The mind in the courtroom: on forensic mental health reports in judicial decision-making about guilt and sentencing in the Netherlands

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4 Sentencing with(out) forensic mental health information

An experimental vignette study

ABSTRACT

In the Netherlands, a pre-trial forensic mental health report (FMHR) can be requested to inform the court whether a mental disorder was present at the time of the offense, whether this disorder affected behavior and decision-making at the time of the offense, how this disorder may affect future behavior and advise on possible treatment measures. However, a substantial number of defendants refuse to cooperate with FMHRs to avoid being sentenced to a forensic psychiatric hospital for at least two years (TBS). With an experimental vignette study among law and criminology students (N = 355), we tested whether TBS is less likely for an uncooperative defendant than for a cooperative defendant. Second, we tested whether an uncooperative defendant receives a longer prison sentence, when TBS is not imposed. Results showed that refusing to cooperate reduces the likelihood of a TBS measure and that this is compensated by a slightly longer prison sentence. Extending international research, we explored whether type of disorder and recidivism risk in an FMHR had an effect on sentencing. Results show that schizophrenia led to TBS more often than antisocial personality disorder regardless of recidivism risk. Type of disorder or recidivism risk did not substantially affect the prison sentence regardless of whether TBS had been imposed. Recommendations for research and practice are discussed.

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4.1 Introduction and background

Forensic mental health reports (FMHRs) (in Dutch: *pro Justitia-rapportages*) serve an important function in the criminal justice system. In the Netherlands, an FMHR is relevant for sentencing decisions. These pre-trial reports are used to advise professional judges about whether the presence of a mental disorder affected the behavior and decision-making of the defendant at the time of the offense. They also provide an evaluation of whether and how the disorder might affect future (criminal) behavior. Lastly, these reports contain conclusions about criminal responsibility (three degrees: full responsibility, diminished responsibility, no responsibility), a risk assessment and advice on possible treatment measures with appropriate regulations (Hummelen & Van der Wolf, 2018; Koenraadt, 2010; Van Marle et al., 2013).

Defendants, however, are not obligated to cooperate with this forensic mental health evaluation, as they have the right not to incriminate themselves (article 6 European Convention for the Protection of Human Rights and Fundamental Freedoms; section 29 CCP). The number of uncooperative defendants in the Netherlands has increased in the past two decades, from 23% in 2002 to 43% in 2017 (Nagtegaal et al., 2018). An important reason for defendants to refuse cooperation with the evaluation is to reduce the likelihood of being sentenced to a TBS measure (in Dutch: *terbeschikkingstelling*): (involuntary) commitment to a forensic psychiatric hospital (section 37a and 37b CC). In the Netherlands, the TBS measure is the most severe measure that can be imposed for dangerous defendants who suffered from a mental illness at the time of the alleged crime (see Jehle et al., 2021 for a comparison of European countries when dealing with dangerous offenders). For most violent crimes, TBS can be repeatedly extended with one- or two-year increments for an unlimited period and can thus result in a (life-)long period of incarceration (sections 38d sub 2 and 38e sub 1 CC).[1] To reduce the possibility of being sentenced to TBS and the possibility of being incarcerated for a long, potentially indefinite, period, lawyers often encourage their client to refuse cooperation with a forensic mental health evaluation (Nagtegaal, 2018). When judges do not impose TBS due to the suspect's refusal to cooperate, a prison sentence (with a specific maximum) often remains the only option to incapacitate a potentially danger-

1 TBS has two variations: TBS with conditions (section 38 CC) and TBS with forced care (section 37b CC). When a TBS measure with conditions is imposed, the offender has to abide to specific treatment conditions without being forced to receive care. In practice, the offender will usually reside in a forensic psychiatric treatment clinic or rehab facility. An important precondition is that the offender is willing to be treated. A more invasive measure is a TBS measure with forced care. This entails that the offender is placed in a (maximum) secured forensic psychiatric treatment facility to be treated for mental illness for two years. The measure can be repeatedly extended with one- or two-year increments in the case of very serious index offenses (i.e. crimes against physical integrity of the victim which include most violent and sexual offenses and arson).

ous offender convicted of a serious offense (Nagtegaal et al., 2018). The current study aims to test whether TBS is indeed imposed less often with an uncooperative defendant than with a cooperative defendant and whether this is compensated by imposition of a longer prison sentence.

4.1.1 Background

Even without cooperation, it remains legally possible to impose TBS. In such cases, an FMHR from two mental health experts (of which at least one psychiatrist) should be present, explaining that the defendant refused cooperation with the evaluation (section 37a sub 4 CC). Depending on the extent of the uncooperative attitude of the defendant, such FMHRs are less elaborate and do not contain (much) information about possible mental disorders, criminal responsibility, and advice on appropriate sanctions. In such cases, judges have the discretionary power to impose TBS if in their opinion the following legal criteria have been met: 1) presence of a mental disorder[2] at the time of a serious offense,[3] and 2) whether the defendant poses a significant danger to society. Judges can base assessment of these criteria on other information in the case file, such as severity of the offense and frequency of prior convictions (section 37a sub 5 CC). Prior forensic mental health evaluations,[4] and judges' own observations at the court hearing can be informative as well to determine whether a disorder is present.[5] The decision about whether a disorder is present, is ultimately the court's responsibility. The legal criterion of what constitutes a mental disorder is ambiguous (Gröning et al., 2020; Ligthart et al., 2019; Mevis & Vegter, 2011). For example, section 39 CC only states that a defendant who is not criminally responsible for a crime committed by reason of a mental disorder, is excused from punishment. This criterion is very broad and not further specified in law or jurisprudence. The disorder does not have to be classified conform the terminology of the Diagnostic and Statistical Manual of Mental Disorder (DSM-5).[6] Such an open criterion leaves the court with the responsibility to determine if a defendant suffers from a mental disorder, how this translates to criminal responsibility and whether this legitimizes TBS.

2 A mental disease or defect according to section 37a CC. For clarity purposes, we will use the term 'mental disorder'.
3 A serious offense which, according to the statutory definition, carries a term of imprisonment of four years or more, or which constitutes any of the serious offenses defined in the law (see section 37a sub 1 CC).
4 It varies per case whether these are available.
5 ECtHR 3 March 2015, Constancia vs. the Netherlands; Kooijmans & Meynen, 2017.
6 American Psychiatric Association, 2013 and see Dutch Supreme Court 18 December 2012, ECLI:NL:HR:2012:BY5355.

