Jury instructions: Comparing hearing and deaf jurors’ comprehension via direct or mediated communication

1. Introduction

Typically in English speaking countries that have an adversarial court system, it has been a requirement for any potential juror to understand English. Historically, non-English speaking citizens, or migrants that do not yet have a full command of English, have been exempted from serving as jurors as they cannot sufficiently access the language of the court. One exception would be in the state of New Mexico in the United States, where Spanish speakers are accommodated to serve as jurors due to the large Spanish-speaking population in that state (Montalvo, 2001).

Legal discourse (in English) is known to have clear features of complex linguistic and sociolinguistic behaviour that can be challenging for non-legal experts to understand (Gibbons, 2003; Olsson, 2004; Eades, 2010), and particularly for people from minority or indigenous communities who may not have English as their first language (Berk-Seligson, 1990; Cook, 2002; Eades, 2003, 2013; Shuy, 2003). Non-English speaking people that have to attend court (as a witness, complainant or defendant) typically rely on interpreting provision between the language of the court and their first or preferred language.

It is well established that due to the complexities of the justice system, in order to work in legal settings only professionally accredited interpreters should be used, and interpreters must be suitably qualified and experienced (Gallai, 2012; Hertog, 2001, 2003, 2010; Morgan, 2011; Roberson, Shaw & Russell, 2011, 2012).

Nevertheless, sociolinguistic studies of courtroom interpreting in Australia and elsewhere have revealed the challenges for spoken and signed language interpreters of interpreting legal terminology; attending to, and effectively incorporating, the sociolinguistic and pragmatic elements of courtroom discourse; and mediating cultural differences (see for example, Berk-Seligson, 1990; 2002; Brennan & Brown, 1997; Goldflam, 1995; Hale, 2004, 2014; Jacobsen, 2003, 2008; Lee, 2013, 2015; Russell, 2002). These challenges are perceived to potentially impact on criminal proceedings (Nartowska, 2016), or negatively influence the perception that jury members have of the credibility of non-English speaking witnesses (Gallez & Maryns, 2014; Hale, et al, in press).

If courtroom discourse is so complex and challenging to understand, then this begs the question as to how well jurors understand courtroom discourse, even if they are accessing the discourse in English? There have been several studies that have highlighted that people listening directly to spoken English can experience difficulty in comprehending legal texts, such as police cautions (Cotterill, 2000). Since the seminal work of Charrow and Charrow (1979a, 1979b) that identified the problems that jurors experience in comprehending jury instructions, there have been various forensic linguistic studies that have confirmed that jury instructions fail to communicate central points of the law and juries continue to struggle to comprehend jury instructions, despite recommendations for simplifying instructions and providing written instructions as an aide to comprehension (see for example Dumas, 2000; Elwork et al, 1982; Findlay, 2001, 2008; Hansen et al, 2006; Levi, 1993; Luginbuhl, 1992; Smith & Haney, 2011; Thomas, 2010; Trimboli, 2008).

Thus it would appear that being an English speaker does not guarantee that a person can adequately comprehend the content of courtroom discourse in order to fulfill their civic
duty as a juror. This is one element, as well as representation of the population in jury panels, that is leading to a review of the make-up of juries in many countries and whether juries are fairly representative (Thomas, 2010), and whether bilingual juries should be considered (Parry, 2007).

If representation is a key element for consideration, then this could also apply to deaf sign language users, who are typically exempted from jury service because of their deafness. Profoundly deaf sign language users in Australia use Auslan (Australian Sign Language) as their first or preferred language, and often are proficient in (written, and sometimes spoken) English but just cannot hear it. Most deaf people have not had early access to signing at home as their first language as only 1 in 10 deaf people have deaf parents, so their exposure to, and therefore fluency in sign language, depends very much on how, when and where they first met and socialised with other deaf people. For example, residential schools were a very fertile environment for sign language development, whereas currently, many deaf students in non-signing mainstream schools do not acquire a signed language as a second language until after they leave school and start mixing with the Deaf community (Napier, McKee & Goswell, 2010).

If deaf sign language users serve as jurors they need to access courtroom discourse through sign language interpreters. It is difficult to determine what legal discourse in sign language looks like, as there has only been one study of deaf-to-deaf monolingual legal professional discourse (in American Sign Language), which is as yet unpublished (see http://www.gallaudet.edu/daily-digest/spencer-foundation-grant.html).

In order to discharge their duty as a juror, they need to sufficiently understand legal argumentation, and in particular, need to comprehend jury instructions in order to weigh up the facts of the case. But if hearing people already struggle to comprehend jury instructions, and they access the information directly in English, are deaf people disadvantaged in any way by accessing the instructions indirectly via a sign language interpreter?

To date, the majority of research attention on deaf sign language users in the justice system has focused on people that come into contact with the system as witnesses, complainants, defendants or prisoners. In particular, researchers have examined the potential barriers faced by deaf people that have ‘minimal language competence’ (i.e., are not fluent in a signed language), and how the provision of sign language interpreters does not guarantee access for these people (see Brunson, 2007; Kermit, Mjøen & Olsen, 2014; Miller, 2001, 2003; Miller & Vernon, 2001; Vernon, 2010; Vernon & Miller, 2005; Tuck 2010).

