

Intoxicated Eyewitnesses: Prevalence and Procedures according to England's Police Officers

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### Abstract

Despite the apparent role alcohol plays in criminal offences, there is at present no evidence available as to the extent of the problem of intoxicated witnesses within England. To address this lack of research, police officers from seven constabularies completed an online survey addressing issues such as the prevalence of intoxicated witnesses, how officers determine intoxication, the procedures employed and their effectiveness. Officers indicated that intoxicated witnesses were a common, to very common, occurrence with most officers determining intoxication through physical symptoms and the witness's own admission. In terms of interviewing witnesses, the majority of officers indicated that initial details were taken whilst witnesses were intoxicated, but the evidential interview was taken when sober. Officers also indicated that if the witness was intoxicated then the case was less likely to proceed to court and that officers viewed the witness as less accurate. These findings are considered from a criminal justice perspective and discussed in relation to future research.

**Keywords: Alcohol intoxication, Eyewitnesses, Police procedures, Intoxication level, Interview**

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In criminal investigations, the details recalled by witnesses and victims are often crucial, and provide police officers with the principal leads in their enquiries (Coupe & Griffiths, 1996; Kebbell & Milne, 1998; Wells & Loftus, 2003). A witness' testimony can also be one of the most persuasive and useful pieces of evidence presented to jurors (Boyce, Beaudry, & Lindsay, 2007; Brewer & Burke, 2002; Lindsay, 1994). Despite this, research has shown that such testimonies are prone to errors (Sporer, Penrod, Read, & Cutler, 1995) and may be affected by a range of factors such as: stress (Deffenbacher, Bornstein, Penrod, & McGorty, 2004), witness age (Marche, Briere, Cordwell, & Holliday, 2014) or misinformation (Huff, Weinsheimer, & Bodner, 2016). One issue though that has been largely overlooked, until very recently, is witness intoxication (Malpass et al., 2008). As indicated by Evans, Schreiber Compo and Russano (2009), this omission may be a consequence of a lack of information as to the prevalence of intoxicated witnesses, and the procedures officers employ when interacting with these individuals. At present, these questions have not been answered in relation to England. The aim of this present study is therefore to address this omission. For, if intoxicated witness research in England is to have real-world value in evaluating and improving police procedures, then it is imperative to know the extent of the intoxicated witness problem and the current police procedures that are adopted, in addition to the effects that alcohol has on recall. Whilst there is an extensive volume of research that investigates the more general memory deficits resulting from alcohol intoxication (see Maylor & Rabbitt, 1993; White, 2003), there is a shortage of studies that explore the effects of alcohol on eyewitness memory. In the current body of international published literature, only 17 studies have explored the effects of alcohol on the recall and line-up decisions of witnesses (e.g., Gawrylowicz, Ridley, Albery, Barnoth, & Young, 2017; Hagsand, Roos af Hjelmsäter, Granhag, Fahlke, & Söderpalm). This is an Accepted Manuscript of an article published by Taylor & Francis in *PSYCHOLOGY, CRIME & LAW* on 14 May 2018, available online: <https://www.tandfonline.com/doi/full/10.1080/1068316X.2018.1474216>.

Gordh, 2017; Harvey, Kneller, & Campbell, 2013a, 2013b; Schreiber Compo, Evans, Carol, Kemp, Villalba, Ham, & Rose, 2011; Schreiber Compo et al., 2017). From this limited research, it appears that whether alcohol affects memory may depend on factors such as: the witness' level of intoxication (Crossland, Kneller, & Wilcock, 2016), the type of information to be recalled (i.e. central and peripheral details (Crossland et al., 2016; Flowe, Takarangi, Humphries, & Wright, 2016), the task being completed (i.e. recall of event details or line-up decisions (Harvey et al., 2013a; Kneller & Harvey, 2016), the number of interviews conducted (La Rooy, Nicol, & Terry, 2013), state-dependent effects (Schreiber Compo et al., 2017), and whether alcohol is consumed before or after the witnessed event (Gawrylowicz et al., 2017).

#### *Extent of the intoxicated witness problem*

In 2015/16, around 1.2 million violent crimes were committed in the UK (Office of National Statistics (ONS), 2017); with around half of these offences involving a perpetrator who had consumed alcohol (ONS, 2016). A similar link between alcohol and violent crime can be seen across Europe (Anderson & Baumberg, 2006) particularly in Ireland, Germany and the Nordic countries (Mäkelä, Fonager, Hibell, Nordlund, Sabroe, & Simpura, 1999; Ramstedt & Hope, 2005; Rossow & Hauge 2004; Rossow, Pernanen, & Rehm, 2001). Further to this, international research indicates that in many instances where the perpetrator is intoxicated, the victim and witness are also under the influence of alcohol (Van Dijk, 2007). Yet despite the apparent role alcohol plays in criminal offences, the only evidence available as to the extent of the problem with witness intoxication is in relation to crimes committed in the United States (US) (Evans et al., 2009; Palmer, Flowe, Takarangi, & Humphries, 2013), or anecdotal evidence from Canadian law enforcement officers (Yuille, 1986).

According to US and Canadian officers, intoxicated witnesses are a widespread problem. In a survey of 119 US law enforcement officers, around 73% indicated that interacting with

intoxicated witnesses was a common occurrence, with such witnesses having an estimated Blood Alcohol Concentration (BAC) of 0.11ml/kg (Evans et al., 2009). Of those witnesses deemed to be under the influence of a substance, officers indicated approximately 58% had consumed just alcohol whilst a further 24% were thought to be intoxicated from multiple substances. Furthermore, an archival analysis of 639 felony criminal cases (rape, robbery and assault) in the South West United States found around 20% of cases had at least one intoxicated witness (Palmer et al., 2013). Of the 170 witnesses under the influence of a substance, 73% had consumed only alcohol whilst another 11% had taken a combination of drugs, potentially including alcohol. Such findings suggest that alcohol is likely to be the most common drug that officers will encounter when dealing with witnesses. When it came to giving evidence in court 49.4% of US police officers indicated that intoxicated witnesses were less likely to testify (Evans et al., 2009). However, an archival analysis found intoxication not only had no effect on whether charges were filed, but that around a third of witness testimonies heard in US courts were from individuals under the influence of alcohol (or another drug) at the time of the crime (Palmer et al., 2013). This research indicates that, in the US at least, witness intoxication may be an estimator variable worth investigation. Whilst the UK and North America have comparable levels of alcohol consumption (World Health Organisation (WHO), 2014), and similar frequencies of alcohol fuelled crimes (Dorsey & Middleton, 2010; Greenfield & Weisner, 1995; Yarvis, 1994), there is no data available as to the extent of the problem of witness intoxication in the UK.

