

Public Attributions and Attitudes Toward the Not Criminally Responsible Accused in Canada

by

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### **Abstract**

Research has found that the public holds negative attitudes towards the NCRMD defence and views individuals using it as dangerous and avoiding punishment (Goossens et al., 2021). Within these attitudes, people appear to attribute behavioural control and stability or consistency across time towards NCRMD adjudicated. Thus, it was hypothesized that these attributions could influence punishment goals and NCRMD attitudes. This study examined public attitudes towards NCRMD-accused using a 2x2 factorial design vignette manipulating two offender characteristics: the amount of control the offender had over their behaviour (high or low) and the stability of their behaviour (high or low). Undergraduate psychology students completed an online survey using the vignette and instruments to assess causal attributions, punishment goals, and NCRMD attitudes. Participant responses were analyzed using qualitative (N = 156) and quantitative (N = 544) analysis. The results did not support attributions affecting punishment preference and NCRMD attitudes. Constructed themes from reflexive thematic analysis included the role of medication in predicting behaviour, interpreting stability as emotionally stable, and perceptions of mental illness and criminality. The results from this study suggest that people do not consider the legal criteria for NCRMD in their attributions of control and that control is changeable in an NCRMD context. Additionally, financial barriers to medication can mitigate public perceptions of control. Finally, attributions of stability may function differently within an NCRMD context than in a carceral context.

*Keywords* attributions, insanity defense, forensic mental health, NCRMD, public perceptions

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## **Chapter 1: Introduction**

In Canada, individuals can be found not criminally responsible on account of mental disorder (NCRMD) if, at the time of the offence, they had a mental disorder that rendered them incapable of appreciating the nature and quality of their actions or knowing that their actions were wrong (*Criminal Code of Canada*, 1985, s. 16). Despite this legal framework, the NCRMD defence remains controversial, with many members of the public expressing negative attitudes toward both the defence of NCRMD and individuals adjudicated as NCRMD (Goossens et al., 2021). For instance, a recent content analysis of social media comments regarding an NCRMD case revealed that the defence is often perceived as a “loophole” or a strategy to evade punishment (Goossens et al., 2021, p. 53). Some respondents suggested that they perceived individuals found NCRMD to be responsible for their actions, as reflected in comments like, “Mental illness is real but should never excuse anyone from their actions” (Goossens et al., 2021, p. 55), while others indicated a public preference for more severe punishment: “Put him away for life” (Goossens et al., 2021, p. 55). Such perceptions may contribute to negative attitudes toward NCRMD defence, as they reflect public beliefs that individuals adjudicated as NCRMD are responsible for their actions and use the defence to avoid incarceration. This can lead to policy changes that are driven by public sentiment rather than empirical evidence, as seen in responses to high-profile NCRMD cases where policy adjustments were made to address perceived public safety concerns.

### **Public Attitudes Toward the NCRMD Defence Influence Government Policy**

In fact, in 2014, the Canadian government amended the Criminal Code to create a “high-risk accused” designation. This designation may be applied to individuals who were at least 18 years of age during their index offence, when the offence was considered to be of a brutal nature

indicating a risk of harm to another, and when the court considers there to be a substantial likelihood that the individual will use violence that could endanger another person (*Criminal Code of Canada*, 1985, s. 16). The creation of the designation was in response to perceived injustices from the Allan Schoenborn and Vince Li cases—two NCRMD cases involving particularly violent crimes that garnered significant media attention (Lacroix et al., 2017). These changes sought to remove the possibility of conditional or absolute discharge for high-risk individuals to increase public safety (Lacroix et al., 2017). However, Crocker and colleagues (2015) found that individuals designated as high-risk have lower rates of violent crime recidivism compared to those with less severe index offences:

People who had committed a severe offence for their index NCRMD verdict had the lowest recidivism rates of all groups: 3 years following the index offence, only 6.0% (10/159) committed a new offence of any kind. The recidivism rate was higher among people who committed a less severe index offence against a person (15.3%; 151/988) or people who committed index offences that were not against a person (21.6%; 134/621). (p. 130)

These policy changes demonstrate how public perceptions of dangerousness can result in government policy changes based on attitudes rather than evidence. Public attitudes toward the NCRMD defence matter because these attitudes can lead to systematic changes, such as limiting discharge options for individuals perceived as dangerous, even though they may be statistically less likely to behave violently than other individuals adjudicated as NCRMD. Furthermore, while Section 16 of the Criminal Code of Canada recognizes that the offences were committed due to the individual's severe mental disorder (*Criminal Code of Canada*, 1985, s. 16), and forensic mental health services emphasize a recovery-oriented approach to reduce the risk of future harm

and support rehabilitation, public attitudes often conflict with this rehabilitative-focused approach. Publicly expressed views (Goossens et al., 2021) suggest that people are making behavioural attributions towards individuals adjudicated as NCRMD, indicating a need for research to explore how these attributions shape public perceptions and policy.

### **An Attribution Theory Lens with Public NCRMD Attitudes**

Attribution theory is a social motivation theory that may explain negative public attitudes toward the NCRMD defence. The theory asserts that people react to what they attribute to being the cause of someone's behaviour (Weiner, 2006). The first attribution relevant for examining NCRMD attitudes is control, which is viewed as having agency and being responsible for one's actions (Weiner, 2006). A respondent from Goossens et al.'s study (2021) appeared to be making a behavioural attribution of control when they stated, "Give this kid an Oscar for the great performance he put on; he played the system well". From an attribution theory perspective, this quote suggests that the respondent viewed the individual as having a high degree of control because the individual could choose how to behave in the situation (Weiner, 2006). This theory could be helpful for understanding public attitudes toward the NCRMD defence because it may explain how people view and respond to the behaviour of others. For instance, if the respondent from Goossens et al.'s (2021) study viewed the individual as having a high degree of control over their behaviour, attribution theory indicates that the individual was seen as being responsible for their behaviour (Weiner, 2006; Weiner et al., 1997). When an individual is adjudicated as NCRMD, experts have determined them to be not criminally responsible; however, the public may develop negative attitudes toward the NCRMD defence because they view the forensic mental health system as an inappropriate type of punishment for individuals whom they consider as to be responsible and in control of their behaviour.

Another relevant behavioural attribution for examining NCRMD attitudes is stability, which is the consistency of behaviour over time (Weiner, 2006). A participant from Goossens and colleague's (2021, p. 55) study appeared to be making attributions of stability when they stated, "If the medical system cannot cure all mental illness; it cannot cure MDG. He is a danger to society for the rest of his life". This response suggests that the participant viewed the individual adjudicated as NCRMD as having high behavioural stability because the respondent viewed the individual's dangerousness as consistent across time (Weiner, 2006). In essence, attribution theory demonstrates that behavioural stability creates an expectation for future behaviour (Weiner, 2006). People may develop negative attitudes toward the NCRMD defence when they consider individuals using it incapable of changing their behaviour. Both control and stability behavioural attributions are important to examine with attribution theory because when either is considered high, people may be more likely to prefer punishments that are incongruent with the rehabilitative focus of the forensic mental health system (Weiner, 2006; Weiner et al., 1997). These incongruent punishment preferences may result in negative attitudes toward the NCRMD defence.

### **The Relationship Between Attributions and Punishment Preferences**

Previous research has established links between attributions and punishment goals in carceral contexts (Graham et al., 1997; Weiner, 2006; Weiner et al., 1997). While there are four causal attribution dimensions (locus, control, stability, and globality), research examining their relationship to punishment preference has focused on control and stability (Graham et al., 1997; Weiner, 2006; Weiner et al., 1997). Attributions of control and stability must both be considered when examining punishment goals because either can change which punishment goal is preferred (Graham et al., 1997; Weiner, 2006; Weiner et al., 1997). Specifically, these studies suggest that

when people attribute high behavioural control or stability to an individual, they are more likely to prefer retributive punishment (Weiner, 2006). Retributive punishment is when a person experiences consequences proportionate to their actions (Plantz et al., 2023). In contrast, when people attribute low levels of control and stability, they are more likely to prefer utilitarian or rehabilitative punishment (Weiner, 2006). Utilitarian punishment focuses on the function of punishment and how it benefits others, whereas rehabilitative punishment benefits both the individual being punished and others (Plantz et al., 2023). Some researchers consider rehabilitative punishment a subcategory of utilitarian punishment (Weiner, 2006), but others consider it distinctly separate (Plantz et al., 2023). The rationale for these punishments is that when an individual's actions are seen as less intentional or due to external factors, a focus on rehabilitation or societal benefit becomes more appropriate. Studying NCRMD attitudes requires an examination of rehabilitative rather than utilitarian punishment because the forensic mental health system is rehabilitative in terms of punishment. Even though the three punishment goals differ from each other, they are not mutually exclusive (Carlsmith et al., 2002). Despite the established links in traditional criminal justice settings, the way these attributions and punishment preferences play out in cases involving NCRMD individuals remains unclear, suggesting a need for further investigation.

Most research on punishment goals has been in a carceral context. For instance, studies examining a belief in redeemability with British and American samples found that a higher belief in redeemability reduces the need for retributive and utilitarian punishment goals (Burton et al., 2020; Maruna & King, 2009). This suggests that people with a high belief in redeemability may prefer rehabilitative punishment. While redeemability may imply that an individual has choice (high behavioural control) and the capacity to change (low behavioural stability), evidence from

attribution theory suggests that people prefer rehabilitative punishment when individuals are considered to have low control and stability (Graham et al., 1997; Weiner, 2006; Weiner et al., 1997). A belief in redeemability reduces retributive and utilitarian punishment preferences (Burton et al., 2020; Maruna & King, 2009), which suggests that people with this belief perceive individuals committing an offence as having low control (and stability). It could be possible that people with this belief consider individuals to have low control while committing an offence that leads to rehabilitative punishment. Once the individual is rehabilitated, they may be seen as having increased control and capable of redeeming themselves. A separate study in South Africa found that people were more likely to reintegrate offenders when they abstained from criminal activity (Brubacher, 2019), which suggests that people want individuals who committed an offence to change. These findings suggest that public openness to rehabilitative (Plantz et al., 2023) and utilitarian punishment (Weiner, 2006) may be contingent on perceiving the individual as capable of reform rather than inherently dangerous or unchangeable. Taken together, this suggests that people may be open to the NCRMD defence if they believe that individuals can change their behaviour.

