Opening paragraph

Bethany is giving testimony in a trial by jury for assault. During examination, the court learns Bethany is a 32-year-old woman, she is the victim, and she has an intellectual disability (ID). This adds up, the observers think, as Bethany acts awkward, sounds robotic, and appears anxious and uncomfortable over and above what would be expected of a typical witness. But will the fact Bethany has an ID cloud the jury’s perceptions of her? Does her competency now appear dubious? Is her memory of the event unreliable? Will she flounder under cross-examination? Imagine a child witness with an ID is called, will their testimony work for or against a just verdict for Bethany? Afterall, the jurors’ evaluations of the testimony they hear is pivotal to their verdict. If prejudices against adults and children with ID’s effects juries, justice might not occur where it should.

Debris:

Footnote 1 after first PWID:

Intellectually Handicapped Children (IHC) New Zealand recognises “people with intellectual disabilities” as the term that New Zealand officially recognizes (IHC, 2017). This study recognises this. PWID is sometimes used in different ways (looking at adults and children) to attend to the study's objectives.

Literature supporting this is minimal, however a study of Australian offenders found 88.4% (borderline[[1]](#footnote-1), 39.3%; mild 49.1%; moderate, 6.3%, severe = 1.4; profound = NA; unspecified/unassessed = 3.8%) of PWID in custody as having milder forms of ID (Cockram, 2005). Thus, by applying the ‘developmental model’ for mild ID, jurors should expect most witnesses and defendants with ID’s to have more deficits than their CA match, but be as capable as a TD person with the same MA.

# **Introduction**

## **Intellectual Disability and Unjust Injustice**

People with an intellectual disability (PWID) are a sizeable and vulnerable group (Brown et al., 2015). Globally, estimates of the prevalence of intellectual disability (ID) range from 1-3% (World Health Organization [WHO] & The World Bank [WB], 2011; McKenzie et al., 2016; Armstrong et al., 2013), and in New Zealand, 2% of the population (≈100,000 people) have an ID (Statistics New Zealand, 2013; Intellectually Handicapped New Zealand [IHC], 2017). This demographic, compared to the general population, is at an increased risk of social stigma and exclusion, discrimination, and abuse (Hughes et al., 2012). Additionally, PWID are more likely to be victims of crime (Fogden, et al., 2016; WHO & WB, 2011), or even perpetrators in some categories (e.g., violent crime) (cf. Nixon et al., 2017). Thus, PWID are more likely than the general population to depend on the efficacy of their respective justice systems (Brookbanks, 2019). Regularly, however, their needs are not met.

PWID that are victims of crime are less likely to have their complaints investigated and taken to court (Brown & Lewis, 2013), and when they are, conviction rates are lower (Williams, 1995; Agnew et al., 2006). An explanation for this “paradox” (Brown & Lewis, 2013) is that ableist discrimination (Hehir, 2002; Miller et al., 2004) against PWID seeps into the courtroom, and juries have misconceptions of the competencies of PWID (Stobbs & Kebbell, 2003; Westcott & Jones, 1999; Henry et al., 2011b). Yet, PWID do have various deficits (American Psychiatric Association [APA], 2013; Brown et al., 2015), so understanding juror perception, and when they are accurate or erroneous, is critical to judicial outcomes. Accordingly, this study will examine how juror beliefs compare to the capabilities of PWID in the courtroom.

## **Understanding ID’s**

Whilst understanding ID goes beyond clinical definitions, these are a good starting point. ID, or intellectual developmental disorder (WHO, 2018), is a neurodevelopmental disorder (American Psychiatric Association [APA], 2013). It originates during a person's development period (before 18 years of age), are intellectual (e.g., problem solving, abstract thinking) and adaptive (e.g., personal independence, communication) functioning deficits which are demonstrated in conceptual, social, and practical domains, and can range in severity (mild, moderate, severe, and profound) (APA, 2013; WHO, 2018). These deficits mean that, typically, PWID have a mental age (MA) that is lower than peoples of the same chronological age (CA) who are typically developing (TD), meaning their developmental level is analogous of younger peers (APA, 2013; Henry et al., 2011b). Finally, ID’s are lifelong (Armstrong et al., 2013), and mild ID is the most common (Boat & Wu, 2015) classification, a severity attributed to approximately 85% of PWID (Armstrong et al., 2013).

# **Method**

The survey was granted ethical approval by the School of Psychology Human Ethics Committee, under delegated approval from the Victoria University of Wellington Human Ethics Committee, application #0000027058. This study uses a subset of a larger research programme including a more comprehensive survey. Data collection was completed before my involvement.