#### *Determining witness intoxication*

With so little research having explored the effects of alcohol on eyewitness recall in the UK, it may not be surprising that very few guidelines have been produced to aid police officers and courts in dealing with such individuals. At present, in England, if the Crown Prosecution Service (CPS) presents the evidence of an eyewitness which a defendant disputes, then the court will follow the

Turnbull Guidelines (*R v Turnbull, 1976*). These guidelines assist in cases where the defendant claims the witness has made a mistake in their identification of the suspect, but can equally be applied to all aspects of a witness' recall. In such circumstances, to provide the jury with a strong indication as to how much reliance can be placed on the witness' identification, the judge takes into account not only witness demeanour and account consistency (Bingham, 2006) but also a range of estimator variables (Wells, 1978). These estimator variables can include the intoxication of the witness, although it is not specifically referred to. In light of the Turnbull Guidelines police officers in England are trained to describe in their accounts how much alcohol the witness had drunk. Without other guidelines or legal backing, it is left to individual officers to determine the witness' degree of intoxication.

In their survey of US police officers Evans et al. (2009) found that 71.4% of respondents did not use an instrument such as a breathalyser to determine the intoxication of the witness. Instead intoxication was gauged through behavior, odour or a sobriety test (such as the walk-and-turn or the one leg stand). This is supported by Palmer et al.'s (2013) archival analysis where, in only 9% of cases, the intoxication of the witness was determined by a breathalyser, with a further 3% being observed consuming alcohol. In an overwhelming 88% of criminal cases though, it was the witness admitting having consumed alcohol or drugs that allowed police officers to establish intoxication. This evidence indicates that, in regards to the US at least, an officer's experience and the witness' self-confessed consumption of alcohol are the primary means of assessing intoxication. With no research having been conducted in the UK, there is no indication of how police officers choose to determine witness intoxication and how consistently this is done. If, as in Canada, this information is not consistently documented (Yuille & Tollestrup, 1990), then the worth and reliability of such evidence, when provided to the court, may be brought into question.

### *Interviewing intoxicated witnesses*

The legal and practical guidelines for police officers in the UK are not only limited in relation to how to determine, measure and quantify witness intoxication, but also what procedures officers should follow in deciding when to interview a witness who has consumed alcohol. Current Government guidelines advise that where beneficial, vulnerable witnesses should be interviewed using the Cognitive Interview (Ministry of Justice, 2011). Whilst the 2002 publication of *Achieving the Best Evidence in Criminal Proceedings* specifically referred to the vulnerability, or temporary mental instability that may result from alcohol or drugs (Home Office, 2002), the 2011 revision is not as explicit. Although it is indicated that mental instability may be affected by alcohol, the general vulnerability associated with alcohol is only inferred (Ministry of Justice, 2011). At present, though, there is no guidance which details when officers should interview intoxicated witnesses. Does an officer follow the same procedure as used with a sober witness? Do they treat the intoxicated witness as part of a vulnerable group (e.g., as with children or those with learning disabilities) and alter the interview process accordingly? If so what changes are made?

In the US, 74% of law enforcement officers indicated that whether they interview a witness whilst still intoxicated depended on the situation (Evans et al., 2009). While 44.2% of officers said they followed the same procedure whether the witness was drunk or sober, 45.5% claimed they altered their typical interview procedure if the witness was intoxicated. The most common alteration indicated by officers was to interview the witness immediately, despite them being intoxicated, then conduct a follow-up interview once sober. Palmer et al.'s (2013) archival analysis provides some support for this with 72% of officers obtaining a witness description of the perpetrator on the same day as the offence rather than the next, although no details were given as to whether a follow-up interview was conducted once sober. Other than this, Palmer et al. (2013) concluded that officers treat sober and intoxicated witnesses similarly when information gathering.

### *Present study*

Previous studies indicate that alcohols effect on memory may depend on the witness' level of intoxication, the type of information to be recalled, the type of task being completed, the number of interviews conducted and whether alcohol is consumed before or after the witnessed event. At present, there is no research in England which indicates how common intoxicated witnesses are, how officers determine witness intoxication and the interview procedures that are employed. Consequently, it is not possible to confirm the extent to which the experimental designs employed by researchers replicate the experiences of genuine intoxicated witnesses, and thereby how effectively the research findings can be applied to real life. Research is therefore needed to address these questions and to ensure the forensic relevancy of future studies. Without specific guidelines, and with no research conducted in England, questions as to what procedures officers actually follow when dealing with an intoxicated witness are at present unanswered.

The aim of the present study was therefore to begin to address the lack of research in England and to obtain information as to how frequently police officers have to deal with intoxicated witnesses, the extent of their involvement in criminal cases, and the procedures officers follow when interviewing such individuals. To this end a questionnaire based on the work of Evans et al. (2009) was constructed. The questionnaire was aimed at obtaining information from, and understanding the personal experiences of, uniformed response officers. As these individuals are at the front-line, dealing with witnesses on a regular basis, their perceptions of the credibility and accuracy of intoxicated witnesses was also sought. As the research was exploratory, no hypotheses were put forward.

## Method

### *Participants*

In order to allow police forces from a range of geographical locations within England to complete the questionnaire, the survey was administered entirely online. The original intention was to also



collect responses from Welsh police forces, but unfortunately none of these police forces signed up for the study. With both English and Welsh police forces following the same Achieving Best Evidence (Ministry of Justice, 2011) and Turnbull Guidelines (*R v Turnbull, 1976*), however, there is not anticipated to be a difference in the behaviour of officers. Initial contact with each force was made directly through the researcher's contacts. Each police force was provided with details as to the purpose and contents of the questionnaire via email and then asked to distribute the survey link to uniformed response officers. As the questionnaire link was circulated by third parties it is not possible to ascertain the exact number of participants to whom the link was distributed, but only police forces in England chose to participate.