However, judges are often hesitant to determine the presence of a mental disorder themselves because they are laymen with respect to forensic psychiatry. Case analyses have shown that a majority of uncooperative defendants do not receive TBS (about 75%; Nagtegaal et al., 2018; Van der Wolf et al., 2018). Arguments given for not imposing TBS are lack of information or conclusions in the FMHRs, and lack of prior forensic mental health evaluations to establish the presence of a mental disorder (Van der Wolf et al., 2018). Still, judges may believe that an uncooperative defendant accused of a serious offense has mental health problems, which can make him a societal risk. Consequently, in the absence of TBS, judges might be inclined to impose a longer prison sentence. This incarceration can serve the utilitarian goals of community protection and aversion of potential risk (Albonetti, 1991; Jongeneel, 2017; Nagtegaal et al., 2018; Steffensmeier et al., 1998; Van der Wolf et al., 2018). Moreover, the lack of information in the FMHRs of uncooperative defendants also means that potential mitigating information (such as the role of a mental disorder in criminal responsibility) is absent, which might lead to longer prison sentences as well (Jongeneel, 2017; Nagtegaal et al., 2018). In other words, from the defendant´s perspective it is not necessarily wise to be uncooperative with a mental health evaluation. But other than a few studies analyzing verdicts with an uncooperative defendant retrospectively, research in which the role of an uncooperative attitude in an FMHR on sentencing is tested, is lacking.

It is important to note that in the Netherlands, it is possible to combine a prison sentence with a TBS measure when a defendant is considered (partially) responsible for their crimes. Contrary to many other jurisdictions, criminal responsibility is not used as a binary construct (i.e. the defendant is considered either responsible or not guilty by reason of insanity). Many evaluated and cooperating defendants are considered diminished responsible for their crimes (35,2%; Kempes & Gelissen, 2020). Combinations of TBS and a prison sentence are therefore common: in 2018 about 75% of imposed TBS measures were combined with a prison sentence (Raad voor Strafrechtstoepassing en Jeugdbescherming, 2020). A mental disorder can diminish criminal responsibility and mitigate a prison sentence while also be a reason to additionally impose TBS. The prison sentence is then proportionate to the blameworthiness of the offender and meant to fulfil retributive goals (De Keijser, 2000; Hart, 2008; Steffensmeier et al., 1998; Von Hirsch, 2009), while a TBS measure is used to incapacitate the offender to protect society and treat the offender for the purpose of rehabilitation (Albonetti, 1991; Steffensmeier et al., 1998). Because a measure is not intended to inflict suffering, that suffering does not need to be proportionate to the offense or blameworthiness of the offender (for a critical discussion of the Dutch dual-track system of punishments and measures see De Keijser, 2011).

Despite the important role information from an FMHR can have in sentencing decisions, empirical research on how information in an FMHR (e.g. disorder, recidivism risk) is used in sentencing decisions in the Dutch context is lacking

(see review in Chapter 2). This gap in the literature is problematic given the prevalence of FMHRs in trials and judges' discretionary power to decide on the presence of a mental disorder, criminal responsibility, and dangerousness of the defendant. These decisions can have serious consequences for the defendant. As such, more insight in the use of information in FMHRs in sentencing decisions is necessary to benefit the legitimacy of these decisions.

Apart from the aforementioned studies that focused on the uncooperative defendant (Jongeneel, 2017; Nagtegaal et al., 2018; Van der Wolf et al., 2018), a small number of studies used case analysis to explore the correspondence between expert advice in FMHRs and sentencing decisions in the Netherlands. Results show that in most cases (between 86% and 90%) judges follow the conclusions about criminal responsibility and treatment as given by the experts (Boonekamp et al., 2008; Harte et al., 2005; Nagtegaal et al., 2018). Furthermore, one explorative study examined the effect of diminished criminal responsibility on the length of a prison sentence when TBS had also been imposed (Claessen & De Vocht, 2012). Based on published cases, it was shown that diminished responsibility could have a mitigating effect on the prison sentence although this effect can be negated by seriousness of the crime or other circumstances in a case (Claessen & De Vocht, 2012). Whether the mere combination of TBS with a prison sentence acts as a mitigating factor on the length of the prison sentence remains largely unknown. The use of retrospective case analysis is insightful, but poses an important methodological limitation, as it is impossible to determine the exact role of FMHRs in judicial decision-making processes.

Prior research in other jurisdictions have used experimental vignette methods to study the effects of forensic mental health expertise on different sentencing decisions, mostly among mock jurors (see review in Chapter 2), While results were not all consistent, studies demonstrate that the type of disorder matters in decisions about sanction type (i.e. death penalty, involuntary hospitalization). Expert testimony about schizophrenia appears to be a mitigating factor in capital cases (in the United States), while psychopathy aggravates perceptions of dangerousness and (capital) sentencing (Barnett et al., 2004; Berryessa & Wohlstetter, 2019; Edens et al., 2005; Edens et al., 2004; Kelley et al., 2019; Mowle et al., 2016; Saks et al., 2014). However, most of these studies were conducted in the United States and are therefore not easily generalized to the Dutch jurisdiction. Sentencing options for individuals with mental health problems are different in the Netherlands (see above). Furthermore, in contrast to some other jurisdictions (e.g. in the United States), Dutch law and jurisprudence do not provide any regulations or definitions as to what type of mental disorder can affect criminal responsibility or what type of sanction should be imposed (see Beukers, 2017). It is therefore necessary to explore whether type of disorder also affects sentencing decisions in the Netherlands.

4.1.2 Current study

The current study is a first attempt to experimentally study the decision-making in sentencing decisions in cases with a mentally ill defendant in the Netherlands. The following research question is studied: to what extent does an FMHR and the available information about mental disorder and recidivism risk therein affect sentencing decisions in the Netherlands? We focused on two sanction options: TBS and imprisonment. Based on current legislation and legal practice, and the scarcely available studies, we hypothesized that:

1) When a defendant is uncooperative with a forensic mental health evaluation, TBS is less likely than when a defendant cooperates.

When the criteria for imposing TBS are not met as a result of an uncooperative attitude, it is suggested in the literature that a (long) prison sentence often remains the only sentencing option (Jongeneel, 2017; Nagtegaal et al., 2018). We thus expected that in case of an uncooperative defendant decision-makers would increase their focus on incapacitation through imprisonment using their own perception of potential risk to society. Furthermore, there is a lack of potentially mitigating factors in an FMHR to inform their decisions. As such, we hypothesized that:

2) In case TBS is not imposed, an uncooperative defendant will receive a longer prison sentence than a cooperative defendant.

