'. Given the difficulties in differentiating between suggestibility and compliance outside of clinical practice, where the participant demonstrated either of these behaviours, such instances were combined and noted as vulnerability in line with previous research (Farrugia & Gabbert, 2019).

## Results

### Interrater reliability

Twenty-five per cent ( $n = 27$ ) of the interviews were double coded to check for interrater reliability. Data relating to question type, amount and accuracy of investigation relevant information, level of clarifications and overall vulnerability were coded for the number of instances that they occurred. Intraclass correlation is recommended when assessing continuous variables (Hallgren, 2012). Correlations were 0.96 and 0.99 for open and closed question types respectively, 0.94 for the overall amount of investigation relevant information, and 0.97 for its accuracy. Interrater correlations were 0.97 for clarification of questions and 0.79 for overall vulnerability displayed by the participant. This indicated good to excellent reliability (Koo & Li, 2016).

### Manipulation Checks

Initially, the two interview models were subjected to manipulation checks to confirm that they differed as expected in relation to the amount of open and closed questions. A 2 (participant type: with/without mental health conditions) x 2 (interview type: best practice/modified interview model) between-subjects ANCOVA was conducted with the amount of open questions as the dependent variable, whilst controlling for interview length. There was no significant main effect for participant type,  $F(1, 103) = .10, p = .75, \eta_p^2 = .001$ . There was a statistically significant main effect for interview type,  $F(1, 103) = 53.76, p < .001, \eta_p^2 = .34$ , indicating that the best practice model contained significantly more open questions (mean = 7.61, SD = .64) than the modified interview model (mean = .90, SD = .64). There was no significant interaction between participant and interview type,  $F(1, 103) = .03, p = .86, \eta_p^2 = .00$ .

Next, a 2 (participant type: with/without mental health conditions) x 2 (interview type: best practice/modified interview model) between-subjects ANCOVA was conducted with the amount of closed questions as the dependent variable, whilst controlling for interview length. There was no significant main effect for participant type,  $F(1, 103) = .78, p = .38, \eta_p^2 = .01$ . There was a statistically significant main effect for interview type,  $F(1, 103) = 147.64, p < .001, \eta_p^2 = .59$ . This suggests that the modified interview model contained significantly more closed questions (mean = 28.35, SD = 1.02) than the best practice model (mean = 10.64, SD = 1.02). There was no significant interaction between participant and interview type,  $F(1, 103) = .20, p = .66, \eta_p^2 = .002$ . These analyses confirmed that the two interview types were significantly different to each other in relation to the types of questions featured.

## Best Practice v Modified Interview Model: Amount and Accuracy of Investigation Relevant Information

Analyses focused on the amount and accuracy of investigation relevant information obtained from both participant types within the two different interview models.

A 2 (participant type: with/without mental health conditions) x 2 (interview type: best practice/modified interview model) between-subjects ANCOVA was conducted with the overall amount of investigation relevant material as the dependent variable, whilst controlling for interview length. There was no significant main effect for participant type,  $F(1, 103) = .34, p = .56, \eta_p^2 = .003$ , and no significant main effect for interview type,  $F(1, 103) = 1.29, p = .26, \eta_p^2 = .01$ . There was a significant interaction between participant type and interview type,  $F(1, 103) = 4.40, p = .04, \eta_p^2 = .04$ . Participants with mental health conditions tended to provide more investigation relevant information during the modified interview (mean = 145.86, SD = 7.80) than the best practice interview (mean = 139.02, SD = 7.80). Participants without mental health conditions tended to provide more investigation relevant information during the best practice interview (mean = 150.22, SD = 7.02) when compared to the modified interview (mean = 126.08, SD = 6.90). Simple effects analysis revealed no significant differences in the overall amount of investigation relevant information between the two participant groups in the best practice interview,  $t(52) = .79, p = .22$ , or in the modified interview,  $t(52) = 1.70, p = .09$  (see Figure 1).

Figure 1 to go here.