A total of 199 individuals (65% male) completed the questionnaire and responded to over 70% of the questions. Participants had a mean age of 34.69 years ( $SD = 8.41$ ) (range 20 – 55 years) with an average 11.66 years ( $SD = 6.56$ ) experience working for the police (range: 6 months - 29 years). Respondents predominately held the rank of police constable (67.84%), although a number of other police roles were represented as seen in figure 1 completing the questionnaire.

(Insert Figure 1 here)

Officers from seven constabularies within England participated in this research; Force 1 (30.2%), Force 2 (19.6%), Force 3 (11.1%), Force 4 (10.6%), Force 5 (10.1%), Force 6 (9.5%) and Force 7 (9.0%). There were no significant differences in age ( $F(6, 185) = 1.57, p > .05, \eta^2 = .05$ ) or years of experience ( $F(6, 191) = 1.85, p > .05, \eta^2 = .06$ ) between the participants from these seven constabularies.

### *Materials*

Based on the work of Evans et al. (2009) a questionnaire was constructed to investigate how frequently police officers dealt with intoxicated witnesses and the practices they employ. In contrast to Evans et al. (2009) and in order to focus on intoxicated witnesses whilst maintaining participant retention, the questionnaire focused only on witnesses who were not victims. Further to this, all questions in relation to intoxicated suspects, sexual violence and line-ups were removed. In light of legal requirements for conducting police interviews within England, questions pertaining to witnesses who were intoxicated at the time of the formal interview were also eliminated. These amendments resulted in a shortened seven section questionnaire that focused exclusively on intoxicated witnesses. As per Evans et al. (2009), participants were instructed that whenever the term intoxicated was mentioned, then they were to base this on their own personal impression of the witness, and no particular BrAC was stated within the questionnaire to define 'intoxication'. In section one, participants were given details about the questionnaire including the information they would be asked to provide and the measures taken to ensure their anonymity. Assurances that the task was voluntary, that they could withdraw up to 3 months after the task was completed, and a consent form were also incorporated. Within section two participant demographic information, including age, gender, police rank and number of years in the force was recorded. Section three asked officers' questions about the prevalence of intoxicated witnesses and the types of crime they typically witnessed. Section four addressed questions regarding police procedures and their effectiveness in relation to intoxicated witnesses, such as methods for interviewing and identifying these individuals. The fifth section asked officers for their beliefs about intoxicated witnesses, for example if interviewed repeatedly when does an intoxicated witness provide the largest amount of information, and how accurate is the information witnesses' recall? In the final section officers were asked about the demographic groups that most represented intoxicated witnesses and whether there were any issues relating to intoxicated witnesses that the questionnaire had not addressed. At the end of the task participants were reminded of their right to withdraw and were given the option to

provide their email address to later be provided with the study conclusions. The questionnaire used a mixture of multiple-choice, scaled and open-ended questions with an 'I don't know' or a 'not applicable' response available for most questions.

### *Procedure*

Potential participants were directed to a web page on the Unipark academic survey software website where they were first provided with the information sheet and consent form. After consenting, participants created a Unique Reference Number (URN) in order to identify their responses should they wish to withdraw. Participants were then asked to provide demographic information, followed by the survey itself. At the end of the questionnaire participants viewed a debrief sheet and were thanked for their time.

### *Results*

The initial information sheet of the questionnaire was viewed 682 times, with 544 individuals seeing the consent page and 326 then creating a URN. A total of 324 participants provided their demographic information, with 125 of these individuals responding to only three or less additional survey questions. Of the remaining 199 participants, 186 responded to the questionnaire in its entirety, and 13 answered at least 70% of the questions. For these 13 participants, questions pertaining to the typical gender, ethnicity and other demographic information associated with an intoxicated witness were skipped. Additionally how effective their current procedures were and how likely a case was to make it to court if the witness was sober or intoxicated were also not answered. As the remainder of the questionnaire was completed, the data from these 13 individuals was retained, and it is from the sample of 199 participants that all analyses are reported.

### *Prevalence of intoxicated eyewitnesses*

To ascertain base line measurements with which to compare respondent interactions with intoxicated witnesses, police officers were asked how many witnesses they interviewed in a typical month. The 198 officers who responded, reported interviewing an average of 12.74 witnesses ( $SD = 11.04$ ) a month (range: 0 – 40). Of these sober delayed interviews, 43.96% were with witnesses who were intoxicated at the time of the crime ( $M = 5.60$ ,  $SD = 6.03$ ). In response to the question “In a typical month, how many witnesses do you take an initial statement from whilst they are still intoxicated?”, the 197 respondents reported taking an initial intoxicated account from an average of 2.55 witnesses ( $SD = 4.51$ ; range: 0 - 25). Based upon their own experience police officers were asked if it was very common, common, unusual, or very unusual for a witness to be intoxicated. The majority of respondents (57.3%) indicated that such an occurrence was common, with a further 24.6% stating that it was very common for a witness to be intoxicated. Only 12.6% of officers considered witness intoxication to be unusual and no respondent claimed witness intoxication to be very unusual (5.5% Don’t Know/Not Applicable (DK/NA)). Officers were also asked ‘In which types of crimes do you typically encounter intoxicated witnesses?’. As respondents could select more than one crime on this multiple choice question, the percentages do not add up to 100%. Of the 199 respondents, 93.5% indicated that assaults were commonly associated with witnesses who had consumed alcohol. Other crimes typically connected with intoxicated witnesses were rape (38.7%), volume crimes (those offences which due to their sheer number have a significant impact on the community, such as shoplifting, burglary and vandalism) (20.1%), robbery (19.6%), public order offences (11.6%), motor vehicle crimes (7.5%), domestic crimes (6%), murder (3.5%). If officers felt that there were other crimes that were associated with intoxicated witnesses, but not covered by the multiple choice options, they were given the option to respond ‘other’ and provide additional details: criminal damage (0.5%) and other violent crimes (0.5%).

### *Identification of intoxication*

In response to the multiple choice question “how do you determine if a witness is intoxicated?” respondents could select more than one option, so the percentages do not add up to 100%. Of the 192 officers who responded to this question, 92% indicated that they looked for the physical symptoms of alcohol consumption (e.g., blood shot eyes, slurred speech or loss of balance). For 88 of these respondents this was the only assessment method employed, however, the remaining 104 police officers used multiple means. The witness admitting intoxication (51.8%) and the officer observing the consumption of alcohol (20.1%) were the other two primary ways of determining intoxication. If officers used methods other than those covered by the multiple choice options, they were given the chance to respond ‘other’ and provide additional details. A total of 9.5% of officers indicated that they used these ‘other’ methods including: general witness behaviour, the officer’s years of experience, the smell of alcohol on the witness’ breath, information received from others, or an argumentative witness with an inability to communicate. Whilst officers also indicated under the ‘other’ option, that they have no power in law to breathalyse or take blood from a witness, twelve officers (6.25%) did state that they had previously used objective measures such as a breathalyser or blood test to determine witness intoxication.