The experimental design of the current study also presents the opportunity to study whether specific information in an FMHR affects sentencing decisions. The legal criterion of what constitutes a mental disorder is very open and not further defined in jurisprudence (Beukers, 2017; Gröning et al., 2020; Ligthart et al., 2019; Mevis & Vegter, 2011). To expand upon prior international research, we therefore explored whether specific mental disorders within an FMHR, namely schizophrenia and antisocial personality disorder (APD), affected sentencing decisions (i.e. imposing TBS and a prison sentence) differently. These disorders were selected based on their use in international research and their prevalence in the Dutch forensic population (Dienst Justitiële Inrichtingen, 2021; Kempes & Gelissen, 2020; Vinkers et al., 2011). Moreover, these disorders often differ in the way that criminal responsibility is attributed based on whether behaviors appear to be tied to personality traits within the individual's control (Edens et al., 2005; Tsimploulis et al., 2018; Weiner, 2010). Consequently, schizophrenia and APD may differ in their mitigating or aggravating effects on sentencing (Barnett et al., 2004; Berryessa & Wohlstetter, 2019; Edens et al., 2005; Edens et al., 2004; Kelley et al., 2019; Mowle et al., 2016; Saks et al., 2014; see Chapter 2). Since specific effects of mental disorders on sentencing decisions have not been studied in the Dutch context yet, we only explored potentially different effects of these disorders. Finally, we explored whether sentencing decisions varied according to information about

risk assessment in the FMHR. Including this factor allowed us to study whether this risk assessment was used to determine the defendant's danger to society, and if effects of a mental disorder occur other than as an (implicit) association with dangerousness and criminality (Edens et al., 2005; Edens et al., 2004; Garcia et al., 2020; Link et al., 1999; Pescosolido et al., 1999; Van der Wolf, 2012).

An experiment allowed us to isolate effects of (aspects of) the FMHR on sentencing decisions. The experimental design and procedure will be explained in the *Method* section (paragraph 4.2) after which the results will be presented in paragraph 4.3. Paragraph 4.4 discusses these results and the implications for future research and practice.

4.2 Method

4.2.1 Participants

Participants were 355 students recruited from law and criminology courses at seven universities in the Netherlands. Law and criminology students served as proxies for professional judges. It is often inevitable to resort to a student sample for quantitative research on legal decision-making in the Netherlands. Permission to recruit sufficient criminal law judges is often denied in the Netherlands because the Council of Judiciary acts as a very strict gatekeeper to prevent overload of courts (see Bosma & Buisman, 2017; Van Spaendonck, 2021). The experimental design in this study (see paragraph 4.2.2) required many participants to guarantee power of the analyses, which could not be achieved by recruiting professional judges in the Netherlands (Simmons et al., 2011).[7] According to the Council, these numbers would produce an overload and burden onto the courts. Permission to conduct this experiment among professional judges was therefore unfortunately denied. However, by using a student sample we could provide for power in our analyses. Law and criminology students are not directly representative of professional judges who decide in criminal cases in the Netherlands and have had years of training and experience (see paragraph 4.4.1 for a discussion about generalizability of the results). Yet, because of their education in criminal law and as prospective legal professionals, these students may be considered to be more representative for decision-makers in the Dutch legal system than other types of students (i.e. psychology students) or members of the general public. The majority of the sample were young (M = 21.46 years; SD = 4.24), female (62.8%) law

7 A power analysis in G*Power (Faul et al., 2007) suggests a sample size of at least 244 participants provides 80% power to detect a relatively small (interaction) effect size (f = 0.2, power = 0.8, α = 0.05; cf. Allen et al., 2019). As such, a sample of criminal law judges was not feasible.

students (83.1%), and in their first year of undergraduate studies (49.3%).[8] Participants were recruited through virtual learning environments and websites of multiple Dutch universities (e.g. Blackboard, Brightspace, Canvas) and via social media (e.g. Facebook and Instagram). The recruitment message presented a link to a 15-minute Qualtrics survey. After giving informed consent, participants were directed to the case summary. No incentives were given for participation and data were collected anonymously. This study was approved by the Committee of Ethics and Data of Leiden Law School.

4.2.2 Design, materials and procedure

4.2.2.1 Case vignette

All participants received a summary of a case file (approximately 1000 words) resembling an actual case file used in Dutch criminal proceedings (see Appendix B). The vignette was adopted and adapted from a study by De Keijser and Van Koppen (2004). In this fictitious but realistic case, a male defendant was accused of aggravated assault with serious bodily harm (section 302 CC). After a night out and multiple beers, the defendant attacked the victim. The defendant and the victim did not know each other. The defendant and the victim had an argument about something the defendant had said to the victim's girlfriend. After that, the defendant followed the victim and his girlfriend and attacked the victim. He kicked the victim against his body and head multiple times. The assault resulted in loss of memory, loss of speech and permanent paralysis according to a neurologist. The defendant confessed and was held in pre-trial detention for 3 months. The defendant was ultimately found guilty of aggravated assault with serious bodily harm.

4.2.2.2 FMHR

After reading the case summary, participants were randomly assigned to either one of eight conditions in a completely between-subjects design. Figure 4.1 provides a schematic representation of this design. The conditions are:

– C1. A condition without an FMHR. This condition allows for analysis of the effect of the mere presence of an FMHR, regardless of its content. This condition was used to test the effects of presence of any FMHR on imprisonment[9] decisions.

8 While almost half of the sample consists of first year students, they were recruited at the end of their first year. Therefore they had completed the introductory course to criminal law.

9 This condition could not be used in decisions about TBS because TBS cannot be imposed when an FMHR is completely absent.

- C2. A condition with an FMHR in which the defendant was uncooperative with the evaluation. This condition did not provide any information about type of disorder, nor about recidivism risk. This condition was used to test the two hypotheses in this study. Furthermore, this condition served as a control condition for the subsequent six conditions in a factorial design in which the defendant cooperated and both type of disorder and recidivism risk were varied.
- C3-C4-C5. These conditions contained an FMHR with a cooperative defendant with an antisocial personality disorder. In these conditions the level of recidivism risk was varied: there was either a low risk (C3), a high risk (C4) or no information about risk at all (C5). The condition without any information about risk is needed to test whether the presence of a mental disorder has a main effect on sentencing decisions regardless of associated recidivism risk.
- C6-C7-C8. These conditions contained an FMHR with a cooperative defendant with schizophrenia. In these conditions the level of risk was varied: there was either a low risk (C6), a high risk (C7) or no information about risk at all (C8).