These findings have implications for NCRMD-accused individuals from an attribution theory perspective. If an NCRMD-accused individual is seen as having low behavioural control and stability, people may be more likely to consider rehabilitation as an appropriate punishment (Weiner, 2006). Conversely, if they are perceived as having high stability in their behaviour (e.g., a persistent pattern of violence), the preference may shift toward retribution (Weiner, 2006; Weiner et al., 1997). Attitudes toward the NCRMD defence may become more positive if people perceive the punishment as appropriate and congruent with their attributions about an NCRMD-accused individual. While punishment goals have been used to explain punitive attitudes in

carceral contexts, their role in an NCRMD context remains unclear, highlighting the need for further research to understand how these concepts translate in cases where mental disorder plays a central role.

### **The Present Study**

Punishment is a significant factor when considering hypothetical NCRMD case outcomes (Yamamoto & Maeder, 2021). However, it remains unclear whether punishment goals function similarly in an NCRMD context as in a traditional carceral setting. Previous research has demonstrated a link between attributions and punishment goals in carceral contexts (Graham et al., 1997; Weiner, 2006; Weiner et al., 1997). Specifically, high control or stability attributions are associated with retributive punishment goals, while low control and stability attributions tend to be linked with utilitarian or rehabilitative punishment goals (Weiner, 2006). Despite these findings, there is a gap in understanding how these relationships function in an NCRMD context.

This study used a vignette-based, 2x2, between-subjects design to examine how attributions influence punishment preferences in an NCRMD context and how these attributions impact attitudes toward NCRMD attitudes. The study's first objective was to determine if the relationship between attributions and punishment goals functions similarly in an NCRMD context as in a carceral context. Specifically, this study examined retributive and rehabilitative punishment. Although some consider rehabilitative punishment a subcategory of utilitarian punishment (Weiner, 2006), this study examined rehabilitative rather than utilitarian punishment because it is congruent with the NCRMD defence. The second objective was to determine if attributions influence attitudes toward the NCRMD defence. Based on the theoretical frameworks outlined and the identified gaps in understanding, the following hypotheses were tested:

**Hypothesis 1a (H1a):** It was hypothesized that attributions of high control would predict retributive punishment goals in an NCRMD context, consistent with findings from carceral contexts (Graham et al., 1997; Weiner, 2006; Weiner et al., 1997).

**Hypothesis 1b (H1b):** It was hypothesized that attributions of high stability would also predict retributive punishment goals in an NCRMD context, as observed in traditional carceral settings (Graham et al., 1997; Weiner, 2006; Weiner et al., 1997).

**Hypothesis 2 (H2):** It was hypothesized that attributions of low control and stability would predict rehabilitative punishment goals (Graham et al., 1997; Weiner, 2006; Weiner et al., 1997), as these goals may be more salient when individuals are seen as having low control and stability over their actions (Brubacher, 2019; Burton et al., 2020; Hechler et al., 2023; Maruna & King, 2009).

**Hypothesis 3 (H3):** Finally, it was hypothesized that attributions of high control and stability would predict negative attitudes toward the NCRMD defence, given that these attributions may lead to punishment goals that conflict with the rehabilitative nature of the defence (Graham et al., 1997; Weiner, 2006; Weiner et al., 1997).

## Chapter 2: Methods

### Participants

This study contains both qualitative analysis (QLA) and quantitative analysis (QTA). The QLA sample ( $N = 159$ ) consisted of undergraduate students. Due to a data entry error, participants in the initial sample did not receive all the dependent measures (the CDS II, SGI, and IDA-R). Of the 159 participants recruited for QLA, 92 received all the dependent measures and were added to the final QTA sample ( $N = 544$ ).

Previous research has found that university students are good proxies for jurors (Maeder et al., 2015) and thus make an ideal sample for exploring public attitudes towards the NCRMD defence. Participants were recruited from the University of Manitoba introductory psychology course participant pool and received course credit upon survey completion. To be included in the study, all participants must have been 18 years of age and eligible for jury duty in Canada (i.e., a Canadian citizen). Participants were excluded from QLA if they did not respond to the open-ended question on the survey ( $n = 3$ , 1.89%), which left a sample of 156 for QLA.

The QTA sample consisted of 544 undergraduate students. This study's sample size was determined using a G\*Power analysis for a 2x2 between-subjects ANOVA (Faul et al., 2007), which indicated the minimum sample size required was 489 based on an effect size of  $f = 0.15$  (small to medium),  $\alpha = .05$ , and power of .80. Participants were excluded from QTA if they did not complete the dependent measures, failed one or more manipulation checks, or if their average response time per survey item was less than two seconds (Bowling et al., 2016). Fourteen participants ( $n = 14$ ) were removed prior to analysis for not responding to the dependent measures. Three-hundred-and-sixty-eight ( $n = 368$ , 67.76%) participants were excluded from QTA for responding incorrectly to one ( $n = 241$ , 44.30%) or both ( $n = 127$ , 23.35%) of the

manipulation check questions. Zero participants ( $n = 0$ ) were excluded for speeding, leaving a final sample of 176 (32.35%) participants for QTA.

With a sample size of 176 for QTA, this study was underpowered. G\*Power was used to conduct a sensitivity analysis to determine the minimum effect size obtainable with the sample size and power (Faul et al., 2007). The analysis indicated that with a sample size of 176 ( $\alpha = .05$ , and power = .80), a medium to large effect size ( $f = 0.25$ ) would be detectable. This result is an estimate of the minimum detectable effect size that extends from the previous G\*Power analysis used to determine the minimum sample size required for detecting a small to medium effect size ( $f = 0.15$ ).

Participants in the final QLA sample ( $N = 156$ ) had an average age of 20.06 ( $SD = 3.76$ ), ranging from 18 to 38. Most of the QLA sample identified as women ( $n = 91$ , 58.33%), followed by men ( $n = 61$ , 39.10%), gender-fluid ( $n = 2$ , 1.28%) and non-binary ( $n = 2$ , 1.28%). The most represented self-reported ethnicity in the sample was white ( $n = 100$ , 64.10%). For a list of QLA and QTA descriptive statistics for ethnicity, refer to Table 1.

Participants in the final QTA sample ( $N = 176$ ) had a mean age of 20.15 ( $SD = 5.14$ ) and a range of 18 to 41. The QTA sample predominantly identified as women ( $n = 124$ , 70.45%), followed by men ( $n = 48$ , 27.27%), gender fluid ( $n = 1$ , 0.57%), two-spirited ( $n = 1$ , 0.57%),

demigirl ( $n = 1$ , 0.57%), and one participant preferred not to answer ( $n = 1$ , 0.57%). White ( $n = 127$ , 72.16%) represented the most self-reported ethnic identification in the QTA sample.

Table 1.

*Self-Reported Ethnicity Descriptive Statistics*

| Ethnic Identity      | Qualitative Sample |       | Quantitative Sample |       |
|----------------------|--------------------|-------|---------------------|-------|
|                      | $(N = 156)$        |       | $(N = 176)$         |       |
|                      | $n$                | %     | $n$                 | %     |
| White                | 100                | 64.10 | 127                 | 72.16 |
| Multiple Identities  | 17                 | 10.90 | 18                  | 10.23 |
| Black                | 10                 | 6.41  | 4                   | 2.94  |
| Filipino             | 10                 | 6.41  | 4                   | 2.27  |
| South Asian          | 7                  | 4.49  | 6                   | 3.41  |
| Indigenous           | 7                  | 4.49  | 5                   | 2.84  |
| Chinese              | 4                  | 2.56  | 3                   | 1.71  |
| Another Identity     | -                  | -     | 5                   | 2.84  |
| Prefer Not to Answer | 1                  | 0.64  | 4                   | 2.27  |

*Note.* Participants could select one or more ethnic identities and/or enter their identity in an open-answer response. The “Multiple Identities” captured all multiple ethnic identities, such as participants who identified as both Filipino and Latin American, while “Another Identity” captured the sole members of an identity category not listed.

### Procedure and Stimulus

This study received approval from the Research Ethics Board at the University of Manitoba before data collection, which took place from March until October 2024. A

convenience sample of participants was recruited through SONA, an online student participant registration portal, and they completed the approximately 35-minute survey in exchange for course credit. The study employed a 2x2 between-subjects mixed methods factorial design administered via Qualtrics. Participants were randomly assigned to one of four conditions, with each condition involving a vignette describing a man adjudicated NCRMD for an assault. As the scenario was the same for each vignette, there was sufficient context for the between-subjects design (Aguinis & Bradley, 2014; Atzmüller & Steiner, 2010; Birnbaum, 1999). The independent variables were control (high/low) and stability (high/low), creating four distinct vignette conditions.

Before reading the vignette, participants were informed that it would be presented for 60 seconds before they could continue. Following the vignette, participants completed two manipulation checks to ensure they understood the scenario and manipulations. In the vignettes, the individual was portrayed as either able to afford his medication or not (control manipulation) and as having either a history of violent behaviour or none (stability manipulation). Following the vignette, participants were given three randomly ordered dependent measures (CDS II, SGI, IDA-R). After completing the measures, participants were given the open-ended question and demographic questions.

The vignettes were reviewed and revised by a forensic psychologist to ensure verisimilitude. Additionally, they were pilot-tested with two groups of 100 participants each from February to March 2024 to confirm the effectiveness of the independent variable manipulations. The pilot study did not include the dependent measures for NCRMD attitudes and punishment goals.

### *Vignette and Manipulations*

The vignette was developed to resemble the Canadian Broadcasting Corporation's (CBC) news articles, designed to provide a realistic context for the case of a fictional Manitoba man adjudicated as NCRMD for assault (The Canadian Broadcasting Corporation, 2023). The scenario's details, such as the individual's age, gender, most serious offence, and mental disorder diagnosis, were chosen based on common characteristics in NCRMD cases (Latimer & Lawrence, 2006; Miladinovic & Lukassen, 2015). Consistent with the CBC template news article (The Canadian Broadcasting Corporation, 2023), the vignettes were written at a grade 12 readability level, as assessed using the Microsoft Word Flesch-Kincaid test (Boutemen & Miller, 2023). The vignette contained two independent variables (control and stability), which were manipulated as follows:

- **Control:** In the high control condition, the individual could afford his prescribed psychiatric medication but chose not to take it ("Smith stated that he would normally have been on his prescription medication, but he didn't want to take it"). In the low-control condition, he could not afford his prescription ("Smith stated that he would normally have been on his prescription medication, but he could not afford it").
- **Stability:** In the high-stability condition, the individual had a history of violent behaviour and a criminal record ("This was not the first violent criminal offense Smith had committed. In his hearing, Smith stated that he had a few run-ins with the law before the incident"). In the low-stability condition, he had no prior history of violent behaviour ("This was the first violent criminal offense Smith had committed. In his hearing, Smith stated that he had never broken the law before the incident").