This lack of an objective means of determining intoxication is supported by the officer responses to the explicit question of “do you ever use a breathalyser on a witness who you believe is intoxicated?”, where 91.2% of officers indicated ‘no’ (2.6% DK/NA). However, ten respondents (5.21%) indicated that ‘yes’ they had breathalysed witnesses, although they did add a free recall ‘other’ response that this was only with their consent and even then the reading was merely for internal paperwork and not included in the official statement. Average Breath Alcohol Concentration (BrAC) readings were considered by these ten officers to be between 0.50 and 0.80mg/L or around one and a half to two times the drink drive limit in England (0.35mg/L). Having established that a witness is intoxicated, officers were asked “how do you decide if they are competent enough to be interviewed?” As respondents could select more than one method in

relation to this multiple choice question, the percentages do not add up to 100%. The frequency of participant responses in relation to each means of determining competency can be seen in table 1.

(Insert Table 1 here)

Of the 193 police officers who completed this question only 36.27% used a single means of determining competence, 19.69% used two methods, 32.64% used three and 11.40% used four means. Across all officers common sense was the most typical way of establishing an intoxicated individual's competence (73.9%). Experience from previous witnesses (56.3%) and the officers own personal experience (52.3%) were also dominant factors. Letting the witness decide if they were sober enough to give a statement was selected by 16.6% of respondents whilst 12.1% claimed they used 'other' means such as, the mental capacity test, questioning the witness to assess how capable they are of understanding, the witness' manner/behaviour, ability to engage with officers, physical symptoms, how they hold up to their account being challenged, the time since their last drink or the amount of alcohol consumed. For those employing two methods, common sense and experience from previous witnesses/victims were the most typical combination employed (34.21%) this was closely followed by common sense and own personal experience (31.58%). A similar pattern was apparent with those using three methods where a combination of experience from previous witnesses/victims, own personal experience and common sense was most typically cited. Of all 193 respondents, only 5% indicated that they used an objective measure such as a blood or breath test to determine competency.

#### *Police procedures with intoxicated eyewitnesses*

Police officers were asked the multiple choice question, 'Are your departments' standard procedures for interviewing intoxicated witnesses, the same as, or different from, those employed

with sober individuals. Of the 191 respondents to this question, 24.6% indicated their departments' procedures were the same irrespective of whether or not the witness had consumed alcohol (5.8% DK/NA). The majority of police officers (69.6%), however, indicated that their departments' standard procedures for interviewing witnesses were different if they were intoxicated than if they were sober, and provided a number of additional free recalled details. Amongst these free recalled responses, officers indicated that when dealing with an intoxicated witness they initially assessed the intoxication level of the individual. Within these responses, 65 respondents (48.87%) mentioned how they deal with interviewing witnesses who are 'moderately intoxicated' (or reasonably/relatively intoxicated), 82 officers (61.54%) mentioned their procedures with slightly intoxicated (e.g. minimally/barely intoxicated) witnesses, and 18 (13.30%) described their procedures with a 'heavily intoxicated' witness (e.g. considerably/ extremely/severely intoxicated). As some officers mentioned multiple intoxication levels, the percentages do not equal 100%. For the 65 officers (48.87%) who recalled their interview procedures with 'moderately intoxicated' witnesses, they indicated that an initial, less formal, non-evidential account would be taken from the witness through the use of body worn cameras (where available) or in the officer's personal notebook. This account, which some officers referred to as a 'holding statement', incorporates basic event details such as when, where, who and what happened, in order to determine if there was a strong enough case to support the allegation. This initial statement may also provide a record of the amount of alcohol that was consumed. The initial account would then be followed up by a full formal statement when the witness was sober. Further to this, those respondents who detailed their interview process when witnesses were 'slightly intoxicated' stated that, in this situation, their discretion was the key determinant of whether a formal statement was taken immediately. Those officers who free recalled their interview processes when dealing with 'heavily intoxicated' witnesses, it was indicated that they would never take a statement from such an individual as it would not be Achieving Best Evidence and may even be unlawful. Further to this, 4.5% of officers

free-recalled that they would only interview an intoxicated witness if it was absolutely necessary, i.e., if it was an emergency and the individual was a key witness and there was no other evidence. These responses suggest that the witness' degree of intoxication is the primary factor that determines the procedures that police officers follow.

### *Interviewing intoxicated witnesses*

Officers were also asked the multiple choice question 'when do you usually interview intoxicated witnesses?' In line with the officers' free recall responses, with regards to their standard procedures for interviewing intoxicated witnesses, 42.7% of the 193 respondents claimed that they took initial details whilst the witness was intoxicated, and then completed a full interview when the individual was sober. A further 13.1% of officers stressed that they waited until the witness was sober before conducting any form of interview, and 11.1% revealed they interview individuals whilst they are still intoxicated. From the respondents, 27.1% indicated that in fact 'it depends' when they interview a witness who has consumed alcohol, and most free recalled considering multiple factors. Amongst these 54 officers the most common factors that determined when an intoxicated witness was interviewed was the seriousness of the offence (40.74%) and the degree of intoxication of the witness (35.19%). This was followed closely by officers indicating that they would take some information whilst intoxicated and the full details when sober (31.48%). The urgency with which the evidence was needed from the witness (16.67%) and whether there was already a suspect in custody (12.96%) were also mentioned. Other factors that the police officers took into account when deciding when to interview an intoxicated witness included, whether the witness was an alcoholic (5.56%), how likely they were to have access to the witness again when sober (3.72%), the role of the witness within the crime (i.e., key witness or victim) (1.86%), whether there was any other evidence (1.86%) and the level of detail that was needed from the witness (1.86%).