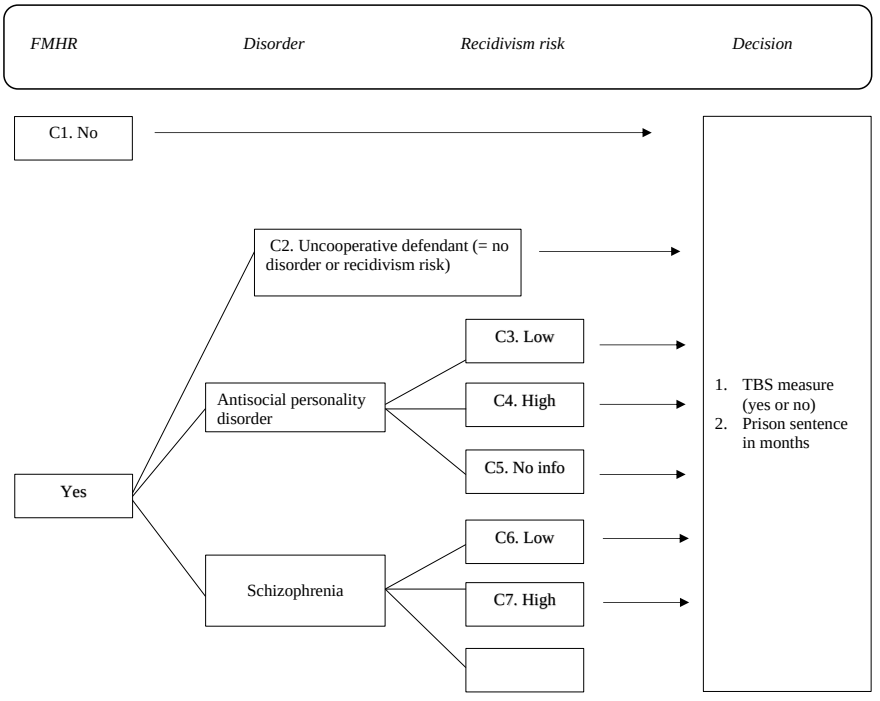

Figure 4.1: Visualization of experimental design.

In the condition with an uncooperative defendant, the FMHR stated that after evaluation in a forensic observation clinic[10] by a multidisciplinary team of experts, no conclusions could be given about the contribution of a possible mental disorder to the offense, advice on criminal responsibility, risk assessment or treatment advice. In the conditions with the cooperating defendant, a fictitious, condensed multidisciplinary forensic mental health evaluation (between 250 and 350 words) by a psychologist and psychiatrist was provided to participants. Use of language in the reports was based on actual FMHRs to make them as realistic as possible.

The disorder in the FMHR with a cooperating defendant was either a personality disorder with antisocial traits (APD) or schizophrenia. In accordance with actual FMHRs in the Netherlands, symptoms of the disorders were described. Symptoms of APD included aggressive impulses, lack of empathy, impairment of impulse control and frustration (American Psychiatric Association, 2013). Symptoms of schizophrenia included impulsive aggression, hallucinations,

10 While most forensic mental health evaluation are done on an outpatient basis (Nederlands Instituut voor Forensische Psychiatrie en Psychologie, 2021), serious cases with uncooperative defendants are often evaluated in a forensic observation clinic (Dutch: Pieter Baan Centrum) for a period of up to seven weeks (this can even be extended to 14 weeks) by a multidisciplinary team of experts (section 196, 198 and 509g CCP).

and delusions (American Psychiatric Association, 2013). This facilitated a similar and comparable interpretation of the disorders among participants. Descriptions and labels of the disorders were based on actual Dutch FMHRs. Regardless of disorder, all evaluations contained information on the contribution of the disorder to the offense, resulting in a conclusion of diminished criminal responsibility. The forensic mental health evaluation also contained an advice that the defendant should be treated for an extensive period and that the defendant was willing to cooperate with treatment. However, no specific treatment options or appropriate legal frameworks were provided in order to test whether and if so, which type of sanction participants would impose (see Appendix B).

The second between-subject factor that was manipulated was recidivism risk. In the conditions with a cooperating defendant, participants either received information about a low recidivism risk, a high recidivism risk (both based on the Historical Clinical Risk Management-20, version 3 [HCR-20v3] (Douglas et al., 2014) or no additional information about recidivism risk (see Appendix B). The complete design of the study with sample sizes per condition is presented in Table 4.1.

Table 4.1: Experimental design of the study

				Decision	
Condition	*Disorder*	*Risk*	*N*	*TBS*	*Prison*
C1. No FMHR (control)	-	-	56	N/A	X
C2. FMHR with uncooperative defendant	-	-	41	X	X
C3. FMHR	APD	Low	49	X	X
C4. FMHR	APD	High	44	X	X
C5. FMHR	APD	-	40	X	X
C6. FMHR	Schizophrenia	Low	34	X	X
C7. FMHR	Schizophrenia	High	38	X	X
C8. FMHR	Schizophrenia	-	44	X	X
			N	278[11]	346[12]

Note. FMHR = forensic mental health report; APD = antisocial personality disorder; – = not present; X = condition used with this outcome measure; N/A = not applicable.

11 The removal of the control condition resulted in the removal of 56 participants from analyses on TBS. Twelve participants chose to impose a compulsory treatment order based on judicial care authorization (section 2.3 Forensic Care Act). Because of its low prevalence and because this is a civil measure (in the Compulsory Mental Health Care Act) we decided to remove these participants from the analyses about TBS to optimize comparability. This resulted in a sample size of 278.

12 The final sample size does not include participants who filled in '0' when they were asked to determine the length of an unsuspended prison sentence (n = 2) or were an outlier based on z-scores (> 3 standard deviations from the mean; n = 7).

4.2.2.3 Procedure and questionnaire

Since we did not expect students to be fully aware of the sanctions that could possibly be imposed in this specific case, we provided them with general guidelines of the available sanction options with their appropriate regulations, requirements, and limitations. First, each participant was asked to impose an unconditional prison sentence with a maximum of 8 years (or 96 months) which is the maximum prison sentence that can be imposed for aggravated assault with serious bodily harm (section 302 CC). Additionally, participants could choose to combine this with other sanction modalities (e.g. a suspended sentence with/without special conditions) or measures. Only in conditions with an FMHR, participants were able to choose TBS with conditions (section 37a CC) or TBS with enforced care (section 37b CC). These options were only available when participants considered the defendant to be diminished responsible or not responsible at all.[13] Conform law and legal practice, TBS options were also provided when the participants assessed the defendant fully responsible for his actions in the condition with the uncooperative defendant (section 37a sub 3 jo section 37 sub 3 CC). The focus of the current study lies on the TBS measure and prison sentence.