The accuracy of the investigation relevant information obtained from participants with/without mental health conditions from the two different interview models was also examined. A 2 (participant type: with/without mental health conditions) x 2 (interview type: best practice/modified interview model) between-subjects ANCOVA was conducted with the overall amount of correct information as the dependent variable, whilst controlling for interview length. There was no significant main effect for participant type,  $F(1, 103) = .40, p = .53, \eta_p^2 = .004$ . There was also no significant main effect for interview type,  $F(1, 103) = .31, p = .58, \eta_p^2 = .003$ . There was a significant interaction between participant type and interview type,  $F(1, 103) = 4.89, p = .03, \eta_p^2 = .05$ . Participants with mental health conditions tended to provide more correct investigation relevant information during the modified interview (mean = 91.41, SD = 1.27) than the best practice interview (mean =

89.49, SD = 1.24). In contrast, participants without mental health conditions tended to provide more correct information during the best practice interview (mean = 92.83, SD = 1.11) than the modified interview (mean = 89.56, SD = 1.10). Simple effects analysis revealed a significant difference in the accuracy of the investigation relevant information obtained between the two groups in the best practice interview,  $t(52) = 2.76, p = .01$ . However, there was no significant difference in the accuracy of the investigation relevant information obtained between the two groups in the modified interview,  $t(52) = .93, p = .58$  (see Figure 2).

Figure 2 to go here.

### **Best Practice v Modified Interview Model: Level of Clarifications**

A 2 (participant type: with/without mental health conditions) x 2 (interview type: best practice/modified interview model) between-subjects ANCOVA was conducted with the overall amount of clarifications as the dependent variable, whilst controlling for interview length. There was no significant main effect for participant type,  $F(1, 103) = .01, p = .98, \eta_p^2 = .01$  and no significant main effect for interview type,  $F(1, 103) = .04, p = .84, \eta_p^2 = .01$ . There was a significant interaction between participant type and interview type,  $F(1, 103) = 4.44, p = .04, \eta_p^2 = .04$ . Participants with mental health conditions tended to seek more clarification during best practice interviews (mean = 1.42, SD = .25) than the modified interview (mean = .87, SD = .26), whereas participants without mental health conditions tended to seek more clarification during the modified interview (mean = 1.37, SD = .22) than the best practice interview (mean = .92, SD = .23). Simple effects analysis revealed no significant differences in the amount of clarifications between the two groups in the best practice interview,  $t(52) = 1.03, p = .92$ , or in the modified interview,  $t(52) = 1.29, p = .10$  (see Figure 3).

Figure 3 to go here.

### **Best Practice v Modified Interview Model: Instances of Vulnerability**

A 2 (participant type: with/without mental health conditions) x 2 (interview type: best practice/modified interview model) between-subjects ANCOVA was conducted with the overall amount of

vulnerability as the dependent variable, whilst controlling for interview length. There was no significant main effect for participant type,  $F(1, 103) = .90, p = .35, \eta_p^2 = .01$ , and no significant main effect for interview type,  $F(1, 103) = .45, p = .51, \eta_p^2 = .01$ . In addition, there was no significant interaction between participant type and interview type,  $F(1, 103) = .51, p = .48, \eta_p^2 = .01$ .

## Discussion

The current study aimed to build upon Farrugia and Gabbert's (2019) previous work by experimentally testing two different interview models (best practice and a modified interview) with a vulnerable group of individuals to explore which would elicit the most, and the most accurate, investigation relevant information. Our results challenge what currently constitutes best practice when interviewing vulnerable suspects.

Participants with mental health conditions tended to provide more investigation relevant information during the modified interview than the best practice interview, thus showing support for our first hypothesis. In addition, this vulnerable participant group also provided more accurate information during the modified interview than the best practice interview and sought more clarification during best practice interviews, showing support for our second hypothesis. Investigative interviewing is a complex task and given the introduction of legislation (PACE; Home Office, 2008) and the development of the PEACE model in recent decades (Williamson, 2006), the onus is now on obtaining accurate and reliable information (Clarke & Milne, 2015; Farrugia & Gabbert, 2019; Oxburgh et al., 2010). The general consensus is that the use of open and probing questions elicit more detailed and more accurate information when compared to closed questions (Oxburgh et al., 2010; Snook et al., 2012). Our results challenge this notion in that the vulnerable participants used in this sample tended to provide a higher level of information and more accurate information to the modified interview, which contained more closed questions.