### *Procedures and their effectiveness*

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Taking into account the procedures employed within their departments, officers were asked “how effective do you think these procedures are at obtaining useful information from the intoxicated witness?” Responses were given on a scale ranging from 1 (*not at all effective*) to 10 (*extremely effective*). A mean rating of 5.27 ( $SD = 2.08$ ; 6.5% missing) was shown with 20.6% of 193 respondents selecting a rating of 5, namely that they were unsure of the effectiveness of the current procedures. Whilst only 2.5% of officers considered the procedures to be extremely effective (rating of 10), 13.5% of officers did not feel the current procedures were at all effective (rating of 1). When asked “are there any changes you would make to the current procedures for interviewing intoxicated witnesses?” a majority of the 193 officers (55.4%) responded ‘no’ (16.1% DK/NA), but the remaining 28.5% of respondents thought changes could be made to improve procedures.

(Insert Figure 2 here)

As seen in Figure 2, of these 55 individuals, 30.94% believed interviewing intoxicated witnesses immediately should be avoided entirely. A further 29.12% suggested amendments to procedures so that an initial account is taken whilst the witness is intoxicated and the full statement once sober; at least 12 hours after the last alcoholic beverage, but within 48 hours of the event. Other suggestions included greater use of body worn cameras to video the intoxicated witness and thereby provide a clearer indication of witness competence (23.66%). Interviewing the witness as soon as possible after the crime (whilst still intoxicated) was also proposed by 7.27% of officers who also indicated that a note of the witnesses’ intoxication level should be made in the statement, and a second full interview done when the witness was again sober. Officers felt their own judgement as to the intoxication level of the witness should be considered more reliable and this judgement should be supported more by the CPS (3.64%). It was also thought that there should be a better understanding of intoxication by officers (1.82%) and some officers wanted a definitive answer as to whether they could use statements from intoxicated witnesses (1.82%).

*Police beliefs about intoxicated eyewitnesses*

Within this questionnaire section officers were asked about their beliefs regarding intoxicated witnesses, based upon their own experience. As a baseline, respondents were asked on a scale of 1 (*not at all accurate*) to 10 (*extremely accurate*) “how accurate are statements provided by witnesses if they are sober at the time of the crime?” A mean rating of 7.47 ( $SD = 1.45$ ) was obtained from 190 officers, with zero respondents believing that a sober witness’ account was not at all accurate (a rating of 1 or 2). In contrast, when asked, on the same scale of 1 to 10, “how accurate are statements provided by witnesses if they are intoxicated at the time of the crime?” there was a significantly lower mean rating of 4.63 ( $SD = 1.67$ ) ( $t(189) = 23.68, p < .001$ ). Only 1.6% of respondents indicated that an intoxicated witness’s statement was extremely accurate (a rating of 9 or 10).

Based upon their own experience, officers were asked about the likelihood of a case getting to court. To establish a baseline, officers were asked on a scale of 1 (*not at all likely*) to 10 (*very likely*) “if the witness is sober at the time of the crime, how likely is it that the case will make it to court (if there is no other evidence)?” From the 187 respondents, there was a mean rating of 5.84 ( $SD = 2.45$ ). When asked the same question relating to intoxicated witnesses, the mean rating (on the same 1 to 10 scale) fell significantly to 3.88 ( $SD = 1.86$ ) ( $t(186) = 12.68, p < .001$ ). No respondent indicated that it was very likely for a case to make it to court if the witness was intoxicated (a rating of 9 or 10). Officers were also asked “if interviewed repeatedly, when do intoxicated witnesses provide the largest amount of information (irrespective of accuracy)?” From the 192 officers who responded to this question 52.6% believed that intoxicated witnesses provided the most amount of information soon after the crime (whilst they are still intoxicated). An additional 29.2%, however, believed that the largest amount of information is recalled later on when the individual is sober (18.3% DK/NA).

*Characteristics of intoxicated eyewitnesses*

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In the final section of the questionnaire officers were asked the free recall question, “In your experience what demographic groups most represent intoxicated witnesses?” Regarding gender, 42.2% of the 187 officers who answered this question indicated that an intoxicated witness was just as likely to be male as female. Of the remaining respondents, 38.5% felt that intoxicated witnesses tended to be male and only 19.3% believed most intoxicated witnesses were female. In terms of age, 23.1% of 193 officers indicated that intoxicated witnesses were typically between 20 to 24 years old. A further 17.4% indicated that in their experience witnesses under the influence of alcohol tended to be slightly older at between 25 and 29 years of age. An additional 12.2% of officers felt that intoxicated witnesses were usually between the age of 30 and 34. A total of 9.9% of officers believed witnesses were typically aged between 35 and 39, and a further 9.6% considered witnesses to be under the age of 19. Regarding the ethnicity of intoxicated witnesses, a majority of the 178 officers who responded (75.8%) indicated that such individuals were typically Caucasian, but an extra 21.9% felt that intoxicated witnesses were from no one particular ethnic group. Police officers were also asked if there were any other factors that in their experience were characteristic of an intoxicated witness. Only 58 officers responded to this question and 79.31% of these individuals highlighted additional characteristics; the most frequently mentioned being socio-economic group (36.12%) with intoxicated witnesses being seen to have low incomes or being unemployed. Officers also indicated that intoxicated witnesses were typically associated with the night-time economy (15.48%) and were either alcohol or drug dependent (13.76%). The witness being known to the police (8.6%) and also withdrawing their testimony once sober were also mentioned by officers (5.16%).

#### *Other issues*

Officers were finally asked the free recall question, “are there any issues or experiences with intoxicated witnesses that have not been addressed in this survey which you think are important?”

Whilst 54.4% of 195 respondents indicated that there were no other issues (14.8% DK/NA), 60

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(30.8%) of officers did suggest additional issues. Amongst these officers the most frequently mentioned factor was the influence of individual differences and tolerance to alcohol (20%). For example, respondents indicated that alcoholics or an 'experienced drinker' may have a high BAC and still be lucid whilst a non-alcoholic may be barely able to function. Officers indicated that a breathalyser reading in such situations would not be useful. Additionally, 18.33% emphasized that intoxicated witnesses were more likely to change their mind about testifying. They tended to be very talkative at the time of the crime, want to make a complaint, provide a testimony and were willing to go to court. However, once sober the individual was more reluctant to talk, and often changed their mind and withdrew their testimony. The emotional state of intoxicated witnesses was also mentioned by 11.67% of respondents. If a witness had consumed alcohol they tended to be more emotional, more agitated, less rational and even violent towards police. The final factor mentioned by 10% of respondents was the reliability of the witness and how this translates to their credibility in court. Officers indicated that many intoxicated witnesses themselves felt their evidence would not be believed in court because they had consumed alcohol. Officers also mentioned that they themselves are made to look reckless or incompetent in court if the presented evidence was obtained from an intoxicated person, irrespective of the evidential value.