In the United States, there are approximately 250 deaf people now practising as lawyers (Hurley, 2016); there is a Deaf and Hard of Hearing Bar Association, and American deaf lawyers use sign language interpreters in client consultations (Kurlander, 2008) and either interpreters or speech-to-text transcription services in court (Stanton, 2011; Pravda, 2011). In the United Kingdom, there are 16 members of Deaf Lawyers UK, but only a few of them have a practising certificate. Although there are several legally trained deaf sign language users in Australia, they are not practising lawyers. In 2011, Kathryn O’Brien became the first deaf practising lawyer in Australia to use Auslan/English interpreters in court (Lawyers Weekly, 2011), and she is still the only deaf Auslan user who practises law in Australia. So it can be seen that sign language interpreters are increasingly being expected to work in court with different ‘actors’ in the courtroom—with people on the ‘other side’ of the justice system.

Deaf people have been able to serve as jurors in the United States since 1979 (Napier & McEwin, 2015), and some court administrations (such as Monroe County Court in Rochester, New York) have well-established systems to track when deaf people have been called to serve as jurors, and to ensure that professional sign language interpreters are provided as needed (Napier & Russell, in preparation). However, at present, in the majority
of countries that adopt an adversarial court system deaf people are not permitted to serve as jurors. They are generally exempted by legislation that allows for people who are unable to discharge the duties of juror because of sickness, infirmity or disability to be excused. Technically, however, “none of these reasons applies to deaf people, as they can read and understand English, and if a sign language interpreter is present, they would be able to access the ‘language of the court’ and discharge their duties as a juror” (Napier & McEwin, 2015, p.23).

In New Zealand, there has been one case of a deaf person serving as a juror shortly after the New Zealand Sign Language (NZSL) Bill was presented in parliament (Travaglia, 2005) (the NZSL Act was enacted in 2006; Reffell & McKee, 2009); and in Ireland, deaf people can no longer be automatically exempted from acting as a juror, instead permission is granted on a case-by-case basis, but to date empanelment of deaf persons on a jury has been challenged by defence lawyers of the court (Farrell, 2011).

Typically, the concern raised about having a deaf juror relates to having a 13th person (i.e., interpreter) in the jury room (Enright, 1999; Silas, 1993). It has been acknowledged that the needs of deaf jurors in accessing information via sign language interpreters is different from other deaf participants in the justice system, as jurors need to access legal information in order make informed decisions as to a person’s guilt (Mather & Mather, 2003). But the US courts have recognised that the sign language interpreter as 13th person in the jury room is not an issue; they are perceived as being neutral in jury discussions and are required to swear an oath to maintain confidentiality of jury deliberations, as any juror is required to do (Napier & McEwin, 2015).

1.1 Deaf jurors in Australia
Deaf people are not currently permitted to serve as jurors in Australia; although one case was recently heard at the Australian High Court, where the Queensland District Court was accused of discriminating against deaf Auslan user Mrs Gaye Lyons by not permitting her to serve on a jury (Deaf Australia, 2016); and, the United Nations Human Rights Office of the High Commissioner handed down a verdict that the rights of two deaf people in Australia were violated when they were called up for jury service but then told they could not have the support they needed, in the form of sign language interpretation and real-time captioning, to participate in the proceedings (United Nations, 2016). The possibility of deaf people serving as jurors in Australia has, however, been considered since 2003 when the state of New South Wales (NSW) Attorney General, instructed the NSW Law Reform Commission (NSWLRC) to establish a reference group to investigate whether deaf and blind persons ought to be able to serve on juries in criminal courts.

As part of the NSWLRC investigations, they commissioned a study in response to a concern expressed by judges as to whether legal concepts are sufficiently translate-able into Auslan to be understood by deaf jurors and the extend to which deaf jurors could comprehend jury instructions (a judge’s summation). The study involved the analysis of an Auslan interpretation of two extracts from an authentic set of jury instructions taken from a previous case (selected by a judge and the NSWLRC), which were read out in spoken English and interpreted into Auslan, under controlled conditions (Napier & Spencer, 2008). The interpretation was video-recorded in order that assessment of the accuracy of the translation of legal concepts could be carried out.

Eight key legal concepts were identified that were central to the case, and a content-equivalence analysis of the interpretation was carried out, using back translation from the Auslan interpretation back into English and analysis of the whether the legal concepts were retained. The analysis revealed that there were some problems with translations of the broad legal concepts, yet the problems were largely subtle shifts between legal definitions or objectively presented facts, to interpretations of the meaning of such statements. In sum, a
quantification of equivalent achievement of legal concepts showed that the interpretation was 87.5% accurate, which was deemed acceptable by legal experts, and also by the fact that it is possible to achieve the minimum level of accreditation in Australia to be eligible to work in court) with a pass mark of 70% or more in an interpreting test. It was assessed that the interpreters’ sign language use was typical of Auslan as used by the Deaf community in monolingual interactions. Thus it was recommended that legal concepts are translatable from English into Auslan, but interpreters need to be adequately skilled so as not to skew the legal definitions or to bias the text with subtle shifts in the interpretation (Napier & Spencer, 2008).