## Measures

### *The Insanity Defense Attitudes-Revised scale*

The Insanity Defense Attitudes-Revised Scale (IDA-R, Skeem et al., 2004) is a 19-item self-report instrument designed to obtain attitudes towards the American insanity defence (Skeem et al., 2004), which can be adapted to measure attitudes towards the Canadian NCRMD defence (Yamamoto & Maeder, 2021). The IDA-R has two subscales: strict liability, and injustice and danger. Strict liability measures how much individuals believe mental illness is associated with and reduces the ability to make rational decisions and control one's behaviour and how relevant mental illness is for criminal responsibility for that behaviour (Skeem et al., 2004). Injustice and danger measures the perceived misuse of the insanity defence and how it endangers the public (Skeem et al., 2004). Each item uses a Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). Items 4, 12, 13, 14, 17, and 18 are reverse coded. Higher scores on the IDA-R indicate more negative attitudes towards the insanity/NCRMD defence. The IDA-R was validated using community citizens ("venirepersons") who had previously been called to appear as jurors for criminal or civil cases (Skeem et al., 2004). For the present sample, strict liability had an internal consistency of  $\alpha = .88$ , 95% CI [0.86, 0.91], while injustice and danger had an  $\alpha = .88$ , 95% CI [0.85, 0.90].

### *Sentencing Goals Inventory*

The Sentencing Goals Inventory (SGI, Plantz et al., 2023) is a 27-item self-report instrument designed to measure three different types of punishment goals: retributive, utilitarian, and rehabilitative. For each item, individuals are asked to rate their level of agreement on a 5-point Likert scale ranging from 1 to 5 (1 = do not agree, 2 = somewhat agree, 3 = moderately agree, 4 = strongly agree, and 5 = very strongly agree). Interpretation of the SGI involves

individually summing the three punishment goal subscales comprised of nine items each, and higher scores reflect higher levels of endorsement for each goal.

Early versions of the SGI were validated using faculty and graduate students interested in psychology and law, and later versions used college students (Plantz et al., 2023). For this study's sample, retributive had an  $\alpha = .81$ , 95% CI [0.76, 0.85], utilitarian had an  $\alpha = .79$ , 95% CI [0.74, 0.83], and rehabilitative had an  $\alpha = .83$ , 95% CI [0.79, 0.87].

### ***The Causal Dimension Scale II***

The Causal Dimension Scale II (CDS II) was used to measure participant causal attributions (McAuley et al., 1992). During the pilot study, this measure was used to determine participants' attributions toward the man in the vignette. Additionally, this measure was used in the full study to assess the effectiveness of the independent variable manipulations. This measure differentiates control into personal and external control to capture different perceptions of control because viewing a situation as personally controllable or controllable by others will change one's affective response (McAuley et al., 1992). This scale was modified to include three out of the four subscales relevant to this study: personal control, external control, and stability.

The CDS II is a 12-item self-report measure with a 9-point Likert scale ranging from 1 to 9. The endpoints of each scale are closer to separate statements, and participants are asked to select a point closest to what they believe is the accurate statement. For example, question 3 has "permanent" and "temporary" on the ends of a 9-point scale. Selecting a number on the scale indicates if a cause of behaviour is seen as more permanent or temporary (or equally both). Total scores for each dimension are obtained by summing the three corresponding questions from each subscale, with higher scores indicating higher perceived levels of control or stability. The CDS II was validated using undergraduate students (McAuley et al., 1992). The internal consistency for

personal control in this sample was  $\alpha = .82$ , 95% CI [0.77, 0.86], external control had an  $\alpha = .74$ , 95% CI [0.67, 0.80], and stability had an  $\alpha = .39$ , 95% CI [0.23, 0.53].

### ***Exploratory Behavioural Stability Question***

During the first pilot study, participant control and stability ratings for the individual from the vignette did not differ between their respective high and low conditions. The vignette was revised for the second pilot, and participants perceived control as intended in each condition; however, there were no differences between the first and second pilot for participant stability ratings. The vignette was again revised, and an open-ended question was added to obtain participants' motivations for their stability ratings on the CDS II:

Considering your earlier ratings about Mr. Smith's behaviour, could you please explain the reasons or factors that led you to perceive his behaviour as either stable or variable over time? Feel free to mention any personal traits, past behaviours, or other underlying conditions you believe are relevant.

Because of the challenges with the stability manipulation in the pilot studies, this question was added and explored with qualitative analysis to provide a richer understanding of how participants perceived and attributed behavioural stability.

## **Data Analysis**

### ***Data Diagnostics***

Three procedures were planned in response to missing data, instances of speeding, and data transformation. For missing data on dependent measures, this study planned to solely use the worst-case bounds method (Gomila & Clark, 2022) as double sampling was inappropriate for student participants. However, all included participants responded to the dependent measures; thus, no missing data procedures were used. Twenty participants did not provide their age, but

this variable was not required for testing the hypotheses. Another planned procedure was to remove any participant's data if they were speeding—responding quickly to progress through survey questions (Zhang & Conrad, 2014). No participants were removed for speeding as no average response times were below two seconds per item (Bowling et al., 2016). Finally, any variable that was not normally distributed was transformed to create a normal distribution.

Normal distributions are required for ANOVA, the statistical test used to test the hypotheses. The Scheirer-Ray-Hare test (a non-parametric ANOVA equivalent) was used with variables not normally distributed after transformation.

### ***Quantitative Data Analysis***

Several different analytical strategies were used to understand this study sample. The first was descriptive statistics for the study's demographics and dependent measures: causal attributions, punishment goals, and NCRMD attitudes. Second, chi-square tests were used to assess participant performance on manipulation checks. Third, Shapiro-Wilks and Levene's tests were used to check ANOVA assumptions. Fourth, between-subjects ANOVAs and Scheirer-Ray-Hare tests were used to examine the effects of the independent variables on the study's dependent measures and answer hypotheses 1a, 1b, 2, and 3.

### ***Qualitative Data Analysis***

Braun & Clarke's (2006, 2019) reflexive thematic analysis method (RTA) was used to analyze participant responses to the exploratory open-ended question, asking them their rationale for their behavioural stability ratings on the CDS II. RFA is a six-step process in which responses are reviewed, coded, and then used to construct themes. Braun and Clark's outlines (2006, 2019) and a worked example (Byrne, 2021) were followed for methodological rigour. Additionally, to support the trustworthiness and rigour of the analysis, a team member

experienced with RFA reviewed the codes, themes, and the required steps. For the first step, the responses were reviewed while taking notes to become familiar with the data. Step two involved coding the responses based on what participants were communicating. Themes were created using the constructed codes. The codes were reviewed in step four, and a thematic map was created. For step five, each theme was defined and named. For step six, the final step, the report was produced based on thematic analysis and connected to the study research question and literature.

### Chapter 3: Results

#### Manipulation Checks

After reading the vignette, participants were presented with the manipulation checks to ensure they read and understood the independent variable manipulations. Just over half of the participants correctly responded that Mr. Smith (the individual from the vignette) could afford his medication in the high control condition (52.57%,  $n = 143$ ) or that Mr. Smith could not afford his medication in the low control condition (57.35%,  $n = 156$ ),  $\chi^2(1, N = 544) = 0.008, p = 0.927, V = .008$ . Less than half of participants correctly responded that Mr. Smith had a criminal record in the high stability condition (42.80%,  $n = 113$ ), while over two-thirds (64.29%,  $n = 180$ ) correctly responded that Mr. Smith did not have a criminal record in the low stability condition,  $\chi^2(1, N = 544) = 5.61, p = 0.018, V = .11$ . The difference in recall between conditions may be the result of participants perceiving the circumstance of assault without a criminal record or history of violence within an NCRMD context as unusual or distinct (Geraci & Rajaram, 2006). In total, of the 544 respondents, 368 (67.65%) participants were excluded for responding incorrectly to one ( $n = 241$ ) or both ( $n = 127$ ) of the manipulation check questions. The high exclusion rate may be the result of participants misunderstanding the vignette, survey questions, or inattentiveness. One hundred and seventy-six (32.35%) participants were included in the final analysis testing the effect of the independent variable manipulations on the dependent variable measures. The final number of participants in each group for QTA was 40 (high control/high stability), 47 (high control/low stability), 32 (low control/high stability), and 57 (low control/low stability).

### Quantitative Analysis: Hypothesis Testing

Shapiro-Wilk tests revealed four variables failed to meet the assumption of normality: personal control ( $W = 0.971, p < 0.001$ ), external control ( $W = 0.967, p < 0.001$ ), retributive punishment goal ( $W = 0.974, p = 0.002$ ), and rehabilitative punishment goal ( $W = 0.966, p < 0.001$ ). All four variables were transformed using a square root transformation (refer to Table 2 for the skewness and kurtosis values for each variable). Shapiro-Wilk tests revealed that the transformation was ineffective for the four variables: personal control ( $W = 0.940, p < 0.001$ ), external control ( $W = 0.972, p = 0.001$ ), retributive punishment goal ( $W = 0.959, p < 0.001$ ), and rehabilitative punishment goal ( $W = 0.948, p < 0.001$ ). Consequently, Scheirer-Ray-Hare (non-parametric) tests were used instead of ANOVA tests for analyses involving these four variables.

Table 2.

*Skewness and Kurtosis for Non-Normally Distributed Dependent Variables*

| Variable                  | Pre-transformation |          | Post-transformation |          |
|---------------------------|--------------------|----------|---------------------|----------|
|                           | Skewness           | Kurtosis | Skewness            | Kurtosis |
| Personal Control          | -0.39              | -0.50    | -0.87               | 0.55     |
| External Control          | 0.27               | -0.76    | -0.20               | -0.78    |
| Retributive Punishment    | -0.49              | -0.32    | -0.7                | 0.10     |
| Rehabilitative Punishment | -0.56              | 0.05     | -0.81               | 0.67     |

*Note.* Post-transformation data was created using a square-root transformation method.