## Discussion

This is the first study to examine how frequently police officers in England interact with intoxicated witnesses. The research also investigated the extent to which police officers perceive intoxicated witnesses are involved in criminal cases and the procedures officers follow when interviewing such individuals. Within this study, rather than analysing a sample of witness statements from a police force, a questionnaire was used. This decision was based upon the availability of witness statements and Yuille and Tollestrup's (1990) assertion that not all the required information is consistently reported by officers. According to 81.9% of the officers from the seven police forces who completed the current questionnaire, intoxicated witnesses are a common or very common

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occurrence, with approximately 44% of the interviews conducted each month being with a witness who was intoxicated at the time of the crime. These findings are in line with the conclusions of Evans et al. (2009) where 73.1% of 119 US officers stated that interacting with intoxicated witnesses was a common occurrence. The present study also indicated that assault, rape, volume crimes and robbery were the crimes most typically associated with intoxicated witnesses. This is consistent with the evidence of Palmer et al. (2013) where 20.34% of the 639 felony cases (i.e., rape, robbery and assault) studied involved at least one intoxicated witness. These findings suggest that in England, as in the US, intoxicated witnesses are a widespread issue across a range of serious offences, at least in the seven forces that participated.

Regarding the procedures typically employed by officers, the majority (69.6%) of respondents in the current research indicated that their departments' standard procedures differed if the witness was intoxicated, and varied further depending on the amount of alcohol that had been consumed. This is in partial accordance with the conclusions of Evans et al. (2009) where 45.5% of officers indicated that they altered their interview procedure if the witness was intoxicated. However, 44% of the US officers indicated that they followed the same procedures irrespective of whether the witness had consumed alcohol (Evans et al., 2009). This is higher than the 24.60% who gave the same response in the present research, and suggests that the interview practices of police officers within England, including the Turnbull (*R v. Turnbull, 1976*), and Achieving Best Evidence guidelines (Ministry of Justice, 2011), are more accommodating and adaptable for intoxicated witnesses than the procedures employed in the US. However, in both countries there appears to be a lack of standard procedure for dealing with intoxicated witnesses.

Within England, when faced with a potentially intoxicated witness, officers indicated that they typically first determine the individuals' degree of intoxication. If 'heavily intoxicated' then this witness would not be formally interviewed immediately. However, if 'moderately intoxicated' then an immediate intoxicated non-evidential 'holding statement' would be taken, before a sober

interview is conducted later. This is not dissimilar to the approach of US officers where if the witness is interviewed immediately, despite being intoxicated, then a follow-up interview is conducted when the individual is sober (Evans et al., 2009). The current study indicates that, in England at least, it is typically only the sober delayed account that is formally recorded and presented in court. However, recent alcohol and eyewitness memory research indicates that the immediate intoxicated free recall of participants may actually include as many accurate but fewer inaccurate details than their sober delayed recall (Schreiber Compo et al., 2017). Consequently, officers may be overlooking some valuable recall evidence from intoxicated witnesses. Ultimately, although the interview procedures within England appear to be more accommodating to the individual circumstances of each witness, than those in the USA, this questionnaire highlights potential issues with this approach. Namely officers have no objective means to establish the witness's degree of intoxication and impairment.

In the current research, the primary means of determining witness intoxication was the observation of the physical symptoms of alcohol consumption such as slurred speech and loss of balance. This was often coupled with the officer's observation of alcohol consumption and the witness's own admission of intoxication. These findings are in line with the evidence of Evans et al. (2009) where officer experience and the witness' self-confessed consumption of alcohol were the primary means of assessing intoxication. Whilst Palmer et al.'s (2013) archival analysis also suggested that only 3% of officers determined intoxication through the observation of alcohol consumption, the present research found around 20% of English police officers draw on this means of assessment. Although this method provides a clear indication that a witness has consumed alcohol it does not inform officers of the degree of intoxication or impairment. As in Evans et al.'s (2009) research, however, it appears very few officers use an objective means such as a breathalyser to establish the degree of intoxication. The 6.25% of officers who used a breathalyser in the present study is considerably lower than the 22.1% of US officers who claimed to breathalyse witnesses

(Evans et al., 2009) and also lower than the 9% of cases from Palmer et al.'s (2013) archive analysis. The most likely reason for this discrepancy between the studies is that, as stated by officers, the legal framework in England does not give officers the power in law to breathalyse a witness. Unfortunately, this also means that there is very little information as to the typical BAC or BrAC readings of intoxicated witnesses. In the United States, officers estimated the BACs of intoxicated witnesses to be around 0.11ml/kg or 0.52mg/L (using a US, BAC to BrAC ratio of 2,100:1). Within the present research, officers considered average intoxicated witness BrACs to be between 0.50 and 0.80mg/L. In both cases the estimates are high at around one and a half times the drink drive limit for England (0.35mg/L).

Whilst officers in England considered their departments' current procedures to be only reasonably effective at obtaining useful information from intoxicated witnesses, the majority of respondents indicated that there were no changes they would make to the present procedures. Of the amendments that were mentioned though the most frequently suggested were to entirely avoid interviewing witnesses whilst intoxicated, or to take an initial statement whilst intoxicated and follow this up with a full interview later when sober. These suggestions highlight a worrying fact, namely that not all officers treat an intoxicated witness in the same manner. For some officers, the standard procedure is to take an initial account whilst intoxicated and follow this up later with a full sober interview. For others they would like to change their current procedures to this two-stage interview process. As previous research indicates that the inclusion of both an immediate and a delayed interview can significantly increase the number of correct details reported (Hagsand et al., 2017), then differences in the procedures officers employ can have serious repercussions in relation to the information presented in court.