Another part of the project involved a pilot study of juror comprehension, which tested twelve (6 hearing and 6 deaf) randomly selected Sydney-based ‘jurors’ comprehension of the same two excerpts of jury instructions received directly in spoken English or indirectly mediated via sign language interpreters (Napier & Spencer, 2007, 2008). The level of understanding of the hearing and deaf ‘jurors’ was assessed through the administration of a comprehension test, which involved participants watching a video and listening to the jury instruction extracts delivered in spoken English, or watching the Auslan interpretation of the spoken delivery of the instructions, and then answering twelve open, closed and multiple-choice questions about the content of the instructions (see Appendix). The participants represented a demographic spread across age, gender, educational background and employment status.

The results of the pilot comprehension test showed that both hearing and deaf ‘jurors’ misunderstood some concepts. In relation to the closed/ multiple choice questions, approximately 10.5% of the questions were answered incorrectly by all participants. Of the open-ended questions, some responses were problematic from both deaf and hearing participants. Percentage-wise, there was not a great difference between the number of correct responses from deaf and hearing participants (2.8% difference). A number of similarities were found in the responses made by deaf and hearing participants suggesting that some items may have been challenging, regardless of language used, or whether the information was received directly or mediated through an interpreter. An overall pattern seen in the responses to the comprehension test was the difference between responses to questions of fact and questions relating to legal concepts. Overall, most respondents answered questions of fact correctly. In the case of deaf respondents, this means that the facts of the case had been interpreted clearly and correctly and had been understood by deaf participants. When factual errors did arise, they sometimes arose in respondents who otherwise provided correct answers to more complex questions. Responses to questions related to legal concepts were more problematic. Overall this may indicate a low level understanding of a basic threshold concept in the trial of criminal law cases. If respondents cannot grasp this basic threshold concept then the rest of the evidence may well be lost or misinterpreted by the jury, whether hearing or deaf, in the jury room. However, the level of misunderstanding was comparable between the two sample groups meaning that the concept or the form of questions were difficult for both groups. In sum, the results showed that both the deaf and hearing ‘jurors’ equally misunderstood some terms and concepts in the jury instructions, implying that the deaf jurors did not appear to be disadvantaged by accessing information indirectly via sign language interpreters.

The comprehension study, however, was only ever considered as a pilot due to the small numbers of participants involved. One of the key recommendations from the study was that a larger sample of ‘jurors’ across Australia needed to be tested to examine whether the results were valid and reliable, and whether any variables had any significant correlation to comprehension (Napier & Spencer, 2007, 2008). Thus the objective of the study reported in this paper was to administer the same comprehension test on a national scale in order to
determine statistical significance of the pilot findings. The key research questions were as follows:

1. How much do hearing jurors comprehend of jury instructions delivered in spoken English?
2. How much do deaf jurors comprehend of jury instructions that are interpreted from spoken English into Auslan?
3. Is there any correlation between demographic factors and level of comprehension of hearing and deaf jurors?
4. Is there a significant difference between levels of comprehension between deaf and hearing jurors?
5. Is the level of comprehension influenced by receiving the information directly or indirectly (via an interpreter)?

2. Method
The research method involved replicating the comprehension test as reported in our earlier pilot study (Napier & Spencer, 2007, 2008). The original pilot study was designed to approximate a court experience. The jurors were briefed so as to simulate their presence throughout a trial. They were then provided with a pre-filmed excerpt of jury instructions from a real NSW court case and then asked to respond to 12 multiple choice questions concerning the information covered in these excerpts. The comprehension test was administered to 30 hearing people and 30 deaf people throughout Australia. The comprehension test results were quantitatively analysed for accuracy and also were analysed for statistical significance in order to assess any factors that influenced differences in levels of comprehension.

2.1 Instructions text
Jury instructions from a case that had been tried in the Supreme Court of NSW, Criminal Division were selected by the NSWLRC. The case was Regina v Rodney Ivan Kerr, which took place between 27 October–6 November 2003. Rodney Ivan Kerr was charged with the manslaughter of William Christopher Harris at Redfern station in NSW. He was also charged with affray and endangering the safety of a person on the railway. Two excerpts were selected by representatives of the NSWLRC, which incorporated sufficient legal terminology and important facts of the case. Excerpt 1 was from pages 14 – 27 of the summation and was delivered on Tuesday 4 November 2003. Text 2 was from pages 99 – 107 of the summation and was delivered on Thursday 6 November 2003.

2.2 Test procedure
Drawing on the work of language testing experts (McNamara, 2000; Weir, 2005), two videos were produced for the comprehension test to ensure that participants would be tested in the same language as the source text they received (i.e. English or Auslan), and thus minimize differences in testing procedure for hearing and deaf participants. The first video, for deaf participants, was signed in Auslan (by Napier) and consisted of the following sections:

- Introduction and overall instructions
- Warm-up text consisting of the first 5 minutes of the jury instructions interpreted into Auslan
- The two excerpts from the summation interpreted into Auslan
- Instructions on the nature of the questions that will be asked and how participants were to respond
- Twelve questions consisting of:
- four true/false questions
- four multiple choice questions
- four open-ended questions.