## **2.1. Participants**

N = 1915 participants began the survey, and N = 1237 were excluded from the survey, with N = 678 participants were included in the study (35%). Participants needed to be eligible for jury service in New Zealand. Thus, all participants were over 18 years of age, spoke English, and are New Zealand residents. Screening questions before the survey excluded participants ineligible for jury service. Exclusion criteria included parliamentary members, judges, lawyers, Police officers, Corrections officers, offenders with large (3+ years) sentences, criminal offenders with recent (last 5 years) and moderate (3+ months) sentences, and PWID (for full criteria, see Appendix B). Further, questions excluded participants (i.e., checks) during the survey (e.g., responding “don’t know” to >60% of the items; and by giving identical answers to specific questions [however, these questions are not in this study]). Table 1 presents participant demographics for this study. There was a relatively equal gender distribution, with 51.5% of participants identifying as male, 47.9% identifying as female, and 0.6% identifying as non-binary. Participant ages were categorised in six groups (min = 18-24; max = 65+) with middle adulthood (35-44) being the modal response (20.5%). 95.87% of participants disclosed having formal education, with tertiary education being the modal response (56.78%). Over half (60.2%) of participants indicated they had children.

with tertiary education being the modal response (56.78%). Over half (60.2%) of participants indicated they had children.

Table 1.

*Demographic Responses of Survey Participants*

|  |  |  |
| --- | --- | --- |
| Demographic | *n* | % |
| Included in study  Excluded from study  Gender | 678  1237 | 35  65 |
| Male | 349 | 51.5 |
| Female | 325 | 47.9 |
| Non-binary | 4 | 0.59 |
| Age |  |  |
| 18–24 years | 111 | 16.4 |
| 25–34 years | 125 | 18.4 |
| 35–44 years | 139 | 20.5 |
| 45–54 years | 114 | 16.8 |
| 55–64 years | 115 | 16.9 |
| 65+ years | 74 | 10.9 |
| Education |  |  |
| None | 28 | 4.1 |
| Secondary School Qualification | 265 | 39.1 |
| Tertiary Qualification  Have Children  Yes  No | 385  270  408 | 56.8  39.8  60.2 |

## **2.2. Materials**

Instructions, materials, and consents (see Appendix A) as well as debriefs were presented via Qualtrics. Nine items in the questionnaire were adapted from the Child Sexual Abuse Knowledge Questionnaire (CSA-KQ) by Goodman-Delahunty et. al. (2017) and these were expanded on to include further questions that assessed other aspects of testimonial competence. The questionnaire included several sub-sections, and all bar one (cf. demographic information; 5 items) were presented with a 6-point Likert scale (1 = strongly disagree, 6 = strongly agree; see Appendix B) making the choices intentionally forced, though a “don’t know” option was available. The subsections relevant to this study included disclosure of memory (1 item), suggestibility (6 items), ability to testify in court (6 items). These asked about: pre-schoolers (3-5 years), children in middle childhood (6-11 years), adults (18+), CWID, and AWID.

## **2.3. Procedure**

Instructions, materials, and consents were distributed via the survey package Qualtrics. Qualtrics’ Panels service recruited participants. Participants clicked an anonymous link which emailed to them a link (see Appendix C) which directed them to a participant information page. After consenting to the research, participants were screened for their jury service eligibility in New Zealand. Thereafter, if eligible, participants began the survey which took approximately 25 minutes, and consisted of a 59-item questionnaire with Likert scale items and free text responses, the latter of which are not included in this study. Upon completion, participants were thanked, debriefed on the survey’s purpose, and directed to resources as well as information on where to find results.

## **2.4. Descriptive Statistics**

Each evaluative score (1-6) was included in our analyses, and the “don’t know” response was excluded would not inform our hypotheses on evaluative beliefs by jurors. Full descriptive statistics are included in table 2. The averaged evaluations of CWID were lower in memory (*M* = 2.98, *SD* = 1.32) and ability to testify (*M =* 3.41, *SD* = 0.99) and higher in suggestibility (*M* = 4.07, *SD* = 1.03), a trend reflected in the pre-school (e.g. memory: *M* = 2.66, *SD* = 1.40; suggestibility: *M =* 4.06, *SD* = 1.03) groups. Moderate scores were typical of all measures for the middle childhood (e.g. memory: *M* = 3.59, *SD* = 1.33) and AWID (e.g. suggestibility: *M* = 3.71, *SD* = 1.02) groups. TD Adults had higher scores on memory (*M* = 5.24, *SD* = 1.37), ability to testify (*M =* 4.92, *SD* = 1.03), and moderate suggestibility scores. Full descriptive statistics are included in table 2.

Table 2.

*Mean (M) and Standard Deviation (SD) Scores across the study’s measures.*

|  |  |  |
| --- | --- | --- |
| Measure Titles | M | SD |
| Memory - CWID | 2.98 | 1.32 |
| Ability to Testify - CWID | 3.41 | 0.99 |
| Suggestibility - CWID | 4.07 | 1.03 |
| Memory - TD Child (ages 3-5) | 2.66 | 1.40 |
| Ability to Testify in Court - TD Child (ages 3-5) | 3.18 | 0.93 |
| Suggestibility - TD Child (ages 3-5) | 4.06 | 1.03 |
| Memory - TD Child (ages 6-11) | 3.59 | 1.33 |
| Ability to Testify in Court - TD Child (ages 6-11) | 3.82 | 0.87 |
| Suggestibility - TD Child (ages 6-11) | 4.02 | 0.90 |
| Memory - AWID | 3.67 | 1.30 |
| Ability to Testify - AWID | 3.85 | 0.97 |
| Suggestibility - AWID | 3.71 | 1.02 |
| Memory - TD Adult | 5.24 | 1.37 |
| Ability to Testify - TD Adult | 4.92 | 0.64 |
| Suggestibility - TD Adult | 3.08 | 1.12 |