Irrespective of the interview method that the officers followed, the majority of respondents considered intoxicated witnesses to provide the largest amount of information soon after the crime (whilst still intoxicated). This is consistent with the findings of Schreiber Compo et al. (2017),

where the immediate intoxicated free recall of participants was seen to include as many accurate but fewer inaccurate details than sober delayed recall. The testimony heard in court, however, is the full interview that is completed once the witness is sober. It is the reliability, accuracy and completeness of this latter testimony therefore that needs to be assessed, as this is the information that jurors make their judgements upon. In terms of the accuracy of a witness' statement police officers believed that intoxicated witnesses were significantly less accurate in their recall than sober witnesses. Officers also believed the testimony of an intoxicated witness was less likely to be heard in court than that of a sober witness. Ultimately this suggests that the recall of an intoxicated witness is seen as less reliable, despite very little research having been conducted to support this idea. In fact, arguably, the limited amount of research that has been conducted suggests that intoxicated witnesses may be just as accurate as sober witnesses, although less complete in their recall (Crossland et al., 2016; Flowe et al., 2016; Hagsand, Roos af Hjelmsäter, Granhag, Fahlke, & Söderpalm-Gordh, 2013; Hildebrand Karlén, Roos af Hjelmsäter, Fahlke, Granhag, & Söderpalm-Gordh, 2015; Yuille & Tollestrup, 1990). Therefore, in light of this discrepancy between officers' perceptions and the findings of current research, it is essential that the actual effects of alcohol on eyewitness recall continue to be researched in order to provide a greater understanding of the true influence of intoxication and the reliability of a witness that has consumed alcohol.

### *Limitations*

Whilst the findings of the present study suggest that in England intoxicated witnesses are a common occurrence which warrants further study by researchers, there are a number of limitations that should be noted. Firstly, although the sample size is larger than that of Evans et al. (2009), the findings and conclusions drawn here are still based on the memories and perceptions of the officers. Consequently, the responses recorded are only as reliable as the recall of the participants. An archive analysis would have avoided this issue, but as indicated by Yuille and Tollestrup (1990) the required information is often not consistently recorded by officers. Access to the appropriate files

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would have also been problematic. Secondly, although the original intention was to recruit officers from a number of different constabularies across England and Wales, only officers from England chose to participate. As a result, the sample may not be representative of the experiences of officers in other constabularies. Future research should therefore seek to incorporate the responses of other police forces, particularly those in Wales. Thirdly, the focus of the questionnaire was on the prevalence of intoxicated witnesses and the procedures officers employ when interviewing such individuals. As a result, the study does not provide any information in relation to how and when officers ask intoxicated witnesses to identify a suspect. Further replications of this study would benefit from the inclusion of such questions. This may be especially important if, as previous research suggests with robbery cases, that street identifications or live-showups are the most common identification procedure. In most instances these identifications are also later followed up by a video line-up (Davis, Valentine, Memon & Roberts, 2015).

#### *Implications and recommendations*

The findings of the present study have a number of implications not only for policy makers but also for intoxicated witness researchers. The first consideration refers to the guidelines provided to police officers. At present, in light of the Turnbull guidelines (*R v. Turnbull, 1976*), police officers in England and Wales are trained to describe in their accounts how much alcohol the witness had drunk. The findings of the present study, however, provide some evidence of a lack of consistency in how officers choose to deal with intoxicated witnesses. It is therefore recommended that the CJS in England and Wales consider providing officers with clearer guidelines on how to deal with intoxicated witnesses. Adopting a standard force-wide approach would ensure greater consistency in relation to how information from intoxicated witnesses is obtained. This would help ensure that courts do not disregard witness information solely due to how that information was acquired. As to what these guidelines may include, however, this study provides no indication of the effectiveness of the current range of police procedures. Consequently, such detailed recommendations are beyond

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the scope of this study's conclusions. Nevertheless, as with Evans et al. (2009) there are some suggestions that could be considered, including the frequent recording of witness BrACs (subject to the witness' consent and legal requirements). This information would be especially useful to officers considering the role that the witness' degree of intoxication appears to play in how and when they are interviewed. The recording of a witness' BrAC would also be beneficial in light of the conclusions of previous alcohol and eyewitness studies, that whilst BrACs below the drink drive limit for the UK appear to have no particularly detrimental effect on either recall accuracy or completeness; higher intoxication levels ( $M_{BrAC} > 0.35\text{mg/L}$ ) result in a less complete but no less accurate testimony (Crossland et al., 2016; Flowe et al., 2016; Hagsand et al., 2013; Hildebrand Karlén et al., 2015; Van Oorsouw & Merckelbach, 2012; Yuille & Tollestrup, 1990). Another possible suggestion, in light of the present study findings and those of previous research, is for the immediate intoxicated recall of witnesses to be formally recorded. At present this immediate interview incorporates basic event detail to enable officers to determine if there is a strong enough case to support the allegation, but this does not form part of the formal testimony. As Schreiber Compo et al. (2017) indicates that this type of immediate free recall can include as many accurate but fewer inaccurate details than sober delayed recall, it may be worth officers taking a more formal approach to recording this information. With the current research indicating that police officers in England routinely interact with intoxicated witnesses, it is imperative that studies continue to look at how alcohol affects the recall of intoxicated witnesses in order to establish exactly what these guidelines should incorporate, so as to obtain an accurate and as complete account as possible from intoxicated witnesses.

As this is the first study in the UK that has sought to determine the extent to which officers interacted with intoxicated witnesses, future research should therefore initially seek to replicate the current study to confirm the validity of the conclusions drawn here, whilst taking into account the limitations that have been identified. The current study indicates that intoxicated witnesses are a

common occurrence that warrants further investigation. To enhance the forensic relevancy of future studies, it is recommended that researchers replicate the typical BrAC levels indicated by police officers. These high BrAC levels, however, will typically necessitate that future intoxicated eyewitness memory research be conducted through field studies, as ethical concerns make it difficult to achieve these BrAC levels in the laboratory. If real world bar research is not achievable then BrACs of at least 0.35mg/L should be studied within the lab. As officers indicated that intoxicated witnesses were just as likely to be male as female, and were typically in their 20's, future research should seek to continue recruiting participants who match these demographics.

As previously indicated there is a discrepancy in how and when officers' interview intoxicated witnesses. For some officers the standard procedure is to take an initial account whilst intoxicated and follow this up later with a full sober interview, for others they would change their current procedures to this two-stage interview process. As previous research indicates that the inclusion of both an immediate and a delayed interview can significantly increase the number of correct details reported (Hagsand et al., 2017), then differences in the procedures officers employ can have serious repercussions in relation to the information presented in court. Future research should therefore seek to examine how the different interview practices employed by officers, can affect the accuracy and completeness of an intoxicated witness' recall. Such an exploration would help in developing guidelines that would ensure that as much valuable information as possible is obtained from witnesses and that there is consistency between criminal cases.