All questions were repeated before a response was requested (see Appendix for questions). The Auslan interpretation of the warm up text and the two excerpts were presented as ‘picture in picture’, so that people would see the interpreter on screen, and the ‘judge’ reading the instructions in a smaller box on screen, to provide a visual link to the reading of the original text.

The video for the hearing participants consisted of same sections as the video for deaf participants. The warm-up text and the two excerpts from the summation shown to participants consisted only of the ‘judge’ reading the original text. Instructions and questions for the comprehension component of the video were spoken to the camera.

Prior to the test, hearing and deaf comprehension test participants were sent a brief background to the case and the same written instructions that were provided to interpreters. Participants then attended the test venues individually and watched the relevant video and instructions. All participants were also provided with a written version of questions after they had watched the jury instructions as a reference. All participants were filmed giving their responses orally or in Auslan to the camera. A researcher was present during this activity in order to pause the video for answers as required.

2.3 Participants

Using non-probability network and snowball sampling, hearing and deaf participants for the comprehension test were recruited through the dissemination of a flyer via email through contacts of the research team. The final group of ‘jurors’ were 60 people (30 hearing, 30 deaf) selected to provide a broad representation across the following variables: age, gender, highest educational attainment, and first language, as per the directions from the NSW Office of the Director for Public Prosecutions regarding jury selection (DPP, 2003). An attempt was made to include non-native users of Auslan and similarly non-native users of English in order to include the additional challenge experienced by such jurors.

In both the hearing and deaf participant groups, of the 30 participants, 15 were women and 15 were men. Age was similar for hearing and deaf participants: for hearing participants, age ranged from 20 to 63 ($M = 41.33$, $SD = 13.72$, $Median = 39.50$), and for deaf participants, age ranged from 19 to 63 ($M = 42.67$, $SD = 12.79$, $Median = 44.00$).

As can be seen in Table 1 below, hearing and deaf participants were relatively similar in terms of the amount of education they had acquired, although it can be noted that more deaf participants (15/30) than hearing participants (6/30) had engaged in studies at Technical and Further Education (community) colleges. In terms of employment, a greater number of Deaf participants (10/30) were classified in terms of a trade, administrative, support worker role than were hearing participants (3/30).

<table>
<thead>
<tr>
<th>First Language</th>
<th>Education</th>
<th>Employment Category</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Not working</td>
<td>Student</td>
</tr>
<tr>
<td>Deaf</td>
<td>Less than high school</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>High school</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>TAFE</td>
<td>3</td>
<td>1</td>
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<tr>
<td></td>
<td>Undergraduate degree</td>
<td>0</td>
<td>2</td>
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<tr>
<td></td>
<td>Post Graduate</td>
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<td>0</td>
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</tbody>
</table>
3. Results
As in the pilot study, results of the comprehension test show that both hearing and deaf ‘jurors’ misunderstood some concepts. Numbers of correct responses for each question are shown in Table 2.

Table 2. Summary of correct responses

<table>
<thead>
<tr>
<th>Questions</th>
<th>Correct Responses (invalid responses in parentheses)</th>
<th>Deaf participants (n = 30)</th>
<th>Hearing participants (n = 30)</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>True/False</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1</td>
<td></td>
<td>29</td>
<td>30</td>
<td>59</td>
</tr>
<tr>
<td>Q2</td>
<td></td>
<td>23 (2)</td>
<td>27</td>
<td>50</td>
</tr>
<tr>
<td>Q3</td>
<td></td>
<td>28 (1)</td>
<td>29</td>
<td>57</td>
</tr>
<tr>
<td>Q4</td>
<td></td>
<td>17 (1)</td>
<td>21</td>
<td>38</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>97/120</td>
<td>107/120</td>
<td></td>
</tr>
<tr>
<td><strong>Multiple Choice</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q5</td>
<td></td>
<td>18 (2)</td>
<td>29</td>
<td>47</td>
</tr>
<tr>
<td>Q6</td>
<td></td>
<td>27 (1)</td>
<td>30</td>
<td>57</td>
</tr>
<tr>
<td>Q7</td>
<td></td>
<td>24 (2)</td>
<td>24</td>
<td>48</td>
</tr>
<tr>
<td>Q8</td>
<td></td>
<td>28 (1)</td>
<td>30</td>
<td>58</td>
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<tr>
<td><strong>Open ended</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q9</td>
<td></td>
<td>12 (1)</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td>Q10</td>
<td></td>
<td>5 (1)</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Q11</td>
<td></td>
<td>6 (1)</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>Q12</td>
<td></td>
<td>1 (1)</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

3.1 True or False Questions
In answering Questions 1 to 4, participants were asked to answer “true” or “false” to statements. Questions 1, 2, and 3, as in the pilot study, were generally answered correctly (98%, 83%, and 95% correct respectively). Also as in the pilot study, a greater number of errors were made in answering Question 4 (63% correct). Using a Z-test for proportions, the difference in the number of correct true-false questions for Deaf (81%) and hearing participants (89%) is not significant (z = .91).