To assess whether the manipulations were successful participants rated the criminal responsibility of the defendant on a Likert scale ranging from 1 (*Not responsible)* to 7 (*Fully responsible*). Second, they provided an ordinal decision of criminal responsibility: full responsibility, diminished responsibility, not responsible. In line with Dutch practice, this decision affected whether punishments and measures could be combined. Lastly, participants indicated to what extent they expected the defendant to commit a similar offense in the future on a Likert scale from 1 (*No recidivism*) to 7 (*Absolutely recidivism*). The survey ended with a few questions on demographics (gender, age, study course, university, and year of studies).

4.2.3 Analytical procedure

The control condition (condition 1; see Table 4.1) could not be used in the analyses with the TBS measure, because it is legally impossible to impose TBS if an FMHR is completely absent. This control condition was therefore only used in the analyses with the prison sentence. The two hypotheses in this study

13 Conform Dutch criminal law (section 39 CC), when participants determined that the defendant was not criminally responsible, they could not impose punishment and only impose a treatment measure. Legally, it is also possible to impose a TBS measure when a cooperating defendant is determined to have full criminal responsibility. However, in practice this hardly occurs and in an effort to optimize ecological validity, we filtered out the option to impose a TBS measure when the cooperating defendant was found fully responsible.

were tested using two outcome measures: 1) a binary variable of whether TBS was imposed (no/yes),[14] and 2) a variable reflecting the unsuspended prison sentence in months. To test the first hypothesis, a Chi-square analysis was used to determine whether the choice for TBS differed between the uncooperative and cooperative defendant. We therefore compared condition C2 to a combination of the conditions C3 up to C8 (see Figure 4.1 and Table 4.1). To test the second hypothesis, we used a non-parametric Mann-Whitney test to determine whether the prison sentence differed between the uncooperative (condition C2) and cooperative defendant (combination of conditions C3 up to C8).[15] For the explorative analyses concerning the effects of disorder and risk, Chi square analyses were used for the TBS variable. A two-way ANOVA with Helmert contrasts and a more robust Welch's ANOVA with Games- Howell post-hoc tests were used for the prison sentence.

4.3 RESULTS

4.3.1 Descriptives

There were no significant differences between the conditions regarding sex, age and year or type of studies of the participants. In accordance with the manipulations, participants assessed the criminal responsibility as significantly lower in the conditions with a cooperating defendant and therefore an advice of diminished responsibility (M = 5.20, SD = 1.10), compared to when this advice was not present due to refusal to cooperate (M = 6.61, SD = 0.54, $p <$ .001) or when no FMHR was present (M = 6.52, SD = 0.54, $p <$ .001; Welch's F (2, 117.301) = 117.790, $p <$ .001). All participants across all conditions concluded that the defendant was either diminished, or fully responsible for the offense. Participants also assessed the recidivism risk of the defendant significantly higher in the conditions in which the defendant was predicted to a have high recidivism risk (M = 5.80, SD = 0.96) compared to having a low recidivism risk (M = 4.46, SD = 1.48, $p <$. 001; Welch's F (2, 158.070) = 23.516, $p <$ .001). Recidivism risk in the conditions without information on this risk was assessed as significantly higher compared to when a low indication of risk was provided (M = 5.44, SD = 1.28, $p <$ .001). There was no significant difference in the perception of recidivism risk between the conditions without information on

14 Participants had the opportunity to impose TBS with conditions or TBS with forced care. For analytical purposes, these were combined because the criteria for imposing either one are almost the same.

15 A non-parametric test was performed because assumptions of normality were violated (based on visual inspection, values of Kolmorogov-Smirnov tests and values of kurtosis and skewness and even after removal of outliers (n = 7) based on z-scores > 3 standard deviations of the mean).

recidivism risk and when a high indication of risk was provided (p = .099).[16] The median prison sentence imposed was 24 months (M = 25.1 SD = 12.90, Min = 1 Max = 72, N = 346).

4.3.2 TBS measure

4.3.2.1 Hypothesis 1: When a defendant is uncooperative with a forensic mental health evaluation, imposition of TBS is less likely than when a defendant cooperates

To examine the first hypothesis, we compared the condition of the uncooperative defendant (n = 41) with all the conditions with a cooperative defendant (n = 237). In case of an FMHR with an uncooperative defendant, significantly fewer TBS measures were imposed (7.3%, n = 3) than when an FMHR was present with a cooperative defendant (55.7%, n = 132; $\chi^2(1) = 32.751$, $p < .001$, $\varphi = .343$), supporting our first hypothesis.[17]

4.3.2.2 TBS according to type of disorder and recidivism risk

We further explored differences in TBS between type of disorder and recidivism risk. Table 4.2 presents the proportions of TBS for each condition. There is a main effect of type of disorder. In case of schizophrenia, the proportion of TBS is significantly higher than in case of APD (respectively 68.8% and 44.5%, $\chi^2(1) = 14.060$, $p < .001$, $\varphi = .244$, N = 237). Additionally, we explored the effects of recidivism risk. The overall model was significant ($\chi^2(2) = 6.904$, $p = .034$, $\varphi = .171$, N = 237). Inspection of the adjusted standardized residuals for each level of risk showed that the proportion of TBS was significantly lower for a low risk assessment (45.6%) compared to when no information about recidivism risk was provided (66.3%). The conditions with a high risk did not significantly differ from the other conditions. Further examination of the effect of recidivism risk within the different types of disorder, shows that risk only affected the proportions of imposed TBS measures in case the defendant suffered from APD ($\chi^2(2) = 6.940$, $p = .030$, $\varphi = .233$, N = 237): when information

16 The perceptions of criminal responsibility and recidivism risk show that manipulations were successful. We also used a number of factual stimulus checks in the questionnaire. However, because the main analyses did not differ between the sample with these checks and the sample without checks, we reported the analyses with the full sample to optimize power (cf. Gurley & Marcus 2008; Simmons et al., 2011).

17 Sample sizes were unequal in this analysis (n = 41 versus n = 237). The chi-square test is robust against unequal sample sizes, because the statistics are based on proportions of expected values. The test is valid as long as less than 20% of cells have an expected cell count < 5, which was the case in this analysis (Field. 2013). The effect size of .343 shows a medium strong effect based on the sample size of 278.

about risk was absent with an APD, the proportion of imposed TBS was significantly higher (61.5%) than in the low risk condition.