Hypothesis 1a predicted that high control attributions would lead to a preference for retributive punishment goals, while Hypothesis 1b proposed that high stability attributions would have the same effect. Retributive punishment responses had the following characteristics:  $M =$

33.93,  $SD = 5.86$ , 95% CI [33.08, 34.80], median = 35, and  $IQR = 8$ . A Scheirer-Ray-Hare test with type III sums of squares was conducted using the SGI retribution scores. The test revealed no significant difference for the level of control ( $H(1,172) = 0.69, p = 0.407, \varepsilon^2 < 0.01$  or stability ( $H(1,172) = 0.03, p = 0.857, \varepsilon^2 < 0.01$ ). However, their interaction was significant ( $H(1,172) = 5.06, p = 0.024, \varepsilon^2 = 0.07$ ). These findings do not support hypotheses 1a and 1b, that attributions of high control or stability increase retributive punishment goal preference. The results suggest that only the interaction between control and stability significantly affected retributive punishment goals in this sample.

Wilcoxon rank sum tests were then conducted to investigate the significant interaction between control and stability for retributive punishment responses<sup>1</sup>. There was a significant result for high stability by high and low control ( $W = 843.5, p = 0.021, r = 0.27^2$ , 95% CI [0.04, 0.48]<sup>3</sup>), but not for low stability by high and low control ( $W = 1219, p = 0.433, r = -0.08$ , 95% CI [-0.27, 0.12])—see Figure 1. This finding suggests that participants preferred retributive punishment for the individual from the vignette when they perceived him as having high (vs. low) control only when he had a criminal record and a history of violence. Additionally, there were no significant results for high control by high and low stability ( $W = 1141.5, p = 0.086, r = 0.18$ , 95% CI [-0.03, 0.38]) or low control by high and low stability ( $W = 743, p = 0.149, r = -0.15$ , 95% CI [-0.35, 0.05])—see Figure 2. This finding suggests that participants did not differ in retributive punishment preference for the individual from the vignette who could afford his

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<sup>1</sup> Four data subsets were created in Rstudio to conduct these tests, using one level of an independent variable by two levels of the other independent variable (e.g. high control by high and low stability). These data subsets allowed for Wilcoxon rank sums to be used in testing the effects of each independent variable (control and stability) at each level (high and low).

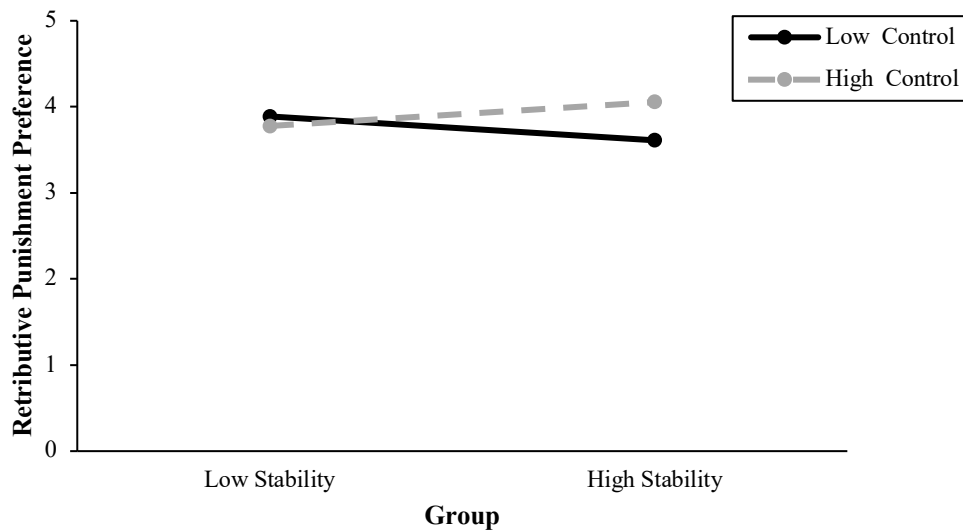
<sup>2</sup> Wilcoxon rank sum test effect sizes were calculated in RStudio using Z-scores, and interpretation values for  $r$  are identical with Pearson's correlation coefficient (Tomczak & Tomczak, 2014).

<sup>3</sup> Confidence intervals were generated using RStudio and bootstrapping the effect size calculations.

prescribed medication or not, regardless of whether he had a criminal record or not (high vs. low stability).

Figure 1.

SGI Retributive Punishment Median Scores for Stability by Control (high vs low) Interaction



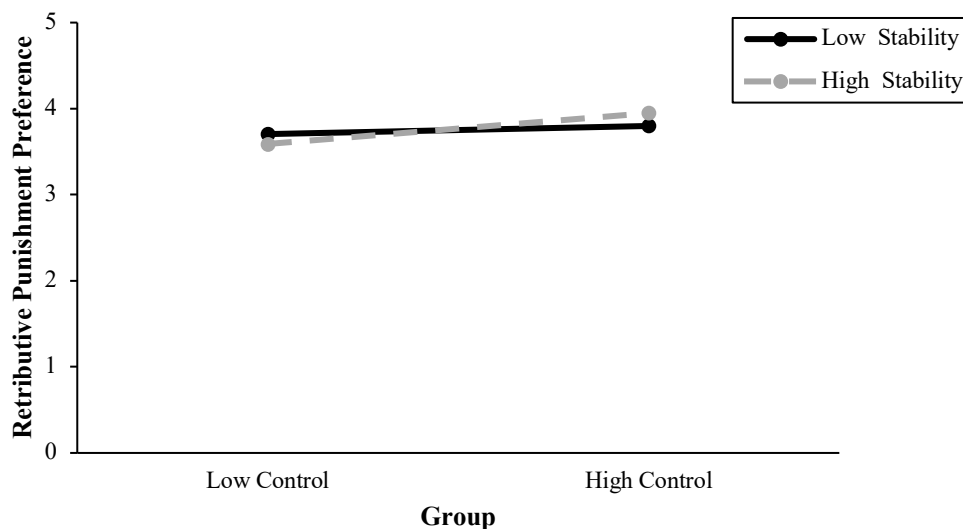
*Note.* These scores represent participant retributive punishment preference levels for the individual from the vignette. This figure shows a statistically significant interaction between control and stability while examining the effect of high and low control at high stability. This result suggests that participants preferred retributive punishment for the individual from the vignette when they perceived him as having high (vs. low) control only when he had a criminal record and a history of violence.

Hypothesis 2 predicted low control and stability attributions would predict rehabilitative punishment goals. Rehabilitative punishment responses had the following characteristics:  $M = 34.95$ ,  $SD = 5.71$ , 95% CI [34.10, 35.80], median = 35, and  $IQR = 8$ . A Scheirer-Ray-Hare test with type III sums of squares was conducted using SGI rehabilitation scores from the control and stability groups. The results were not significant for level of control ( $H(1,172) = 0.02$ ,  $p = 0.878$ ,  $\varepsilon^2 < 0.01$ ), stability ( $H(1,172) = 2.97$ ,  $p = 0.085$ ,  $\varepsilon^2 = 0.03$ ), or their interaction ( $H(1,172) = 0.33$ ,  $p = 0.332$ ,  $\varepsilon^2 < 0.01$ ). These results indicate no support for hypothesis 2, suggesting that

attributions of control and stability did not influence rehabilitative punishment goal preference in this sample.

Figure 2.

SGI Retributive Punishment Median Scores for Control by Stability (high vs low) Interaction



*Note.* These scores represent participant retributive punishment preference levels for the individual from the vignette. The above shows a non-statistically significant interaction between control and stability while examining the effect of high and low stability at low control, and then again at high control.

Hypothesis 3 asserted that high control and stability attributions would predict negative attitudes toward the NCRMD defence. IDA-R responses had the following characteristics:  $M = 67.9$ ,  $SD = 18.18$ , 95% CI [65.20, 70.60], median = 68, and  $IQR = 25$ . A Scheirer-Ray-Hare test with type III sums of squares was conducted using the IDA-R total score by control and stability groups. The results were not significant for level of control ( $H(1,172) = 1.97$ ,  $p = 0.160$ ,  $\varepsilon^2 = 0.02$ ), stability ( $H(1,172) = 0.08$ ,  $p = 0.782$ ,  $\varepsilon^2 < 0.01$ ), or their interaction ( $H(1,172) = 1.58$ ,  $p =$

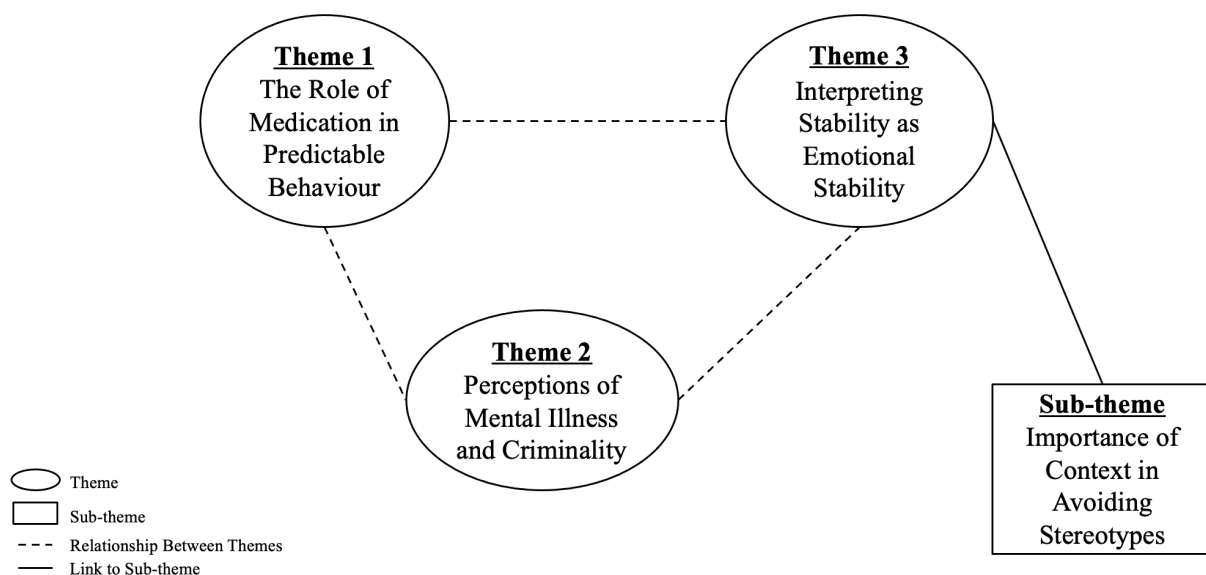
0.209,  $\varepsilon^2 < 0.01$ ). These results provide no support for hypothesis 3 and suggest that attributions of control and stability did not influence attitudes toward the NCRMD defence in this sample.