3.2 Multiple Choice Questions
Question 5 was the longest question asked of participants. In the pilot study where only 67% of participants chose the correct alternative; in this study, 78% of participants chose correctly. This question concerned the definition of murder that distinguishes between *mens rea* (the intention to kill) and *actus reus* (the act of killing). There was a significant difference between the number of correct responses given by deaf participants (60%) and those given by hearing participants (97%; z = 3.45, p < .00006).

Given the length of this question, whether there was any relation between responses and education levels was examined. The education level of the hearing participant who gave the single incorrect response was below Year 11 standard; of the 10 deaf participants who answered incorrectly, 2 also had education levels less than Year 11 and 2 had attained school certificate.
Because the length of the question may also have influenced the linguistic complexity, whether there were differences between deaf participants whose first language was Auslan and those who had Auslan as their second language was examined. As can be seen in Table 3, nine of the incorrect responses (2 that were unclassifiable) came from deaf participants whose first language was not Auslan; whereas 73% of the deaf participants whose first language was Auslan gave a correct answer, 53% of deaf participants whose first language was a spoken language gave a correct answer. This difference between these proportions is not significant ($z = 1.06$).

As in the pilot study, questions 6, 7 and 8 were generally answered correctly (95%, 80%, and 97% respectively).

### 3.3 Open-Ended Questions

Question 9 required participants to restate what witnesses said occurred. Pilot study results were again replicated, and deaf participants provided more correct answers (60%) than did hearing participants (40%). The difference is not significant ($z = 1.55$). This pattern is repeated when fully and partially responses are examined (deaf participants: 77% correct or partially correct; hearing participants: 63% correct or partially correct). Because this answer required participants to recap what they had been told (and therefore linguistic skill may be involved), it can be noted (see Table 4) that only one of the deaf participants whose first language was a sign language gave a wrong answer, regardless of education.

### Table 3: Question 5 responses

<table>
<thead>
<tr>
<th>First Language</th>
<th>Education</th>
<th>Question 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Invalid</td>
</tr>
<tr>
<td>Deaf: spoken language first</td>
<td>Less than high school</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>TAFE</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Undergraduate degree</td>
<td>0</td>
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<tr>
<td></td>
<td>Post Graduate</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Deaf: sign language first</td>
<td>high school</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>TAFE</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Undergraduate degree</td>
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<tr>
<td></td>
<td>Post Graduate</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Hearing</td>
<td>Less than high school</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>high school</td>
<td>0</td>
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<td></td>
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<td></td>
<td>Undergraduate degree</td>
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<td></td>
<td>Post Graduate</td>
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<tr>
<td>Total</td>
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### Table 4: Question 9 responses

<table>
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<th>First Language</th>
<th>Education</th>
<th>Question 9</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Invalid</td>
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<tr>
<td>Deaf: spoken language first</td>
<td>Less than high school</td>
<td>1</td>
</tr>
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</tr>
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<td></td>
<td>Post Graduate</td>
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</table>
The concept in Question 10 was the legal rule of causation. In the pilot study, only one participant—a deaf participant—gave a fully correct answer. In this study, six participants gave fully correct answers—all but one correct answers were given by deaf participants. This difference is carried through when partially correct answers as well as fully correct answers are examined: whereas 37% of deaf participants gave a partially or fully correct answer, only 13% of hearing participants did so. This difference is marginally significant ($z = 2.09, p < .04$).

As with Question 9, Question 11 required participants to recount what they had been told. Only 23% of participants answered this question correctly (deaf participants: 20%; hearing participants: 27%). When partially correct answers and fully correct answers are examined together, 77% of both hearing and deaf participants gave either partially or fully correct answers. It should be noted that none of the deaf participants whose first language was a sign language gave a wrong answer, regardless of education (see Table 5).

### Table 5: Question 11 responses

<table>
<thead>
<tr>
<th>First Language</th>
<th>Education</th>
<th>Invalid</th>
<th>Incorrect</th>
<th>Partially correct</th>
<th>Correct</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Question 11</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deaf: spoken language first</td>
<td>Less than high school</td>
<td>1</td>
<td>1</td>
<td>0</td>
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<td>4</td>
<td>6</td>
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<td>Undergraduate degree</td>
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<td>Post Graduate</td>
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<td>0</td>
<td>1</td>
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<tr>
<td></td>
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Question 12, as did Question 10, required respondents to show an understanding of a legal concept. As with Question 10, few participants—only 3 (one deaf and two hearing
participants)—provided a fully correct response. When partially and fully correct answers are examined together, it can be seen that whereas 30% of deaf participants gave either fully correct or partially correct answers, 47% of hearing participants did so. This difference is not significant ($z = 1.33$)—see Table 6.

Table 6: Question 12 responses

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4. Discussion

The results confirm the pilot study findings, and show that both the hearing and deaf ‘jurors’ equally misunderstood some terms and concepts presented in the jury instructions. There seems to be no major statistical significance in difference in comprehension in terms of age, gender, education or employment.