Table 4.2: Proportion of TBS per type of disorder and level of risk

	Schizophrenia % (*n*)	*APD* % (*n*)	*Total* % (*n*)
Low risk	62.5% (20)	34% (16)	45.6% (36)
High risk	72.2% (26)	40.5% (17)	55.1% (43)
No info on risk	70.7% (29)	61.5% (24)	66.3% (53)
Total	68.8% (75)	44.5%) (57)	55.7% (132)

These results suggest that a disorder of schizophrenia leads to TBS more often than an APD, regardless of a risk assessment. In case of APD, information about risk assessment seems to mitigate the chances of receiving TBS, since in the condition without any information about risk, the proportion of TBS was significantly higher.

4.3.3 Prison sentence

4.3.3.1 Hypothesis 2: In case TBS is not imposed, an uncooperative defendant will receive a longer prison sentence than a cooperative defendant

The second hypothesis in this study focused on the effect of an uncooperative defendant on the length of a prison sentence if TBS was not imposed. Because it was hypothesized that the prison sentence was longer in such cases, we ran the analyses on a subsample of participants who did not combine a prison sentence with TBS (N = 143).[18]

The non-parametric Mann-Whitney test shows that in case of an uncooperative defendant, the prison sentence was significantly longer (M = 29.05, SD = 11.13, Mdn = 30) than when a defendant cooperated (M = 25.79, SD = 13.65, Mdn = 24) (U = 1515.500, z = -2.223, p = .026, r = -0.19, N = 143). To examine if refusing to cooperate aggravates a prison sentence, we compared all conditions to a control condition in which *no* FMHR was present (all else being equal). Although the average prison sentence in the control condition was lower (M = 27.27, SD = 13.79, Mdn = 30) than in the condition with the uncooperative defendant, a non-parametric Kruskall-Wallis test showed that the control condition did not significantly differ from the condition with an uncooperative defendant or the conditions with a cooperative defendant (H(2)

18 This subsample did not differ in demographic characteristics compared to the larger sample of 278.

= 5.550, p =.062, N = 199). This result shows that information in an FMHR about a cooperative defendant is a mitigating factor on the length of a prison sentence, but only when compared to the uncooperative defendant. Refusing to cooperate is thus not used to justify a longer prison sentence (see Figure 4.2).

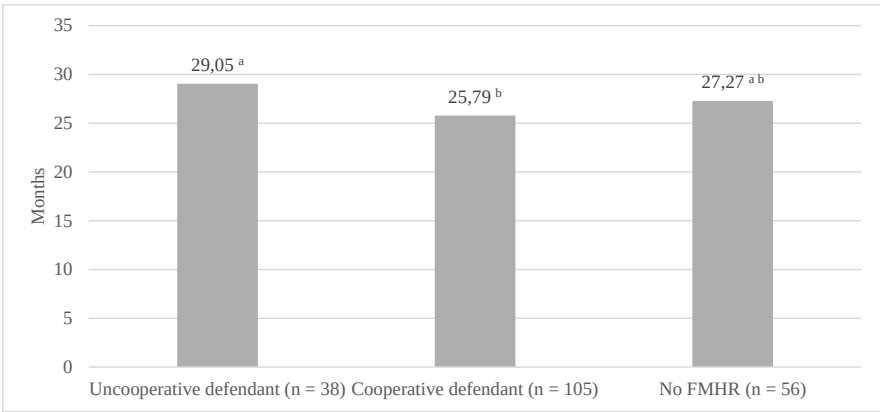

Figure 4.2: Mean prison sentence in months for uncooperative defendant, cooperative defendant, and control condition (no FMHR) when TBS was not imposed

4.3.3.2 *Prison sentence according to type of disorder and recidivism risk when TBS was not imposed*

We further explored whether the effect of an FMHR on the prison sentence differed according to type of disorder within the group that did not impose TBS (N = 105). Those who imposed TBS and those who did not were analyzed separately to reduce any confounding effects of the combination of TBS and a prison sentence. A 2 (Disorder: schizophrenia; APD) x 3 (Recidivism risk: low risk; high risk; no information provided) ANOVA showed a main effect for type of disorder (F(1, 99) = 5.815, p = .018, η_p^2 = .055). The prison sentence was longer in case the defendant suffered from schizophrenia (M = 30.53 months, SD = 19.47) than when he suffered from an APD (M = 23.52 months, SD = 9.42). Neither a main effect of level of recidivism risk (F(2, 99) = 1.021, p = .364, η_p^2 = .020) nor an interaction effect between type of disorder and recidivism risk was found (F(2, 99) = 0.258 p = .773, η_p^2 = .005; see. The left part of Table 4.3 shows an overview of the average prison sentence per condition). Because the assumption of homogeneity of variances was violated for the type of disorder (p < .001) and group sizes were not equal, we also ran a robust Welch's ANOVA to determine whether the main effect of type of disorder was still significant. Welch's ANOvA showed similar results, but only

approached significance (F (1, 40.002) = 3.992, p = .053). Therefore the effect of type of disorder should be interpreted with caution.

4.3.3.3 Prison sentence according to type of disorder and recidivism risk when TBS was imposed

Finally, to explore whether participants who *did* impose a TBS measure adjusted their prison sentence because of diminished criminal responsibility, we ran a 2 (schizophrenia; APD) x 3 (no info on risk; low risk; high risk) ANOvA for this group (N = 132). First, the average prison sentence was not significantly lower when TBS had been imposed (M = 23.28, SD = 12.13, see right part of Table 4.3) than when no TBS was imposed (M = 25.79, SD = 13.65; see left part of Table 4.3, U = 6209.500, z = -1.399, p = .162). The analysis of variance showed no effects for type of disorder (F (1, 126) = 0.998, p = .320, η_p^2 = .008) or information on risk (F (2, 126) = 0.544, p = .582, η_p^2 = .009), nor an interaction effect (F (2, 126) = 1.875, p = .158, η_p^2 = .029; see right part of Table 4.3 for an overview of means per condition).

Table 4.3: Mean prison sentence in months per type of disorder and level of risk when TBS was (not) imposed (M = mean; SD = standard deviation)

	TBS was not imposed (N = 105)			*TBS was imposed (N = 132)*		
	Schizophrenia M (SD)	*APD M (SD)*	*Total M (SD)*	*Schizophrenia M (SD)*	*APD M (SD)*	*Total M (SD)*
Low risk	26.50 (18.03)	22.32 (8.51)	23.49 (11.85)	20.40 (7.16)	23.69 (12.50)	21.86 (9.87)
High risk	32.00 (20.46)	24.48 (9.70)	26.63 (13.75)	26.12 (11.22)	23.24 (10.00)	24.98 (10.72)
No info on risk	33.33 (21.00)	24.40 (9.42)	28.37 (15.96)	25.97 (15.87)	19.13 (11.72)	22.87 (14.43)
Total	*30.53 (19.47)*[a]	23.52 (9.06)[b]	25.79 (13.65)	24.53 (12.54)	21.63 (11.47)	23.28 (12.13)

Note. Significant differences (p = .05) are in italics. Different superscript letters indicate significant differences between conditions.

