

Risk in the eye of the beholder

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Summary

There were two primary aims of the research conducted to produce this dissertation. First was to investigate whether external or internal sources of bias influence trained clinical mental health evaluators' ratings and judgments of an examinee's violence recidivism risk using a structured risk assessment instrument (SRAI). The findings presented in the HCR-20 study (Chapter 3) indicated that HCR-20 scores and risk judgments were significantly related to evaluator attitudes toward offenders, but not to media exposure. The second aim was to examine whether bias affects mock jurors' use of SRAI information in making estimates of an individual's likelihood of recidivism risk and whether individual juror characteristics affect this relationship. As indicated by the findings in the studies in Chapters 4–6, risk-irrelevant contextual information had a biasing effect on mock jurors' estimates of sexual recidivism risk and recommendations for civil commitment. A risk estimate derived from an SRAI was mostly, but not completely, effective in mitigating the effects of bias on mock jurors' estimates of sexual recidivism risk. Finally, forensic clinicians' ratings of potential bias correction strategies were obtained to examine which strategies they believe may be effective in avoiding bias, the results of which may guide further research efforts to empirically test strategies to mitigate bias in forensic evaluations.

Structured risk assessment instruments have gained increased influence over the past several decades as a valid method for discriminating between people who are at high risk of criminal, violent, or sexual recidivism from those who are at low risk of recidivism. In the introductory chapter to this dissertation (Chapter 1), I discussed the importance of violent and sexual recidivism risk estimates to forensic mental health clinicians and legal decision-makers (i.e., judges and jurors). I explained the methods of evaluating recidivism risk, and specifically

the use of SRAIs for this purpose. I also presented previous research findings that indicate that cognitive bias resulting from factors external or internal to a forensic evaluator can affect the ratings they provide using an SRAI. In addition, I discussed research indicating there are external and internal factors that have the potential to bias jurors' interpretations of an SRAI risk estimate. Finally, I discussed a few strategies that are potentially promising to mitigate the potential for bias to affect forensic risk evaluations.

Forensic mental health practitioners often use SRAIs to estimate recidivism risk, as well as to identify potential treatment targets to reduce the risk of violent or sexual reoffending, and to develop plans to mitigate the risk of reoffending. For example, the findings reported in Chapter 2 of this dissertation indicate that Dutch forensic mental health practitioners use an SRAI always or most of the time when conducting a forensic risk evaluation and they rate SRAIs as very useful for this task. Despite the high rate at which SRAIs were used among the survey respondents, they nevertheless expressed concerns that cognitive bias may affect a forensic risk evaluation they performed themselves, as well as those performed by their colleagues.

Regarding bias correction strategies, survey respondents endorsed using structured evaluation methods as the most effective strategy to minimize the potential for bias in a forensic risk evaluation. They also provided high ratings to several other debiasing strategies including continuing to learn after completing formal education and training, investigating all relevant data before forming an opinion and basing conclusions and opinions on sound data, and being an active consumer of scientific knowledge, among others. Although several scholars have written recently about the potential for bias to affect forensic evaluations, empirical testing of potential debiasing strategies with respect to forensic evaluations is notably limited.

Another significant gap in research regarding forensic evaluations is identifying how cognitive bias that results from factors external to the evaluator or individual evaluator characteristics affects evaluator ratings of violent recidivism risk using an SRAI. Therefore, the experimental study presented in Chapter 3 tested the effects of media exposure and evaluator attitudes toward offenders on their ratings of an examinee's risk of violent recidivism using the HCR-20^{V3}. Contrary to expectations, negative media about a forensic examinee resulted in significantly fewer final risk judgments indicating high risk among evaluators exposed to the media as compared to a control group that based their ratings solely on case file information. Yet, evaluator attitudes toward offenders significantly predicted lower HCR-20 total scores and were significantly correlated with lower ratings of the examinee's clinical risk, risk management, and risk for imminent violence. These findings add to previous research that indicates SRAIs cannot be presumed to eliminate the effects of all sources of bias.