There is no statistically significant difference between hearing and deaf people’s accurate responses in the true-false questions. Initially, it was thought that the educational background of participants may have had an influence on the accuracy of responses, as it has been previously found that there is a relationship between educational level and juror comprehension (see for example, Hans et al, 2007). However, this was not the case in this study.

One factor that seems to have some relationship to deaf participants’ correct responses is whether they had Auslan as their first language. There was a significant difference in relation to the correct responses to multiple choice Question 5. When examining the responses of the deaf people who did not have Auslan as their first language, then only 8/17 of the people in this category got it right, whereas 10/13 of the deaf people who had Auslan as their first language answered correctly. It is possible that the linguistic complexity of Question 5 (concerning the elements of murder the prosecution are required to prove beyond a reasonable doubt being, mens rea and actus reus) may have been more challenging to understand a mediated message through the interpreter if they were accessing the interpretation in their second language. This factor is also evident in relation to Questions 9 and 10.
Question 9 required participants to explain what witnesses said the two women with Mr Kerr did. The correct answer should have been that one or both women physically restrained Mr Kerr. When Mr Kerr broke free they again grabbed him and held him back. Pilot study results were again replicated, and deaf participants provided more correct answers (60%) than did hearing participants (40%). The difference is not significant (z = 1.55). This pattern is repeated when fully and partially responses are examined (deaf participants: 77% correct or partially correct; hearing participants: 63% correct or partially correct). Because this answer required participants to recap what they had been told (and therefore linguistic skill may be involved), it can be noted (see Table 4) that only one of the deaf participants whose first language was a sign language gave a wrong answer, regardless of education.

This finding led us to examine whether the interpretation of the information was leading in any way, that is, was the answer somehow ‘given away’ in the Auslan version of the section from the instructions that gave this information? The original utterance from the judge was as follows:

“That the accused then addressed Mr Harris saying, and probably repeating, words such as, ‘What the f*** are you looking at’, or ‘What the f*** are you staring at’, and that he then approached Mr Harris and was physically restrained by one or other or both women, and that he at some stage broke free or to some extent escaped from these women to be grabbed again and there were a number of lurching type actions which you can see on the video.”

A back translation of the Auslan interpretation reveals what Wadensjö (1998) would refer to as a ‘close rendition’, where the propositional content of original text is explicitly expressed in the rendition and the style is approximately the same.

“The accused started talking to the victim, using expressions such as ‘what the f*** are you looking at?’ ‘what the f*** are you staring at?’ or something similar. The accused then started to approach the victim and then other people tried to intervene - two women tried to stop the accused from getting any closer to the victim. He broke free from the two women and came closer to the victim and the women then grabbed him again to prevent him from getting too close. He was then straining to pull away from the women. You’ve seen all this on the video footage already.”

Thus it can be seen that there is no additional information given in the Auslan rendition which may have advantaged the deaf participants and lead them to get the answer correct.

A similar occurrence could be seen with Question 10: whereas 37% of deaf participants gave a partially or fully correct answer, only 13% of hearing participants did so. This difference is marginally significant (z = 2.09, p < .04). The question required participants to explain the legal rule of ‘causation’. A correct answer should have conveyed an understanding of causation in the instant case as being whether the accused’s conduct caused the victim to die. Further, that the accused’s conduct did not have to be the sole or effective cause but whether the act or acts of the accused significantly or substantially contributed to the death of the victim.

There are two important elements of the analysis of question 10 responses. First, deaf participants were able to demonstrate their understanding of the meaning of “causation” more correctly and frequently than hearing participants. Secondly, deaf participants gave an example of their understanding using the fact pattern in the instant case. The following is a sample set of responses in relation to the deaf participants’ ability to demonstrate their understanding of the legal term “causation”:

- It’s the relationship between the threat and the person’s reaction to that threat
... if the behaviour of one person caused the behaviour of another person then it is called causation

I think causation means a behaviour that affects another person. They have to be connected

The following is a sample set of responses that highlight the ability of deaf participants to give an example of their understanding of the term “causation”:

… when a person’s behaviour, let’s say the accused, makes another person fearful about what might transpire

When the accused threatened Mr Harris, did that behaviour influence the actions of Mr Harris and is there a relationship between the two

In this case Mr Harris jumped on to the tracks and was subsequently hit by a train. In relation to causation, we have to think about what led to him jumping on the track. Mr Kerr’s screaming and approaching Mr Harris led to him jumping onto the tracks. It’s like a chain. It doesn’t matter if he wasn’t touched or there was some level of violence …

For example, if a person is angry and their behaviour causes another to flee but they must be connected

These were no responses from hearing participants that were classified as being correct; however, the partially correct responses disclosed a level of demonstrated understanding that would be classed as being correct and appropriate enough in order for a juror to discharge their duty and make a verdict based on the facts. None of the partially correct responses from hearing participants used an example to explain their understanding from the instant case or any other fictitious or non-fictitious scenario.