4.4 DISCUSSION

The aim of the current study was to explore the effects of FMHRs on sentencing decisions in the Dutch legal context. Using an experimental vignette study, we focused on the effects of presence and content of FMHRs on imposing 1) TBS and/or 2) a prison sentence. In accordance with legal practice and based on the scarcely available literature, we first hypothesized that when a defendant is uncooperative with a forensic mental health evaluation, TBS is less likely to be imposed than when a defendant cooperates. Second, we hypothesized that in case TBS is not imposed, an uncooperative defendant will receive a longer prison sentence than a cooperative defendant. Another object-

ive of the current study was to expand upon international research and explore whether different disorders, schizophrenia and APD, as well as information about recidivism risk might affect sentencing differently.

Supporting the first hypothesis, results demonstrated that significantly fewer TBS measures were imposed in case of an uncooperative defendant compared to a cooperative defendant. Apparently, conclusions about the presence of a mental disorder and dangerousness were harder to make when experts could not conclude anything about presence of a mental disorder, criminal responsibility, and risk. The explorative analyses showed that defendants suffering from schizophrenia received TBS more often than defendants suffering from an APD, irrespective of the level of recidivism risk. The level of recidivism risk did matter for defendants suffering from an APD: in this group a low level of risk mitigated the likelihood of receiving TBS.

As was expected in the second hypothesis, when TBS was not imposed, the uncooperative defendant received a significantly longer prison sentence than the cooperative defendant. It should be noted though, that this difference was a little over three months, and the effect size was relatively small (cf. Cohen, 1988). The mean prison sentence of the uncooperative defendant (without a TBS measure) did not differ from the control condition in which an FMHR was absent, indicating that refusing to cooperate was not used as a factor to justify a longer prison sentence. Rather, cooperation to an FMHR serves to mitigate the prison sentence when TBS is not imposed. Furthermore, the results showed no substantial significant differences in prison sentences for defendants suffering from schizophrenia or defendants suffering from APD, regardless of whether TBS was imposed and regardless of the level of recidivism risk. These are contrasting results compared to earlier international studies (from the United States) that found a mitigating or excusing effect of psychotic disorders and an important role for recidivism risk (e.g. Barnett et al., 2004; Berryessa & Wohlstetter, 2019; Blais, 2015; Cox et al., 2010; Edens et al., 2005; Edens et al., 2004; Gurley & Marcus, 2008; Kelley et al., 2019; Mowle et al., 2016; Rice & Harris, 1990; Saks et al., 2014; Weiner, 2010; see Chapter 2). From our findings it appeared that schizophrenia is *not* a mitigating, but even an aggravating factor in sentencing as compared to APD. These results must however be interpreted with caution because the difference only approached significance and only when no TBS was imposed. The sample size for these analyses was lower than the full sample, which may have affected power to detect an effect. Lack of an effect of recidivism risk could also be explained by the lower power in this analysis. Yet another, more substantial, explanation for the lack of such an effect in this study might be the seriousness of the crime in the vignette. This seriousness may have activated more retributive purposes of punishment instead of preventative aims based on risk assessment. Future

research would therefore benefit from varying the type and severity of crimes to test these assumptions.

The exploratory findings further suggest that students deemed defendants with a disorder of schizophrenia and convicted for a violent offense more in need of treatment than defendants suffering from an APD, regardless of the level of risk. Even in the schizophrenia/low risk condition almost two thirds (62.5%) of the participants imposed TBS, even though low recidivism risk can be a contraindication of a TBS measure (section 37a sub 1 CC; Van Spaendonck, 2021). This effect of type of disorder is interesting because in legal practice the specific classification of the behavioral symptoms (e.g. in terms of DSM-5, American Psychiatric Association, 2013) does not play a specific role in decisions about TBS.[19] Yet prior international research has indicated that mock jurors judged that defendants suffering from schizophrenia should spend their sentence in treatment rather than prison (Finkel et al., 1985). Moreover, the idea that defendants suffering from schizophrenia are a danger to society and need to be incapacitated is compatible with studies among the general public that indicate a (stereotypical) association between schizophrenia and perceived dangerousness and violence and subsequent desire to segregate these individuals (Angermeyer & Dietrich, 2006; Corrigan et al., 2003; Link et al., 1999; Pescosolido et al., 1999).

Our study demonstrates that by refusing to cooperate with a forensic mental health evaluation, a defendant can avoid a TBS measure. The absence of TBS is hardly compensated by a prison sentence: the prison sentence of an uncooperative defendant is significantly longer compared to a cooperative defendant, but the difference is a little over three months. The duration of TBS, in comparison, is at least two years, often in addition to a prison sentence (Raad voor Strafrechtstoepassing en Jeugdbescherming, 2020). Even so, avoiding TBS is ill-advised from a societal viewpoint, as an offender with suspected mental health problems associated with criminal behavior is ultimately released untreated.

Results from the current study demonstrate the reluctance to impose TBS when a recent substantive assessment by an expert is completely absent (cf. also Nagtegaal et al., 2018; Van der Wolf et al., 2018). Scholars have questioned whether it is even legitimate for a judge to determine that a mental disorder is present, especially when qualified forensic mental health experts were not able to (Mackor, 2012). An explanation for absence of specific diagnostic information is that forensic psychologists and psychiatrists are not only bound by regulations in the Dutch Criminal Code and Code of Criminal Procedure, but also by their respective professional codes. These professional codes can

19 See Dutch Supreme Court 18 December 2012, ECLI:NL:HR:2012:BY5355.

make experts hesitant to provide tentative information about an uncooperative defendant because disciplinary actions can be taken against them if they do not adhere to these professional codes (Nagtegaal et al., 2018). Nonetheless, there are indications that in the past 10 years judges have increasingly used their discretionary power to establish a disorder and impose TBS when they perceive substantial societal risk and a recent specific diagnosis is absent (Kooijmans & Meynen, 2017; Ligthart et al., 2019; Van der Wolf et al., 2018). The imposition of TBS increased the more substantive information about a mental disorder, criminal responsibility and treatment advice forensic mental health experts are able to provide (Nagtegaal et al., 2018). This emphasizes the importance for experts to provide as much expert information about the mental state of the defendant and the effect this state had on the offense to assist the judge in making the best informed and appropriate sentencing decision (Kempes & Van der Wolf, 2018).