### Qualitative Analysis: Open-ended Response Question

A reflexive thematic analysis (Braun & Clarke, 2006, 2019) was conducted to analyze 156 participant responses to an open-ended question asking them to explain their stability ratings for the individual in the vignette. Three main themes were constructed based on the responses: the role of medication in predictable behaviour, perceptions of mental illness and criminality, and interpreting stability as emotional stability. A subtheme for the stability main theme was also constructed: importance of context in avoiding stereotypes—see Figure 3 for the full thematic map.

Figure 3.

Reflexive Thematic Analysis Map



*Note.* Map design based on Byrne, 2021.

***The Role of Medication in Predictable Behaviour***

Participants frequently emphasized the importance of medication for safety, particularly its role in fostering predictable or regulated behaviour for individuals prescribed treatment. Many described medication as essential for stabilizing behaviour, as illustrated by Participant #4:

"When he's on his medication, he was likely more stable, but he likely had stopped taking his medication in the past, leading to less stable behaviour and more variable behaviour". Similarly, Participant #22 expressed that medication adherence was critical for behavioural predictability: "I think his underlying condition of schizophrenia can be relatively unstable; but only because of his non-adherence to his medication. If he takes the medication he's supposed to take, then the condition, I believe, is quite stable and predictable". These responses indicate that participants saw medication and adherence as significant factors in assessing the man's behavioural stability.

Affordability also influenced participants' ratings. Some showed empathy toward the individual in the vignette when he could not afford his medication, as Participant #13 noted: "Mr. Smith wasn't able to afford his prescription, which is reasonable in my opinion". This aligns with attribution theory, which suggests that individuals seen as having low control are often viewed as less responsible for their actions (Weiner, 2006). In contrast, other participants expressed mixed feelings about reducing the individual's responsibility based on financial limitations:

I think it depends on whether he can afford or obtain the medication he needs. Since it's not something covered by provincial or federal pharmacare, I am leaning slightly towards variable, though that's only because it's something he can't help. As mentioned, it had been Mr. Smith's offence and only occurred because he couldn't afford medication that wasn't covered for him. (Participant #106).

Some participants also suggested affordability issues could be addressed through government intervention, with Participant #147 proposing, "I feel like his behaviour is variable currently because he does not have access to his medication, but it can become stable if his medication becomes accessible through an increase in funds or a reduction in price through government benefits". Overall, participants viewed medication as a crucial factor in their ratings of stability, with affordability considerations influencing their assessment in various ways.

### ***Perceptions of Mental Illness and Criminality***

Participant responses reflected previously documented stereotypes surrounding individuals who use the NCRMD defence (Goossens et al., 2021; Martin et al., 2022). For example, one participant perceived the individual in the vignette as a murderer, despite there being no mention or implication of death in the vignette, "Regardless of him having medication or not, he did commit a crime, and the scary part is if forgets to take his meds next, it could lead to another death" (Participant #68). This response illustrated how some participants perceived the individual as being more dangerous than he was portrayed.

Several participants expressed skepticism toward the NCRMD defence, viewing it as a means of punishment avoidance. Participant #16 remarked, "He also has a criminal record, so I would assume he has been committing crimes like these for a while and is trying to get out of them using his mental illness as an excuse". This comment aligns with previous research indicating that people often view the NCRMD defence as a strategy to evade accountability (Goossens et al., 2021). Another participant echoed this sentiment, linking mental illness with a perceived leniency in the justice system:

[...] I have heard people in the past getting away with other charges because of mental illnesses like schizophrenia, which I think is unacceptable. They are normalizing people

being able to go out and murder another person and get away with it because of not taking medications. (Participant #1).

Overall, some participants in this sample associated mental illness with a heightened risk of danger and perceived the NCRMD defence as a tactic for avoiding punishment. These responses reflect a broader societal view that links mental illness to criminality and reinforces skepticism toward legal defences involving mental health.

### ***Interpreting Behavioural Stability as Emotional Regulation***

When rating the individual's behavioural stability in the vignette, many participants conflated it with emotional regulation (e.g., self-regulation or calmness), even though, in attribution theory, stability specifically refers to behavioural consistency over time (Weiner, 2006). For example, an individual with a criminal record who commits another crime would be perceived as having high stability, as their actions align with past behaviour (Graham et al., 1997; Weiner, 2006; Weiner et al., 1997). Conversely, someone without a criminal record would be seen as low in behavioural stability if they committed a crime, as this action would deviate from their previous behaviour (Graham et al., 1997; Weiner, 2006; Weiner et al., 1997). Participant #140's response illustrates the conflation of behavioural stability with emotional regulation:

Mr. Smith's behaviour is not stable. Before being diagnosed with schizophrenia, he claims to have been a violent child, often getting into fights. This shows that his violent tendencies were not purely because of his mismanagement of his own schizophrenia. Considering this has happened before, it shows that schizophrenia is not his only reason for doing this, and he has some degree of control over his actions. (Participant #140)

In this response, the participant describes the man as “not stable” but goes on to characterize his behaviour as consistent over time. This interpretation of behavioural stability was common among participants, suggesting that many equated behavioural stability with emotional regulation rather than behavioural consistency.

### ***Importance of Context in Avoiding Stereotypes***

Several participants expressed a need for more information to form a complete opinion about the individual in the vignette. For example, one participant stated, "I believe everyone is different and some information is missed, and I would need more information to make more decisions" (Participant #96). This response suggests a discomfort with making judgments based on limited information, recognizing that their view could shift with additional context.

Another participant articulated this need further, explaining that their judgement was based on incomplete information and then elaborated on the details they felt were necessary for a more informed assessment:

I don't believe there is enough background information to make a determination. I guessed as best as I could. All we know is he hasn't been convicted of anything before, and he can't afford his medication. Why can't he afford his medication? Does he have a job? Can he hold a job? Is this something he has the power to fix? Is it because he's spending the money he does have on other things? Or is he responsible and hardworking, and the medication is just outrageously expensive? Has he ever stopped taking the medication in the past? How violent was this attack? Too much context is missing to make any sort of valid determination. (Participant #138).

This response highlights the range of specific details that participants wanted, from the individual's employment status and financial circumstances to his history with medication and

the severity of the incident. Such responses reflect the importance participants placed on contextual information to avoid potentially stereotypical judgments; some sought narrow details (e.g. whether the individual used a weapon), while others expressed a need for as much context as possible.

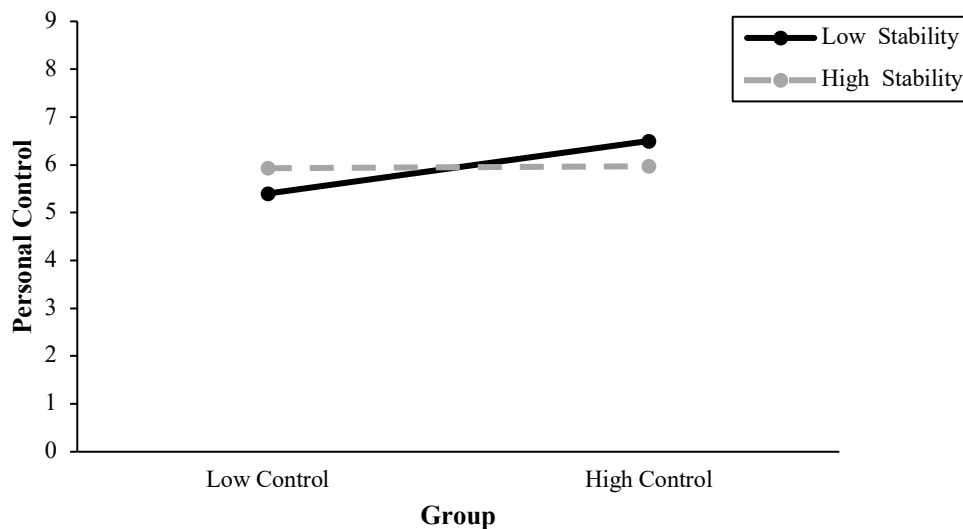
### **Exploratory Analysis: Perceptions of Attributions and Utilitarian Punishment**

Unplanned exploratory analyses were conducted to examine how participants viewed personal control, external control, and stability in the control (high/low) and stability (high/low) conditions. Personal control responses had the following characteristics:  $M = 17.83$ ,  $SD = 5.77$ , 95% CI [17.00, 18.66], median = 18.5, and  $IQR = 8$ . A Scheirer-Ray-Hare test with type III sums of squares was conducted using the personal control scores revealed a significant difference for level of control ( $H(1,172) = 13.31$ ,  $p < 0.001$ ,  $\varepsilon^2 = 0.17$ , but not for level of stability ( $H(1,172) = 0.15$ ,  $p = 0.696$ ,  $\varepsilon^2 < 0.01$ ) or their interaction ( $H(1,172) = 0.18$ ,  $p = 0.675$ ,  $\varepsilon^2 < 0.01$ ) — refer to Figure 4. These findings suggest that the control manipulation was successful because participants viewed the individual in the vignette as having more personal control in the high rather than low condition.

External control responses had the following characteristics:  $M = 13.38$ ,  $SD = 6.36$ , 95% CI [17.00, 18.66], median = 13.00 and  $IQR = 9$ . A Scheirer-Ray-Hare test with type III sums of squares conducted using the external control scores revealed a significant difference for the level of control ( $H(1,172) = 38.34$ ,  $p < 0.001$ ,  $\varepsilon^2 = 0.39$ ), but not for the level of stability ( $H(1,172) = 0.79$ ,  $p = 0.373$ ,  $\varepsilon^2 < 0.01$ ) or their interaction ( $H(1,172) = 0.10$ ,  $p = 0.749$ ,  $\varepsilon^2 < 0.01$ )—refer to Figure 5. These results provide additional evidence for the success of the control manipulation because participants viewed others as having more control over the individual in the vignette in the low rather than high control condition.

Figure 4.

## CDS II Personal Control Median Scores by Study Group



*Note.* These scores represent how much personal control participants attributed to the individual from the vignette. The higher the score, the more participants saw the individual as having control over his behaviour. There was a significant effect for control level but not stability or their interaction.