The incorrect responses from both deaf and hearing participants disclosed either an incorrect understanding of the term “causation” or were expressed with reservations about the persons’ own understanding of their explanation. In terms of demonstrating the correct understanding of the term, participants were judged to have incorrectly demonstrated their understanding if they believed that one act by a person was the only thing that caused the act of misadventure of another person (the victim). It is most important to be able to understand that an act need only be a contributing factor that caused a second person (the victim) to act misadventurously. The following are examples of the first category of not understanding the term “causation”, noting deaf and hearing participants in parenthesis:

… one event must have, an event occurring must reasonably have triggered what’s happened next … (Hearing)

I missed it … I think causation is witnessing what happened (Deaf)

… is the um, cause and effect, the chain of events that lead from one action to an end action, without a break in the middle. So that the starting sequence and the end sequence can be directly attributed from one to the other (Hearing)

I don’t know what causation means. I am not sure (Deaf)

The following responses are those responses where the deaf or hearing participant doubted their own understanding of the term “causation”:

I think it means, um, I think it means when something causes something else to happen. They are somehow related. I think (Deaf)

… a link in the chain where something has either been intended to, or either deliberately or not, to, um, how to explain it. I suppose to come to a conclusion (Hearing)

I’m not sure what it means. I’m not sure I saw that word used in the text but I’ll have a go at answering it. I think it means that an event was caused (Deaf)
• I don’t really remember what were the right words that the judge used … I don’t think I could put it into words … (Hearing)
• Causation. He [Judge] went on about this for ages. Argh, what caused it. I don’t know … I can’t explain it. Too much legal mumbo-jumbo (Hearing)

The answers to question 10 are encouraging given the complexity of the legal concept of “causation” to people untrained in the law. Further, the ability of deaf participants to not only give a correct response that demonstrated their correct understanding of the term “causation” but to provide an example drawn from the instant case, is evidence of the ability of sign language interpretation to convey the correct meaning of legal concepts and also the confidence derived from the translation, of a deaf person, to provide an example to illustrate that understanding.

5. Limitations of the study

Before concluding this paper, and discussing the implications of the findings, it is necessary to acknowledge the limitations of the study. Regardless of the information provided to participants prior to undertaking the comprehension test, the source text was still de-contextualised from an actual criminal trial and the gradual introduction of material that would have occurred in a real life case. Further, participants were not privy to the emphasis and guidance provided by advocates for the prosecution and defence that assist in the understanding of the complex elements of this trial, particularly in relation to applying the concept of causation to the factual matrix gleaned from the evidence presented to them during the trial.

The material was also challenging as hearing ‘jurors’ equally misunderstood some aspects of the jury instructions even though they were receiving the information directly in English. In a real life courtroom, jurors would have had time to absorb evidence and arguments before hearing jury instructions, and would also have time to deliberate as a jury to clarify any misunderstanding. Further, during deliberations they would have the opportunity to ask questions of the judge in relation to any of the evidence presented and most importantly if they did not understand how to interpret that evidence to justify a verdict of guilty that inherently means they would find that the accused caused the death of the victim. While it cannot be assumed that jurors who do not understand the concept of causation as it applies to evidence presented in a criminal trial would ask questions to further clarify the meaning, the opportunity nevertheless exists that would assist a juror given any misunderstanding they may have.

6. Conclusions

This study has provided an examination of 60 jurors’ comprehension of jury instructions, with 30 hearing people accessing the information directly in spoken English, and 30 deaf people accessing the information indirectly, mediated by a sign language interpreter into Auslan. The results confirm the findings from an earlier pilot study (Napier & Spencer, 2007, 2008) with 12 jurors (6 hearing, 6 deaf) in a mock trial setting, that hearing and deaf people equally misunderstand the content of jury instructions, and that deaf people do not appear to be disadvantaged by accessing the information indirectly through an interpreter, and in another language. Of equal importance is that deaf participants performed as well across the board in understanding proceedings and performed better than hearing participants in understanding a judges direction on a complex legal concept that would be critical in the determination of the jury.

In order to conclude, we revisit and respond to each of the research questions:

1. Hearing jurors’ comprehension of jury instructions delivered in spoken English was variable, depending on the question.
2. Deaf jurors comprehension of jury instructions that are interpreted from spoken English into Auslan was also variable, depending on the question; but deaf jurors actually gave more partially or fully correct responses to some questions than the hearing participants.

3. There does not appear to be any correlation between demographic factors and level of comprehension of hearing jurors; but there is a marginally significant relationship between level of comprehension and whether the deaf participants had Auslan as their first language.

4. There was no statistically significant difference between hearing and deaf people’s accurate responses in the true-false questions; and any other differences between hearing and deaf responses were either not significant or only marginally significant.

5. The level of comprehension does not appear to be influenced by receiving the information directly or indirectly (via an interpreter), as both test groups got some responses wrong.

While this study confirms the earlier study on comprehension levels of legal discourse via sign language interpreting, it does not address the logistical issues surrounding the empanelment of deaf people as jurors. Those issues, while not as significant as issues surrounding comprehension, are still important to address, largely from the point of view of enabling the various state and federal justice systems to confidently make provision for participation in jury deliberations by deaf people. The logistical issues include but are not limited to: creating the physical space to accommodate sign language interpreters in both the court and jury rooms; training court personnel and advocates in how to correctly run trials involving deaf jurors so that justice can be served; developmentally exploding some of the myths and prejudices as to the ability of deaf jurors and interpreters to discharge their respective duties pursuant to the various pieces of governing legislation; and, amending enabling legislation to not prevent the use of sign language interpreters because of limitations in the swearing in of jurors and the requirements for confidentiality that currently exist.