## **2.5. Reliability**

Averaged-scale scores of the ability to testify and suggestibility items were analysed using Cronbach’s Alpha, Omega, and Coefficient H. Scores are reproduced in table 3. Using this reliability triad, rather than Cronbach’s alpha alone which is standard, enables us to make less rigid assumptions, and provide higher estimates of reliability (McNeish, 2018). It is likewise efficacious because the assumptions of Cronbach’s alpha (e.g. tau equivalence, unidimensionality, uncorrelated errors, and normal distribution) are seldom met. In all, our measures maintained good reliability. Except for the ability to testify for TD Adult’s item (α = .38), all items had a Cronbach’s Alpha near .70. All Omega’s were above .75, and all Coefficient H’s were above .80, apart from the ability to testify for TD Adult’s item (H = .76). The memory measure only had one item, so no reliability score could be calculated, but can be assumed to be a reliable measure based on the literature.

Table 3.

*Reliability Scores across the Ability to Testify and Suggestibility measures*

|  |  |  |  |
| --- | --- | --- | --- |
| Measure Titles | α | ω | H |
| Ability to Testify - CWID | .70 | .80 | .85 |
| Suggestibility - CWID | .71 | .76 | .80 |
| Ability to Testify in Court – TD Child (ages 3-5) | .68 | .78 | .84 |
| Suggestibility - TD Child (ages 3-5) | .70 | .84 | .84 |
| Ability to Testify in Court – TD Child (ages 6-11) | .69 | .78 | .85 |
| Suggestibility - TD Child (ages 6-11) | .69 | .75 | .83 |
| Ability to Testify - AWID | .72 | .87 | .89 |
| Suggestibility - AWID | .75 | .80 | .85 |
| Ability to Testify - TD Adult | .38 | .75 | .76 |
| Suggestibility - TD Adult | .76 | .82 | .84 |

*Note.* α = Cronbach’s Alpha; ω = Omega H = Coefficient H

## **2.6. Statistical Analyses**

We decided to use a Linear Mixed-Effects Regression (LMER), the model pools an estimated multilevel equations by simultaneously incorporating random and fixed effects, and can be represented by (Muth, et al., 2016, 2020; Singer, 1998):

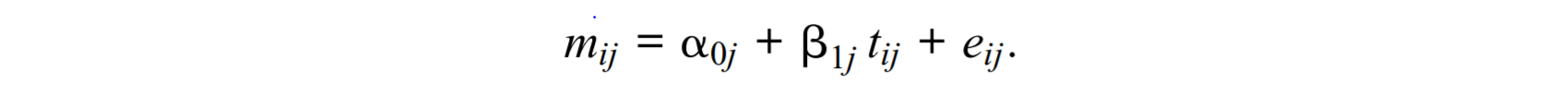
## **2.6. Statistical Analyses**

Text, letter

Description automatically generated We opted for a Linear Mixed-Effects Regression (LMER), as our data is not independent, has an expected hierarchical structure, and it incorporates random and fixed effects. How LMER is represented (Singer, 1998) is in Figure 1.

Figure 1.

*LMER Equation*



Note. *mij =* outcome scores; *i* = an individual; *j* = a repeated assessment; *α0j* = combined linear random mean for each assessment; *β1j* = a random slope for each individual and each assessment; *tij* = measurement occasion; *eij* = random residual error for each individual in each assessment.

European Union Monitoring and Advocacy Program (2005) The Rights of People with Intellectual Disabilities: Access to Education and Employment. Open Society Institute, Budapest. (Available at: http://www .opensocietyfoundations.org/reports/rights-people -intellectual-disabilities-access-education-and -employment); (retrieved 6 June 2021).

middle childhood (*p* = .99).

Figure 1.

*Plotted Distribution from LEMR*

Chart, scatter chart

Description automatically generated

*Note.* EC = Early Childhood (ages 3-5), MC = Middle Childhood (ages 6-11); the measures are ordered in the hierarchical developmental order as per the *developmental model* and hypothesis 1

*CUBIC*

Figure 2.

Chart, scatter chart

Description automatically generated*Graph of Differences In “Don’t Know” Answers Between All TD and ID Groups*

Text, letter

Description automatically generated

1. Borderline Intellectual Functioning (BIF), which describes people whose IQ’s lie between normal intellectual functioning and ID (IQ scores between 70 and 85), was used in earlier versions of the DSM (I-IV), but is not used in the DSM-V, nor is it considered a disorder/disability, because the IQ-based criterion is no longer used to classify ID’s (Wieland & Zitman, 2016; APA, 2013). Regardless, taking those with BIF out of the Cockram (2005) study still means those with a mild ID make up 81% of those in custody in their sample. [↑](#footnote-ref-1)