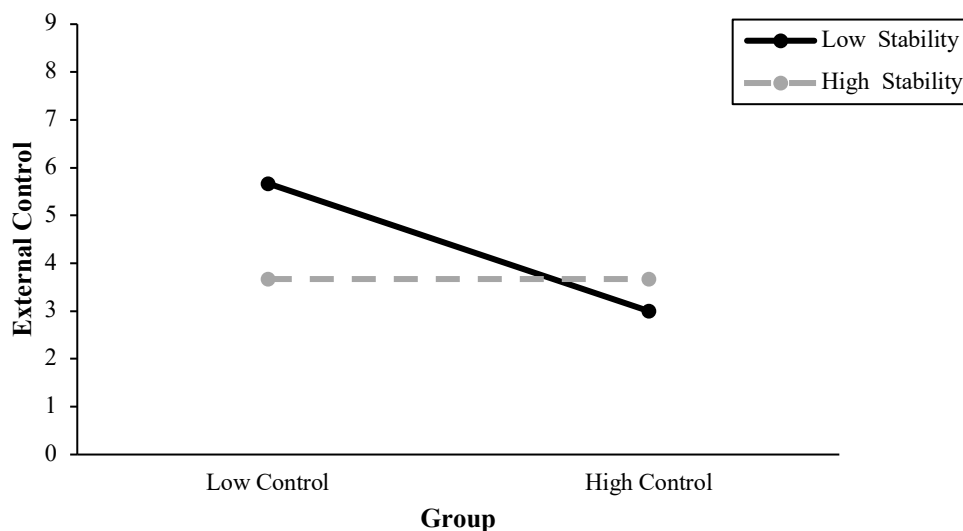
Stability responses had the following characteristics:  $M = 16.05$ ,  $SD = 4.85$ , 95% CI [15.33, 16.77], median = 16.00, and  $IQR = 7$ . A Scheirer-Ray-Hare test with type III sums of squares conducted using the stability scores revealed no significant difference for level of control ( $H(1,172) = 0.33$ ,  $p = 0.565$ ,  $\varepsilon^2 < 0.01$ ), stability ( $H(1,172) = 0.32$ ,  $p = 0.572$ ,  $\varepsilon^2 < 0.01$ ), or their interaction ( $H(1,172) = 0.15$ ,  $p = 0.697$ ,  $\varepsilon^2 < 0.01$ ). These results suggest that the stability manipulation was ineffective because participants did not view the individual in the vignette statistically differently between high and low stability conditions.

An unplanned analysis was conducted to examine how participant attributions of control and stability toward the individual in the vignette influenced utilitarian punishment preferences.

Utilitarian Punishment responses had the following characteristics:  $M = 21.23$ ,  $SD = 5.99$ , 95% CI [20.35, 22.13], median = 21, and  $IQR = 4$ . A Scheirer-Ray-Hare test with type III sums of squares was conducted using utilitarian scores by control and stability groups. The results were not significant for level of control ( $H(1,172) = 0.051$ ,  $p = 0.822$ ,  $\epsilon^2 < 0.01$ ), stability ( $H(1,172) = 0.012$ ,  $p = 0.910$ ,  $\epsilon^2 < 0.01$ ), or their interaction ( $H(1,172) = 0.003$ ,  $p = 0.954$ ,  $\epsilon^2 < 0.01$ ). These results suggest that attributions of control and stability did not affect utilitarian punishment preferences in this sample.

Figure 5.

CDS II External Control Median Scores by Study Group



*Note.* These scores represent how much external control participants attributed others having over the individual from the vignette. The higher the score, the more others were seen as having control over the individual's behaviour. There was a significant effect for control level, but not for stability or their interaction.

To examine how participant perspectives (CDS II ratings) may have predicted NCRMD attitudes, an unplanned analysis was conducted to examine the influence of participant

perceptions of control and stability on IDA-R responses. IDA-R responses had the following characteristics:  $M = 67.9$ ,  $SD = 18.18$ , 95% CI [65.20, 70.60], median = 68, and  $IQR = 25$ . A Scheirer-Ray-Hare test with type III sums of squares was conducted using IDA-R scores by control and stability ratings<sup>4</sup>. The results were significant for level of control ( $H(1,172) = 21.68$ ,  $p < 0.001$ ,  $\varepsilon^2 < 0.01$ ); however, they were not for stability ( $H(1,172) = 0.368$ ,  $p = 0.544$ ,  $\varepsilon^2 < 0.01$ ), or their interaction ( $H(1,172) = 1.75$ ,  $p = 0.186$ ,  $\varepsilon^2 < 0.01$ ). These results suggest that only how participants rated control for the man in the vignette (CP) influenced their attitudes toward the NCRMD defence.

A Wilcoxon rank sum test was then conducted to follow up on the significant result for perceptions of control. The results were significant ( $W = 2298$ ,  $p < 0.01$ ,  $r = -0.35$ , 95% CI [-0.48, -0.21]). This finding suggests a significant difference between participants who perceived the individual from the vignette as having high or low control. Specifically, participants who viewed the individual as having high control (median = 59)<sup>5</sup> viewed the NCRMD defence more positively than participants who viewed the individual as having low control (median = 72).

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<sup>4</sup> Rstudio was used to create binary high/low variables by splitting the medians for the continuous variables, control and stability ratings (CDS II scores). This allowed the use of Scheirer-Ray-Hare and Wilcoxon rank sum tests to test the differences between participants who perceived the individual from the vignette as having high control/stability vs. participants who perceived him as having low control/stability.

<sup>5</sup> Lower scores on the IDA-R indicate more positive attitudes.

## Chapter 4: Discussion

This study examined the relationship between causal attributions and punishment preferences in an NCRMD context, as well as the relationship between causal attributions and NCRMD defence attitudes. The results from this study did not support attributions of high control and stability individually influencing retributive punishment preference. These findings should be taken with caution because the study was underpowered, and the stability manipulation was ineffective and had low reliability. While previous research has established that people prefer retributive punishment when attributing high levels of control or stability to an individual who has committed a crime (Weiner, 2006), the results from this study suggest that neither control nor stability individually increased this punishment preference in an NCRMD context. One possibility for the result is that the study was underpowered and may not reveal the relationship between attributions and retributive punishment in this context. Another possibility is that attributions could not be changed in an NCRMD context because participants viewed the NCRMD defence as avoiding retributive punishment. Qualitative analysis revealed that some participants expressed concern over individuals using mental illness as an excuse to commit crimes and avoid incarceration. There is an identified gap in public knowledge about trajectories and duration within the forensic mental health system for individuals adjudicated as NCRMD (Crocker et al., 2015; Martin et al., 2022). This gap may explain why people consider the forensic mental health system less punitive than jail. Public attitudes toward malingering may also explain why people view the NCRMD defence as punishment avoidance. Research has found that 35.9% ( $n = 350$ ) of Dutch nationals reported that they would consider intentionally fabricating or exaggerating symptoms of mental illness to reduce criminal responsibility (Merten

et al., 2023). If people would consider malingering to avoid criminal responsibility, they may assume that others would do the same.

Although control and stability behavioural attributions did not individually impact retributive punishment preferences in this study, behavioural stability may have influenced how participants considered control for this punishment preference. One finding from this study suggests that people may prefer retributive punishment for NCRMD-adjudicated individuals whom they perceive as being in control of their behaviour when they have a criminal record and a history of violent behaviour. In essence, people may consider behaviour that has been consistent across time when deciding if an individual has control of their behaviour and should receive retributive punishment. This finding was not consistent across groups of participants, which suggests that it could be the result of the study being underpowered. Within an NCRMD context, people could also link mental illness with violent or criminal behaviour. People typically consider mental illness as changeable (Weiner et al., 1988); however, this relationship could differ in an NCRMD context because criminal activity and mental illness are involved. If so, this suggests extant stereotypes in which individuals with mental illness are dangerous (Goossens et al., 2021). People may be influenced by stereotypes of dangerousness when making behavioural attributions towards NCRMD individuals and when forming punishment preferences.

Attitudes about dangerousness and punishment avoidance were also found in participants' qualitative responses. Participants often viewed the individual in the vignette as being dangerous and unpredictable due to his diagnosis of schizophrenia and medication non-adherence. These findings are consistent with research showing increased prejudice towards individuals with schizophrenia compared to other forms of mental illness, such as depression (Bizumic et al., 2022). This prejudice causes individuals to modify stories about individuals with schizophrenia

in ways that are more consistent with stereotypes (Jacobs & Quinn, 2022), such as when participants erroneously recalled the individual in the vignette committing murder rather than assault. However, participant responses also indicated that some actively avoided stereotypes when they expressed a need for more context to make a decision about the individual from the vignette. While it is uncertain how many participants relied on stereotypes in this study, stereotyping may explain why the manipulations did not change punishment preferences or attitudes toward the NCRMD defence.

In addition to the retributive punishment preference findings, this study did not find support for control and stability behavioural attributions influencing rehabilitative punishment preference. An unplanned exploratory analysis was conducted to examine if utilitarian punishment preference was also unchanged because some researchers consider rehabilitative punishment as a subcategory of utilitarian punishment (Weiner, 2006). Utilitarian punishment preferences were also not influenced by attributions in this study. Previous research established that attributions of low control and stability lead to people preferring rehabilitation punishment in carceral contexts (Graham et al., 1997; Weiner, 2006; Weiner et al., 1997); however, this may not generalize to an NCRMD context. While control and stability attributions did not change rehabilitative punishment preference in this study, stability did approach significance for increasing rehabilitation punishment preference. One possibility for attributions not predicting rehabilitative punishment in this study is that the measure was not robust or may not generalize to an NCRMD context. Participants may also have been fatigued or disengaged. The high manipulation check failure may indicate that participants were not fully processing information from the vignette. Another possibility is that participants interpreted stability differently. This possibility was supported by the exploratory analysis for stability perceptions, in which there

were no differences in how participants viewed stability. The qualitative analysis revealed that participants conflated the term stability to mean emotional regulation, which could explain why participants did not view it differently. This conflation could be because of stereotypes of individuals with schizophrenia. Despite the measure explicitly presenting stability as consistent behaviour across time, participants may be using stereotypes for these individuals when describing the individual in the vignette as “unstable” with open-ended responses (Jacobs & Quinn, 2022). The stability measure’s low reliability and statistical power limit the inferences drawn from results, particularly those involving stability.