Investigative interviewing of vulnerable suspects can be particularly challenging given their impaired cognitive functions. This group does not respond well to traditional policing tactics (Farrugia & Gabbert, 2019; Gudjonsson, 2018). Research has documented the difficulties in the effortful processing that a free recall requires (Airaksinen et al., 2005; Bearden et al., 2006; Pauls et al., 2015), and the impairments in episodic memory that can be found in those that have mental health conditions (Fajnerova et al., 2017; Zitterl et al., 2001). Consequently, this can lead to a 'categorical overgeneral memory' (Lemogne et al., 2006). Such well-documented findings lend some support to our results. It appears that the vulnerable sample in the current study benefitted from the use of more specific questions by way of 'scaffolding' when being asked for their free recall account. This is in line with an emerging pool of research. For example, a number of independent studies have found that adults with an intellectual disability report fewer correct details than those without an intellectual disability when asked open questions that invite a free recall (Bowles & Sharman, 2014; Hershkowitz, 2018; Perlman et al., 1994; Ternes & Yuille, 2008). Bowler and colleagues (2011) also documented that individuals

with Autism Spectrum Disorders find it difficult to freely recall information without a structured support and an analysis of real-life police interviews conducted with vulnerable suspects found that those with mental health conditions provided more information to closed questions and sought more clarification for open questions (Farrugia & Gabbert, 2019).

Generally, those with mental health conditions (or any other type of vulnerability) tend to demonstrate more suggestibility, compliance and acquiescence (Gudjonsson, 2018). The overall level of vulnerability was examined between participants with/without mental health conditions and between interview types (best practice vs. modified interview). Our findings found no significant differences in the level of vulnerability portrayed. This suggests that, whilst undoubtedly those with mental health conditions are more vulnerable than those without, the type of interview did not impact upon that level of vulnerability; that is, participants with mental health conditions were no more vulnerable in an interview containing largely closed questions than in a best practice interview containing open questions. It is important to note, however, that neither interview model in the current study was suggestive; there were no leading questions in the best practice interview or the modified interview.

Our findings have implications for current investigative interviewing practice. They challenge current best practice and indicate that alternative questioning methods may be necessary for vulnerable suspects. Whilst it is not being suggested that all interviews should be constructed using only closed questions, consideration should be given to the use of these types of questions in 'scaffolding' and supporting the impaired cognitive abilities in free recall and episodic memory that those with mental health conditions have. The needs of individuals with mental health conditions first entering police custody are poorly understood (Baksheev, Thomas, & Ogloff, 2010). As such, interviewers' questions must be matched to the abilities of those that they are interviewing (Powell, 2002), and the use of closed questions as cued-recall questions should be considered as an effective tool for retrieval support.

Our study is novel in its approach in that it is one of very few that has experimentally explored different interview models within a vulnerable suspect context. In addition, the experimental nature of the study allowed for an in depth analysis relating to accuracy of suspect interview accounts; this has not been conducted before and so builds on the work previously reported by Farrugia and Gabbert (2019). Some limitations are that participants were University students, and therefore it could be argued that they may not represent those typically entering the criminal justice system. However, recent statistics highlight that the majority of offenders

fall within the age range of 18-29 years (Sturge, 2019). Our sample fell within this age range and self-reported the most commonly documented mental health conditions within the criminal justice system. Furthermore, whilst the current study was not exploring any differences between the sex of the participants, it should be noted that the majority of participants were female.

In sum, our study provides insightful findings that adds to the emerging evidence base that vulnerable individuals may require an alternative method of questioning during an investigative interview. Disproportionate numbers of individuals with mental health conditions are coming into contact with the criminal justice system (Sirdifield & Brooker, 2012) and as such the police interviewing of this vulnerable group is becoming an increasingly common practice. The obtaining of accurate and reliable information during the investigative interview is paramount to any investigation and police officers must be equipped to be able to deal with any type of interviewee, including the vulnerable suspect.



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## Tables and Figures

Table 1.

*Participant self-reported mental health demographics.*

Mental Health Condition	N
Depression	13
Anxiety	8
Bipolar Disorder	3
Bulimia	2
Anorexia	1
Borderline Personality Disorder	1
Post-Traumatic Stress Disorder	1
Anxiety and Depression	11
Anxiety and Post-Traumatic Stress Disorder	1
Depression and Obsessive-Compulsive Disorder	1
Anxiety, Depression, and Body Dysmorphic Disorder	1
Anxiety, Depression, and Obsessive-Compulsive Disorder	1
Anxiety, Depression, and Post-Traumatic Stress Disorder	1
Anxiety, Depression, Paranoid Personality Disorder and Psychosis	1
Anxiety, Obsessive-Compulsive Disorder, and Anorexia	1
Total	47

Figure 1.

Graphical representation of mean amount of investigation relevant information in interviews with participants with mental health conditions and participants without mental health conditions based on Best Practice (BP) and Modified Interview (MI) model.