4.4.1 Limitations

Interpretation and generalizability of the results of the current study are subject to several limitations. First, some analyses were done using a subsample. These selections could have affected the power to detect certain effects. As such, some results in this study could be underestimated. Second, as in most inquisitorial legal systems, including the Netherlands, sentencing decisions are made by professional judges. However, it is extremely difficult to obtain permission to approach sufficient judges for (experimental) research in the Netherlands (cf. Bosma & Buisman, 2018; Van Spaendonck, 2021). The experimental design in the current study required a large sample size. Permission to recruit sufficient professional judges for this study was unfortunately denied. We therefore used a sample of university law and criminology students as proxies in a first attempt to isolate specific effects of FMHRs in sentencing decisions. Law and criminology students appear more representative for professional judges than other student populations (e.g. psychology students). To control for the potential lack of knowledge of sentencing practices, we provided participants with an overview of the general legal provisions relevant in the case used in the current study. However, we do not argue that these findings can be directly generalized to professional judges. Therefore, external validity of the results is affected. Professional judges have multiple years of training and therefore may decide differently than students. Our findings on the uncooperative defendant are generally in line with results from previous studies who surveyed actual judicial cases (Jongeneel, 2017; Nagtegaal et al., 2018; Van der

Wolf et al., 2018). Nonetheless, these findings need further rigorous study to determine if these can be generalized to professional judges.

As with much experimental research, the external (ecological) validity of our study is further affected by using a vignette study (Atzmüller & Steiner, 2010; Sniderman & Grob, 2003). The simplified stimulus materials (i.e., a case vignette with a shortened FMHR) and research context (i.e., online) do not correspond with practice in the Dutch legal system in which judges carefully deliberate and incorporate many factors (e.g., severity of the crime, criminal record, other personal circumstances) in their sentencing decisions. However, the use of a vignette enables us to systematically observe (causal) effects of an FMHR and the information presented in these reports on sentencing decisions (Hughes & Huby, 2004). This type of research optimizes internal validity and is a valuable addition to the scarcely available retrospective case analyses. Despite the use of simplified vignettes, all information was representative of a violent criminal case and FMHRs in the Netherlands. As such, this study serves as a first (explorative) start of further empirical research on decision-making on sentencing decisions in cases with a mentally ill defendant in the Netherlands.

4.4.2 Recommendations for future research

We propose a number of recommendations for future research. First and foremost, it is necessary to determine whether our findings can be generalized to professional judges in the Netherlands, but also to other similar (European) civil law systems. The current study provides a first step to further (comparative) research on the use and effects of forensic mental health information on complex decisions about punishment and/or treatment measures. Moreover, further research is needed to address *how* judges exactly use the FMHR and the variety of information in these reports in their decision-making. Based on the current research method and design we cannot determine which specific information in an FMHR is most valuable to decision-makers and how information in an FMHR interacts with other important and unique factors in a case (e.g. severity of the crime, criminal record, treatment history) to reach a final sentencing decision. Qualitative research using interviews or focus groups can provide more insight into this complex decision-making process and (penal) attitudes and motivations that underpin these decisions (cf. De Keijser, 2011; Van Spaendonck, 2021).

Second, the current study focused on one specific treatment measure: TBS. The Netherlands has a wider array of measures available to use when mental health problems contributed to the offense. More recently, the Forensic Care

Act came into force providing the court with the authority to divert defendants out of the criminal justice system and into mental health care at any point during the criminal proceeding (e.g. care authorization; section 2.3 Forensic Care Act). The focus of current study was not on these (civil) measures. Future research should incorporate these novel provisions to gain more insight in the dynamic and evolving sentencing practice concerning offenders with mental health problems.

Third, the aforementioned debate about the discretionary power of judges on establishing a mental disorder in an uncooperative defendant requires further research (Nauta, 2021). The current study focused on a fully uncooperative defendant, so experts did not provide any information about disorder or risk. Prior research found that the frequency with which TBS is imposed in case of an uncooperative defendant depends on the level of non-cooperation and thus the amount of information about a mental disorder, criminal responsibility, and advised treatment options forensic mental health experts are able to provide (Nagtegaal et al., 2018). Hence, future (experimental) research might benefit from varying in *the extent* of uncooperativeness, and thus the degree of available information that experts can provide (cf. Kempes & Van der Wolf, 2018 who showed that experts differ in substantive conclusions they can provide about a uncooperative defendant). Such studies can provide insight into the minimum amount of information considered necessary by decision-makers to impose TBS when a defendant is not cooperating, This is relevant given recent initiatives to gain more information about the mental health problems of uncooperative defendants. These include a special ward to observe the behavior of uncooperative defendants more elaborately, and expansion of legal authority to receive medical information without the defendants' consent (section 37a sub 6-9 CC) (Nagtegaal et al., 2018).

Finally, our explorative analyses showed that type of disorder diagnosed in an FMHR affects decisions concerning TBS even though the diagnostic label is of less importance in such decisions. This finding signals the need to incorporate this result in future research, but more importantly to adequately educate legal professionals about the complex interaction between mental illness and (criminal) behavior. It is important that sentencing decisions are based on accurate forensic psychiatric assessment and not on (stereotypical) perceptions about a defendant's (future) behavior. An optimal informed decision contributes to the credibility and thus legitimacy of judicial decisions in these serious and much publicized cases.

4.4.3 Concluding remarks

This study is the first to experimentally investigate the effects of FMHRs and the information in these reports on sentencing decisions in the Netherlands. Our study demonstrated that by refusing to cooperate with a forensic mental health evaluation, a defendant can avoid a TBS measure and that this is only compensated by a slightly longer prison sentence. Findings also seem to suggest that a stereotypical association between certain mental disorders (i.e. schizophrenia) and dangerousness can have an effect on sentencing. However, the conclusions are tentative and further research is essential. Despite regular use of FMHRs in courts, empirical research on how these reports are used in judicial decisions is still in its infancy. We hope that insights from this study generate new avenues of research to be explored. Research among legal professionals is necessary to test findings from the current study and explore this topic even further. Expanding our knowledge can be used to optimize the use of FMHRs in sentencing decisions to accommodate both needs of a mentally ill offender and society to prevent future harm.