This study also examined the relationship between behavioural attributions of control and stability and NCRMD attitudes. Based on attribution theory, people should develop negative attitudes towards the NCRMD defence when it is used by an individual whom they attribute with having high behavioural control or stability (Weiner, 2006); these attributions would lead to a retributive rather than a rehabilitative punishment preference. The results from this study did not support attributions changing attitudes toward the NCRMD defence in the direction attribution theory would predict (Weiner, 2006). Contrary to this hypothesis, participants who rated personal control higher had more positive attitudes toward the NCRMD defence. One possible explanation for this result is that the study was underpowered. If this finding was present in a fully powered study, it could suggest that attributional models may need to be modified for an NCRMD context. It could also suggest that participants perceive individuals with lower control as unpredictable and dangerous, and the NCRMD defence may be seen as more likely to result in this individual returning to the community more quickly than if they were incarcerated (Martin et al., 2022). The qualitative findings from this study and previous research (Goossens et al., 2021) support dangerousness stereotypes for individuals adjudicated as NCRMD. Additionally,

previous research has identified that the public is unaware of NCRMD trajectories and perceives individuals returning to the community more quickly from the forensic mental health system than the carceral system (Goossens et al., 2021; Martin et al., 2022).

The criteria participants use to determine behavioural control for NCRMD-adjudicated individuals could influence attitudes toward the NCRMD defence. This study successfully manipulated control, indicating that participants can change their views of control in an NCRMD context. The exploratory results supported participants perceiving personal and external control according to what attribution theory would predict (Weiner, 2006); participants in the high control condition viewed the individual in the vignette as having more personal control and less external control, and participants in the low control condition had an inverse relationship. Participants perceived the individual from the vignette as having high control when he was presented as being able to afford his prescribed psychiatric medication and chose not to take it. However, the individual from the vignette was also presented as having been adjudicated as NCRMD. When an individual is adjudicated as NCRMD, they are considered not responsible for their actions during the index offence. From an attribution theory perspective, this individual would be considered low control because individuals are only perceived as responsible for their actions when they have high control (Weiner, 2006). In essence, participants determined the individual's level of control based on the circumstances provided rather than the decision made by experts when both pieces of information were presented together in the same article. This finding suggests that the public may use criteria different from those of experts to determine control and appropriateness for rehabilitative punishment within an NCRMD context. When these do not align, the public could form negative attitudes because they perceive rehabilitative

punishment as inappropriate—especially when considering the NCRMD defence as punishment avoidance (Goossens et al., 2021; Martin et al., 2022).

### **Implications**

The findings from this study did not support attribution theory functioning the same in an NCRMD context as it does in a carceral context. For example, participants considered how changeable an individual's behaviour was before judging whether they had control over their actions and if retributive punishment was appropriate. Furthermore, attributions for stability may be influenced by stereotypes in an NCRMD context rather than the presence of a criminal record or a history of violence. The findings from this study suggest that future research into attributions within an NCRMD context should consider the influence of stereotypes in attribution formation, particularly for attributions of stability. These results also have implications for policy considerations around healthcare access, as participant open-ended responses indicate that some people consider financial barriers to medication as a mitigating factor in determining control and responsibility.

Participants exhibited stereotyped beliefs surrounding mental illness and dangerousness, which may have impacted their views on punishment. These results suggest a need for public education on mental illness, criminality, and the NCRMD defence to reduce stereotypes towards forensic mental health settings. Publicly expressed attitudes toward the NCRMD defence indicate a mistrust in the defence and that it is seen as punishment avoidance for dangerous individuals. These negative attitudes could influence jurors in actual NCRMD cases, which demonstrates a need for education to reduce stigma and misconceptions about mental illness and dangerousness. Additionally, participants considered control for NCRMD individuals differently than experts, underlining the need for awareness of the strict legal criteria for NCRMD. While

educational interventions can be effective at positively increasing NCRMD attitudes (Shinna et al., 2017), their implementation should be directed to the appropriate audiences, as some evidence suggests that a person's educational background may determine the effectiveness of these interventions (Maeder et al., 2015). For the public, media representation may also effectively change attitudes (Whitley et al., 2017).

### **Strengths and Limitations**

This study has several important strengths. The first strength was using a mixed-methods approach to explore attitudes toward the NCRMD defence. The quantitative methods component provided data about how the manipulations affected participant attitudes; however, it was limited to explaining why participants chose their responses on the measures. The qualitative component augmented the quantitative component by providing insight into the participant-measure responses. Participants' open-ended responses helped explain why stability was not effectively manipulated and revealed dangerousness and punishment avoidance stereotypes. The mixed-methods approach provided a more holistic understanding of public NCRMD attitudes than a quantitative or qualitative approach could individually.

Another strength was that this is the first study that explores and experimentally manipulates attributions in an NCRMD context. The study results suggest that public views of control can change. However, stability may function differently in an NCRMD context and act as a moderator to control when examining retributive punishment preferences. Using university participants to assess NCRMD defence attitudes was another strength. University students are an effective proxy for jurors (Maeder et al., 2015), making them ideal for understanding how the public may react to and form attitudes about NCRMD.

A final strength was that this study used a news article format for the vignette, which added verisimilitude to the vignette. Participant responses to open-ended questions suggested that they considered the vignette realistic, which can be challenging to accomplish (Aguinis & Bradley, 2014). A more realistic vignette potentially enhances external validity (Aguinis & Bradley, 2014). However, it is essential to note that caution should be taken with news article-styled vignettes in an NCRMD context because previous research suggests that media may influence attitudes towards the NCRMD defence—typically with negative portrayals of NCRMD-assessed individuals (Miller, 2016; Whitley et al., 2017).

This study is not without limitations, the first of which is that recruitment provided a challenge in obtaining sufficient statistical power. Making conclusions would require a full sample, as underpowered data can lead to erroneous conclusions. Designing the vignette also posed a challenge. The initial design of the experimental vignette was realistic from a clinical perspective. In the initial high-control condition, the individual in the vignette stopped taking his medication because he did not like its side effects. Despite the individual choosing not to take his medication, participants in the vignette pilot viewed him as having low control because of the medication side effects he experienced. Revisions to the vignette significantly improved the control manipulation for the full study. However, the stability manipulation proved ineffective in the pilot and full study. An open-ended question was added that asked participants to explain their stability ratings to account for the revised stability manipulation potentially being ineffective in the full study; through qualitative analysis (Braun & Clarke, 2006, 2019), participant responses provided fruitful insights into the stability manipulation, the control manipulation, and NCRMD stereotypes. However, these insights came at the expense of time—

requiring revisions to vignettes, additional recruitment, and adding a qualitative analysis component to the study.

Another limitation was the potential influence of stereotypes. Qualitative analysis suggested that stereotypes were present in participant NCRMD attitudes; however, adding stereotype measures would have significantly expanded the scope of the study. Previous research suggests that researchers often consider knowledge and familiarity the same constructs, but evidence suggests the contrary (Ladwig et al., 2012). Additionally, evidence suggests that stigma is less present when mental health knowledge is higher (Krakauer et al., 2020), but familiarity may have a more complex relationship with stigma (Corrigan & Nieweglowski, 2019). These studies suggest that mental health knowledge and familiarity should be considered when measuring stereotypes, which the present study could not include in its scope. Additionally, participants may respond differently to the vignette if the individual adjudicated as NCRMD was a woman rather than a man (Nowacki, 2020). However, the present study could not include NCRMD-accused gender in its scope.

Generalizability is another limitation, as university students may not be generalizable to other groups because student responses may be comparatively more homogenous, have different effect sizes, and have different effect directions (Peterson, 2001). However, university students were specifically chosen because they are effective proxies for jurors (Maeder et al., 2015) and thus were ideal for understanding how the public may respond to legal or criminal case information. While university students are an ideal initial sample, caution should be exercised in generalizing findings to different groups.

An additional limitation was the effectiveness of the stability measure. The stability measure reliability for this sample was low, and participants did not see stability differently

between conditions. Participants viewed stability idiosyncratically, and these views were not susceptible to the manipulations that would typically influence perceptions of stability, such as the presence of a criminal record. These findings limit stability-related inferences that can be drawn from this study because perceptions of stability directly shape punishment goals. This finding emphasizes a need for a more robust measure of stability in future studies. The qualitative results revealed that participants may likely conflate stability with emotional regulation, which can help guide future studies in stability measure considerations.

### **Future Directions**

This study's results suggest that participants perceive individuals adjudicated as NCRMD as dangerous and use the NCRMD defence to avoid punishment. These findings were similar to those found by other researchers (Goossens et al., 2021). Refining our understanding of stereotypes around mental illness and criminality could provide insight into what shapes NCRMD attitudes. Stereotypes around mental illness and criminality may be influencing attitudes toward the NCRMD defence. Future studies could explore the relationship between stereotypes and attitudes by measuring stereotypes prior to manipulations. This premeasurement could help determine the influence of stereotypes on outcome measures before independent variable manipulations. Additionally, researchers could survey the public to ascertain if levels of perceived dangerousness vary between different mental health diagnoses in an NCRMD context.

Punishment avoidance could be explored by examining the relationship between malingering and NCRMD attitudes. Previous research found that over one-third of the public would consider malingering to avoid criminal responsibility (Merten et al., 2023); however, it is uncertain if this finding generalizes to a Canadian context. Thus, future research could replicate that study with a Canadian sample and extend it to include participant perspectives about

whether others may malingering to avoid criminal responsibility. Furthermore, researchers could refine measurement tools to capture nuanced beliefs about mental illness and punishment avoidance, as NCRMD defence attitudes may vary based on mental health diagnosis. Surveying the public may identify how these perceptions vary. Finally, refining stability measures for an NCRMD context is recommended, and the measures would benefit from pilot testing to ensure validity.

### **Conclusion**

Public attitudes toward the NCRMD defence have real-world implications for individuals in the forensic mental health system. This study's results did not support attributions engendering punishment goals in an NCRMD context as they do in carceral contexts or affecting NCRMD attitudes. However, the study did provide insight into public perceptions toward the NCRMD defence. These findings suggest that attributional measures need to be refined when used in an NCRMD context, particularly for stability measures. Additionally, results supported the existence of stereotypes that link mental illness and dangerousness, which suggests a need for public education about mental illness and the NCRMD defence to reduce stigma and public misconceptions and improve attitudes toward the NCRMD defence.