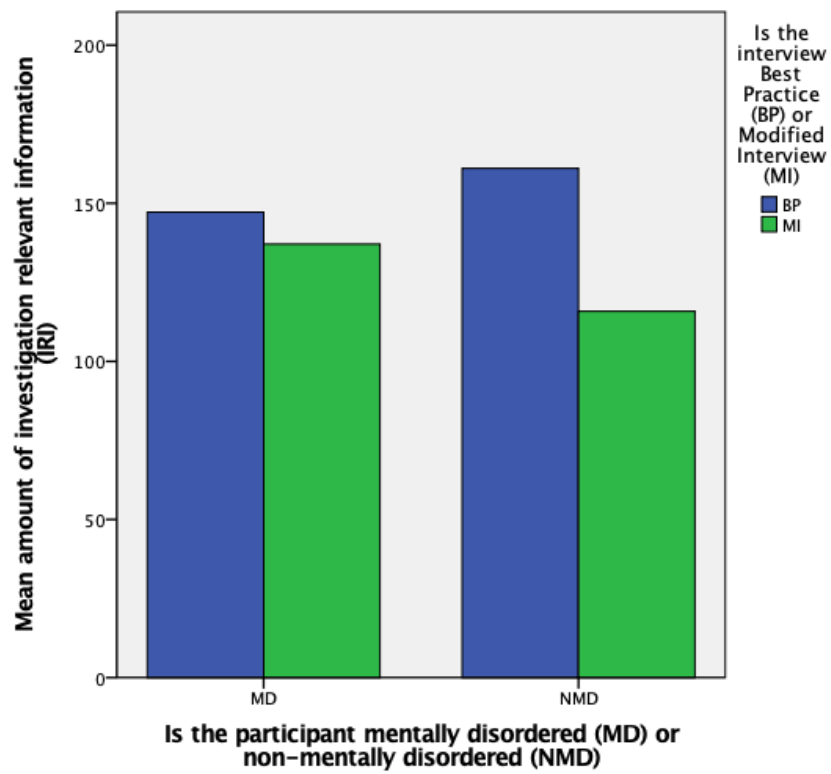


Figure 2.

Graphical representation of mean accuracy of investigation relevant information in interviews with participants with mental health conditions and participants without mental health conditions based on Best Practice (BP) and Modified Interview (MI) model.

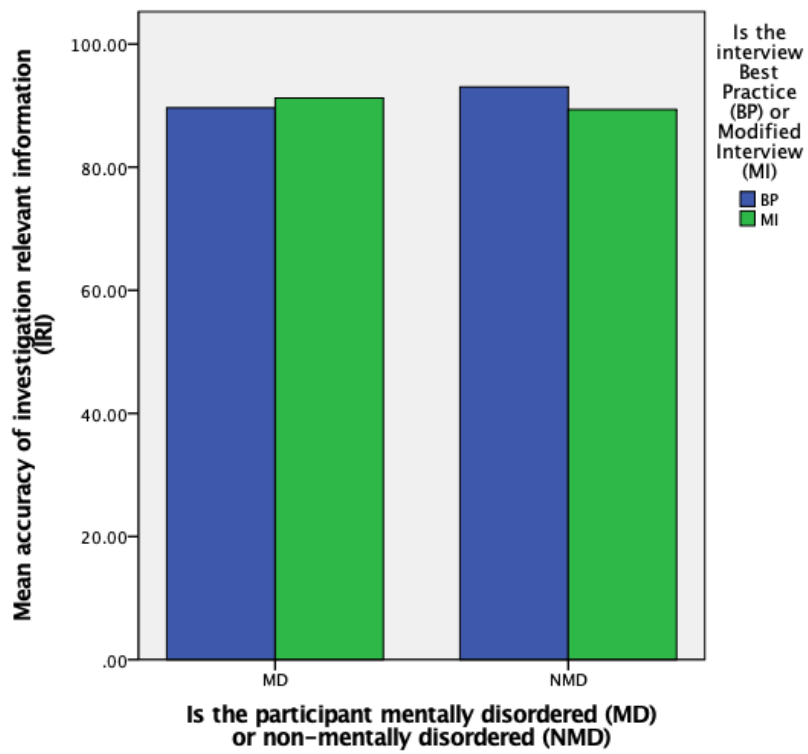




Figure 3.

*Graphical representation of overall clarifications of questions in interviews with participants with mental health conditions and participants without mental health conditions based on the Best Practice (BP) and Modified Interview (MI) model*