It is relatively easy to overcome the logistical issues that would open the door to deaf people being empaneled as jurors however there is a cost to overcoming such issues. When viewed holistically and through the lens of human rights legislation the logistical problems are no greater as the investment that state and federal governments have made and will continue to make on our behalf to ensure other members of society are not discriminated against. Investments such as: the provision of ramps for people with limited mobility; vibrating push-button consoles on pedestrian crossings for visually impaired people; and, support for carers in cases where a person has a learning disability, are just some examples of the investments governments have made in order to eliminate discrimination against people with a disability. The investment that would allow deaf people to be empaneled as jurors is no greater than any of these and would deliver equality to deaf people who, like hearing people, would simply like an equal opportunity to participate in decision making in a society that they make an equal contribution to.

6.1 Further research
As per the recommendations from the pilot study, and the need to test comprehension with a larger group of people, this study confirms that deaf people can sufficiently comprehend jury instructions in order to execute their duties as a juror. What also needs to be examined, however, is the perceptions of key personnel in the justice system as whether they think it is feasible for deaf people to serve as jurors; and also the reality of what actually happens when deaf people serve as jurors. Given that the main concern appears to be the issue of having an
interpreter as 13th person in the jury room, two other recommendations from the pilot study also need to be followed up:

- Carry out courtroom observations of real deaf juror experiences in the United States wherever possible.
- Conduct a mock-trial over several days, filming the proceedings and jury deliberations and sentencing; and conduct interviews with all participants.

The study reported in this paper is actually the second of four studies examining the feasibility of deaf people serving as jurors: (i) and (ii) have focussed on comprehension (Napier & Spencer, 2007, 2008; and this study); (iii) involved an online survey and interviews to canvas the perceptions of legal personnel and interpreters as to whether deaf people can serve as jurors (Napier, in preparation); and (iv) the final (and current) study involves a case study of deaf juror empanelment and interviews with legal personnel and former jurors in the United States (Napier & Russell, in preparation), and a mock-trial involving a deaf juror and sign language interpreters and analyses of the jury deliberations and the different stakeholder perceptions in the trial (Hale et al, submitted; Napier, et al, submitted).

Combining the results of these studies can provide important triangulation to examine the query as to whether deaf people should be permitted to serve as jurors in Australia and other countries, where this is not currently the case; and which can lead to evidence-based recommendations for justice systems worldwide. The findings may have significant impact in pioneering law reform in Australia and internationally.

Acknowledgments

The pilot and follow-up study were both conducted while the co-authors were working in the Department of Linguistics (Napier) and the Department of Law (Spencer) at Macquarie University in Sydney, Australia. This project was made possible with funding from the Macquarie University Staff Grant (Returning from Parental Leave) Scheme. The success of this project owes a great debt to the participation, information and support from all the participants in the original pilot study, and those that undertook the comprehension test in this phase of the project. In particular, we would like to acknowledge the work of Joe Sabolcec, who was the research assistant on the original pilot study; Gerry Shearim, who was the research assistant on this study and who diligently travelled the country to collect the data, and was instrumental in the analytical stage; and Dr Meg Rohan who provided support with statistical analyses.

References


Gallai, F. (2012). Legalising EU legal interpreters: A case for the NRPSI. The Interpreters’ Newsletter, 17, 139-156.


Appendix: Comprehension test questions

True or false

1. Mr Harris was hit by a train at Redfern.

2. The Crown or the solicitor for the prosecution has to prove the accused was guilty of the offence.

3. There were no witnesses to what happened when Mr Harris died.

4. The offence of murder has to be proved beyond reasonable doubt.

Multiple choice

5. To prove murder it must be established:
   a) only that the accused caused the death of the victim
   b) that the accused caused and intended to cause the death of the victim
   c) that the accused caused the death of the victim without intention
   d) that the accused only intended to cause the death of the victim but death did not actually occur.

6. Mr Harris and Mr Kerr:
   a) went to school together
   b) were brothers
   c) were work colleagues
   d) were strangers to each other

7. Manslaughter is:
   a) killing without the intention to kill
   b) recklessly killing
   c) killing recklessly with intention to kill
   d) only committing grievous bodily harm

8. When Mr Kerr got off the train he:
   a) hit Mr Harris
   b) pushed Mr Harris off the platform
   c) yelled but did not touch Mr Harris
   d) told Mr Harris to run away

Open-ended questions

9. Explain what witnesses said the two women with Mr Kerr did.

10. Explain the legal rule of ‘causation’.

11. Explain what witnesses said Mr Kerr yelled at Mr Harris when he saw Mr Harris.

12. In assessing the actions of Mr Harris in response to the actions of Mr Kerr, explain what you, as a juror, must take into consideration.