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## Appendices

### Appendix A: Measures

#### SGI ATTITUDE SURVEY

On the following pages, you will find statements that express commonly held opinions about punishment and sentencing. We would like to know how much you agree with each of these statements. You may interpret the five points on this scale as follows:

|        |   |          |   |            |   |          |   |               |
|--------|---|----------|---|------------|---|----------|---|---------------|
| 1      | / | 2        | / | 3          | / | 4        | / | 5             |
| DO NOT |   | SOMEWHAT |   | MODERATELY |   | STRONGLY |   | VERY STRONGLY |
| AGREE  |   | AGREE    |   | AGREE      |   | AGREE    |   | AGREE         |

After reading each statement, please select the point on the scale that comes closest to saying how much you agree with the statement.

1. Every conviction and sentence should be well publicized.
2. Criminals should be taught pro-social behavior.
3. Severe sentences are appropriate for offenders who commit serious crimes.
4. The correctional system should develop programs for reintegrating offenders back into society.
5. Emphasis should be placed on keeping criminals behind bars where they can't do any more harm.
6. Criminals should be punished for their crimes in order to make them repay their debt to society.
7. Plea-bargaining should be abolished.
8. Programs should be developed to teach offenders useful working skills.
9. Criminals should be imprisoned until they are too old to commit further crimes.
10. The correctional system should punish offenders in proportion to the seriousness of their crime.
11. A repeat offender deserves greater punishment than a first offender.

|                 |                   |                     |                   |                        |
|-----------------|-------------------|---------------------|-------------------|------------------------|
| <u>1</u>        | <u>2</u>          | <u>3</u>            | <u>4</u>          | <u>5</u>               |
| DO NOT<br>AGREE | SOMEWHAT<br>AGREE | MODERATELY<br>AGREE | STRONGLY<br>AGREE | VERY STRONGLY<br>AGREE |

12. Criminals should be harshly punished as examples to others.
13. Although in prison, offenders should have access to counseling and training in problem-solving skills.
14. Offenders need assistance in becoming productive citizens.
15. Capital punishment is deserved in some cases.
16. Prisons should provide opportunities for offenders to learn appropriate behavior.
17. Trying to rehabilitate prisoners is a worthwhile use of time and money.
18. Serious offenders deserve to be in prisons with strict discipline.
19. If lawmakers would make tougher laws against crime, there would not be so many criminals.
20. Harm to the victim should be considered when setting the punishment for a given crime.
21. Lawbreakers should be made to bear full responsibility for their actions.
22. Treatment should be provided to young, first-time offenders.
23. Long prison sentences help keep our community safer.
24. First-time offenders should be punished to deter them from further illegal acts.
25. Light sentences do not provide enough threat to deter people from crime.
26. Harsher crimes deserve harsher sentences.
27. Emphasis should be placed on changing the offender.

*\*Retributive scale items: 3, 6, 10, 11, 15, 18, 20, 21, and 26*

*\*Utilitarian scale items: 1, 5, 7, 9, 12, 19, 23, 24, and 25*

*\*Rehabilitative scale items: 2, 4, 8, 13, 14, 16, 17, 22, and 27*

## CAUSAL DIMENSION SCALE II SURVEY

Instructions: Think about the news article and why Mr. Smith assaulted someone. The items below concern your impressions or opinions of the causes of his behaviour. Select one number for each of the following questions.

Is this cause(s) something:

|                                    |   |   |   |   |   |   |   |   |   |                                     |
|------------------------------------|---|---|---|---|---|---|---|---|---|-------------------------------------|
| 1. Manageable by Mr. Smith         | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | not manageable by Mr. Smith         |
| 2. Permanent                       | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | temporary                           |
| 3. Mr. Smith can regulate          | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | Mr. Smith cannot regulate           |
| 4. Over which others have control  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | over which others have no control   |
| 5. Stable over time                | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | variable over time                  |
| 6. Under the power of other people | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | not under the power of other people |
| 7. Over which Mr. Smith has power  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | over which Mr. Smith has no power   |
| 8. Unchangeable                    | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | changeable                          |
| 9. Other people can regulate       | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | other people cannot regulate        |
|                                    |   |   |   |   |   |   |   |   |   |                                     |

Scoring: The total scores for each dimension are obtained by summing the items, as follows: 4, 6, 9 = external control; 2, 5, 8 = stability; 1, 3, 7 = personal control.

## IDA-R ATTITUDE SURVEY

On the following pages, you will find statements that express commonly held opinions about the not criminally responsible on account of mental disorder defense. We would like to know how much you agree or disagree with each of these statements. To the right of each statement is a rating scale. You may interpret the seven points on this scale as follows:

|                      |   |          |   |                      |   |         |   |                   |   |       |   |                   |
|----------------------|---|----------|---|----------------------|---|---------|---|-------------------|---|-------|---|-------------------|
| 1                    | / | 2        | / | 3                    | / | 4       | / | 5                 | / | 6     | / | 7                 |
| STRONGLY<br>DISAGREE |   | DISAGREE |   | SLIGHTLY<br>DISAGREE |   | NEUTRAL |   | SLIGHTLY<br>AGREE |   | AGREE |   | STRONGLY<br>AGREE |

After reading each statement, please circle the point on the scale that comes closest to saying how much you agree or disagree with the statement.

1. I believe that people should be held responsible for their actions no matter what their mental condition.
2. I believe that all human beings know what they are doing and have the power to control themselves.
3. The not criminally responsible on account of mental disorder defense threatens public safety by telling criminals that they can get away with a crime if they come up with a good story about why they did it.
4. I believe that mental illness can impair people's ability to make logical choices and control themselves.
5. A defendant's degree of mental disorder is irrelevant: if he commits the crime, then he should do the time.
6. The not criminally responsible on account of mental disorder defense returns disturbed, dangerous people to the streets.
7. Mentally ill defendants who plead not criminally responsible on account of mental disorder have failed to exert enough willpower to behave properly like the rest of us. So, they should be punished for their crimes like everyone else.
8. As a last resort, defense attorneys will encourage their clients to act strangely and lie through their teeth in order to appear "insane."
9. Perfectly sane killers can get away with their crimes by hiring high-priced lawyers and experts who misuse the not criminally responsible on account of mental disorder defense.

|                      |   |          |   |                      |   |         |   |                   |   |       |   |                   |
|----------------------|---|----------|---|----------------------|---|---------|---|-------------------|---|-------|---|-------------------|
| 1                    | / | 2        | / | 3                    | / | 4       | / | 5                 | / | 6     | / | 7                 |
| STRONGLY<br>DISAGREE |   | DISAGREE |   | SLIGHTLY<br>DISAGREE |   | NEUTRAL |   | SLIGHTLY<br>AGREE |   | AGREE |   | STRONGLY<br>AGREE |

10. The not criminally responsible on account of mental disorder plea is a loophole in the law that allows too many guilty people to escape punishment.

11. We should punish people who commit criminal acts, regardless of their degree of mental disturbance.

12. It is wrong to punish people who commit crime for crazy reasons while gripped by uncontrollable hallucinations or delusions.

13. Most defendants who use the not criminally responsible on account of mental disorder defense are truly mentally ill, not fakers.

14. Some people with severe mental illness are out of touch with reality and do not understand that their acts are wrong. These people cannot be blamed and do not deserve to be punished.

15. Many of the crazy criminals that psychiatrists see fit to return to the streets go on to kill again.

16. With slick attorneys and a sad story, any criminal can use the not criminally responsible on account of mental disorder defense to finagle his way to freedom.

17. It is wrong to punish someone for an act they commit because of any uncontrollable illness, whether it be epilepsy or mental illness.

18. I believe that we should punish a person for a criminal act only if he understood the act as evil and then freely chose to do it.

19. For the right price, psychiatrists will probably manufacture a “mental illness” for any criminal to convince the jury that he is insane.

*\*Reverse code items 4, 12, 13, 14, 17 and 18. Sum items 1-19 to yield total score.*

*\*Injustice and Danger items: 3, 6, 8, 9, 10, 13, 15, 16, and 19*

*\*Strict Liability items: 1, 2, 4, 5, 7, 11, 12, 14, 17, and 18*

## **Appendix B: Stimulus**

### *News Article Vignette Legend*

-  Control: high / low
-  Stability: high / low

Manitoba

Man found not criminally responsible on account of mental disorder for assault

Judge finds Manitoban man not criminally responsible for assault at Polo Park during a psychotic episode.

· Posted: September 01, 2023 2:59 PM CDT | Last Updated: 2 days ago



The results of the hearing were announced in Manitoba on Friday. The presiding judge determined James Smith was not responsible for assault on account of mental disorder. (Reported by Justin Tanner)



James Smith, 37, was found not criminally responsible for assaulting a man at Polo Park on the evening of February 13, 2023. Records indicate that Smith has [high stability: a / low stability: no] previous history of violence.

The officers who responded to the incident reported that at the time Smith believed he was defending himself and was unaware that he had assaulted the other man. Smith stated that he would normally have been on his prescription medication, but [high controllability: he didn't want to take / low controllability: he could not afford] it.

Smith was diagnosed with schizophrenia in 2015. Symptoms for schizophrenia are treatable with medication, and Smith had been prescribed medication for treating his condition. At the time of the offense, Smith was not taking his prescribed medication.

Smith stated in court that he could [high controllability: afford his prescription but chose not to take it / low controllability: not afford the prescription because it was not covered by provincial or federal Pharmacare programs].

This [high stability: was not / low stability: was] the first violent criminal offense Smith had committed. In his hearing, Smith stated that he had [high stability: a few run-ins with / low stability: never broken] the law before the incident.

- **City Council to review zoning bylaws for commercial areas not restricted by subsection 4b**

Smith will remain in custody until his review board hearing. Review boards conduct initial hearings for patients found not criminally responsible to determine their potential risk to public safety, and treatment and management needs

**If you or someone you know is struggling, here's where to get help:**

- **Talk Suicide Canada**: 1-833-456-4566 (phone) | 45645 (text between 4 p.m. and midnight ET).
- Kids Help Phone: 1-800-668-6868 (phone), live chat counselling on **the website**.
- Canadian Association for Suicide Prevention: **Find a 24-hour crisis centre**.
- This guide from the **Centre for Addiction and Mental Health** outlines how to talk about suicide with someone you're worried about.

[\*Corrections and clarifications\*](#) | [\*Submit a news tip\*](#) | [Report error](#)

### **Appendix C: Manipulation Checks**

#### ***Control manipulation check***

Was Mr. Smith able to afford his prescription medication?

- a) No.
- b) Yes.

#### ***Stability manipulation check***

Does Mr. Smith have a criminal record?

- a) No.
- b) Yes.