The second aim of this dissertation was to examine the extent to which a sexual recidivism risk estimate derived from an SRAI mitigated the biasing effects of risk-irrelevant contextual information on mock jurors' estimates of sexual recidivism risk in a Sexually Violent Predator (SVP) civil commitment case. One of the legal criteria that must be met to civilly commit a person under a so-called SVP statute is that the SVP *respondent*—the person whom the government seeks to commit—is more likely than not to engage in sexual reoffending. Jurors, who often decide these cases, hear expert testimony about the respondent's sexual recidivism risk based on an actuarial risk estimate, although they appear relatively insensitive to this estimate compared to other factors.

Because previous research indicates that mock and actual jurors give little weight to expert testimony about sexual recidivism risk estimates, whether some individual characteristics

among mock jurors had a direct or indirect effect on their estimates of an SVP respondent's sexual recidivism risk were examined. The individual characteristics included mock jurors' level of need for cognition, asymmetrical skepticism toward an SRAI risk estimate, and mock jurors' perceptions of people who have committed a sexual offense (PCSO).

A sexual recidivism risk estimate derived from an SRAI was effective in mitigating bias created by risk-irrelevant contextual information in the studies presented in Chapters 4 and 5. In the study in Chapter 4, there was no moderating effect of mock jurors' level of need for cognition on risk-irrelevant contextual information about the SVP respondent and mock jurors' estimates of the respondent's risk of sexual reoffending. However, because the level of need for cognition was relatively high among the mock jurors in the sample, the possibility that mock jurors who are lower in need for cognition would have showed relatively less sensitivity to the SRAI risk estimate cannot be excluded.

In the study presented in Chapter 5, an SRAI sexual recidivism risk estimate again mitigated the effects of bias among mock jurors toward the SVP respondent based on risk-irrelevant contextual information. However, there was no evidence to support an asymmetrical skepticism effect toward an SRAI risk estimate, such that mock jurors gave lower ratings to the accuracy and reliability of the SRAI when it conflicted with their initial impression of the SVP respondent. In fact, mock jurors overall rated the SRAI risk estimate as significantly less accurate and reliable when the risk estimate indicated below-average risk of sexual recidivism than when it indicated above-average risk. Yet, there is reason to suspect that in the studies in Chapters 4 and 5, mock jurors may have given relatively more weight to an SRAI risk estimate because they did not perceive the SVP respondent as a "stereotypical" sex offender.

In the final study presented in Chapter 6, using the same design as the study presented in Chapter 4, the SRAI risk estimate did not eliminate the biasing effects of risk-irrelevant information on mock jurors' estimates of the SVP respondent's risk of sexual recidivism. Although the difference between the average sexual recidivism risk estimates rendered by the two groups of mock jurors was significant, the small magnitude of the difference makes it unlikely to have much (if any) practical significance. However, the SRAI risk estimate did mitigate the effects of bias on civil commitment decisions in that there was no significant difference between the contextual information groups with respect to the proportion who voted for civil commitment.

Nevertheless, there was a significant direct effect of mock jurors' preexisting perceptions of PCSOs on their estimates of the SVP respondent's sexual recidivism risk, such that more negative attitudes predicted higher risk estimates both before and after receiving the SRAI risk estimate. Furthermore, mock jurors' level of support for harsh sentencing and restrictive management of PCSOs in the community significantly predicted votes for civil commitment both before and after receiving the SRAI risk estimate. Taken together, these results indicate that mock jurors' estimates of the SVP respondent's risk of sexual recidivism and recommendations for civil commitment were significantly influenced by their preexisting perceptions of PCSOs.

The final chapter (Chapter 7) provided a summary of the major empirical findings from the preceding chapters and placed these findings in the context of previous research that indicates that variations in SRAI ratings can be attributed to factors that are unrelated to the examinee's risk of violent or sexual recidivism, thereby indicating potential errors related to bias. Theoretical and practical implications for forensic mental health practice and legal decision-making were addressed. Finally, the limitations of the studies and directions for potential future research that

examines the potential for bias to affect completion of SRAIs or interpretations of a risk estimate derived from an SRAI were addressed, followed by concluding remarks.

Overall, the findings from the studies presented in this dissertation provide further evidence that while SRAIs can be effective in mitigating the effects of cognitive bias with respect to some types of risk-irrelevant contextual information, they may be less effective in doing so with respect to internal sources of cognitive bias. The findings also demonstrate the importance of developing other reliable methods of debiasing in forensic risk evaluations. Although SRAIs can help organize risk-relevant information, ultimately, perceptions of recidivism risk appear to be in the eye of the beholder.