In summary, while at present there is a shortage of intoxicated witness studies within the UK; the current research indicates that intoxicated witnesses are a common occurrence, at least in England. Future research should therefore continue to investigate how alcohol affects the memory of an eyewitness in order to ensure that any testimony presented in court is as accurate, reliable and complete as possible.

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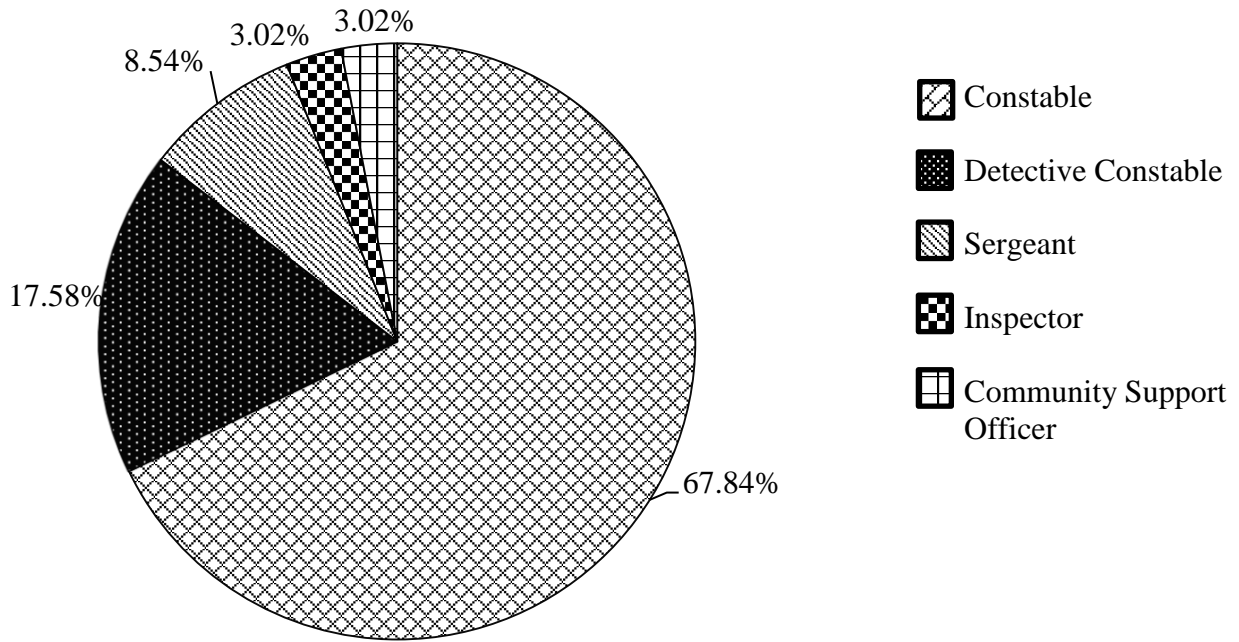


Figure 1: Response percentages for the Police rank of respondents

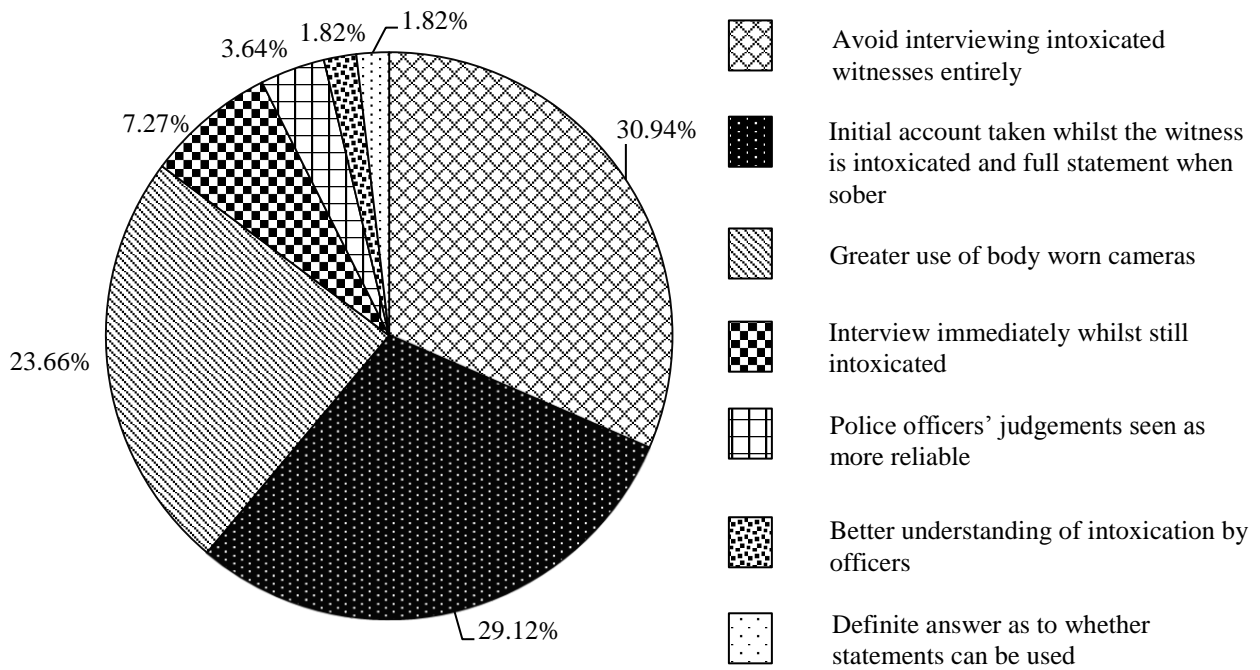


Figure 2: Response percentages to “Are there any changes you would make to the current procedures for interviewing intoxicated witnesses?” (excluding ‘don’t knows’) from the subset of participants who would make a procedural change.

Table 1: Frequency of responses to the how do you decide if they are competent enough to be interviewed

	Breathalyser	Blood Test	Observed consuming alcohol	Admits intoxication	Physical symptoms	Other
Frequency	12	1	40	103	183	19