

## **BETTER TOGETHER**

2018 ATSA Conference | Friday October 19 | 10:30 AM – 12:00 PM

**F-10**

### **How Should We Communicate Offender Risk to Laypeople?**

L. Maaïke Helmus, Ph.D

Particularly in the area of sex offender risk assessment, there have been numerous advances in developing different types of risk communication metrics (e.g., percentiles, risk ratios, recidivism estimates) for different risk scales, and developing a standardized language for communicating risk. While there is considerable research supporting the validity of many commonly used structured offender risk assessment scales, we know much less about whether people understand the results of these scales, and how to best report the results to facilitate understanding and effective risk management decisions. Variables that could impact understanding of the risk assessment could include features about the offender, how the information is communicated, and features about the person receiving the information.

This symposium will present several linked studies examining factors that may influence how people understand risk assessment information that is communicated to them. This larger study is a collaboration between scholars from New Zealand, Canada, and the United States. MTurk data ( $N > 2,500$ ) is currently being collected, and participants are assigned to one of six studies, with each study examining different manipulations to explore optimal risk communication.

#### **Same Score, Different Message? A Replication/Extension of Varela et al. (2014)**

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A recent study by Varela, Boccaccini, Cuervo, Murrie, & Clark (2014) found that juror comprehension ( $n = 211$ ) of Static-99R risk assessment data might be poor, particularly for risk ratios. They also found that jurors were most receptive to risk results indicating a high level of risk. This presentation will describe two studies, one replicating and one expanding on the study by Varela et al. (2011). Using the same survey materials, data were collected

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from approximately 250 participants from Amazon's Mechanical Turk. Each participant read one vignette about an offender and the results of a risk assessment scale. Manipulations included score (low or high) and risk communication method (risk ratio, recidivism estimate, and nominal risk label). A second study extended these findings with a sample size of 1,000 participants from Amazon's Mechanical Turk, manipulating score (low/high), risk communication (percentile, recidivism estimate, risk ratio, risk level, or all 4 combined), and also manipulated the type of offence committed by the offender (e.g., sex offence against an adult, sex offence against a child, violent offence, and domestic violence offence). Participants answered questions about offenders' risk/dangerousness and their perceived influence of the risk assessment information and other variables on their responses. Analyses will be compared to the results of Varela et al., with particular attention to whether the findings differ as a function of offence type.

### **Learning Goals:**

After attending this presentation, audience members will be able to:

- Discuss whether risk ratios, recidivism estimates, and percentiles assist laypeople in distinguishing between high and low risk offenders, and which metric results in highest discrimination
- Discuss whether combining risk ratios, percentiles, and recidivism estimates leads to better discrimination overall than any one metric alone
- Identify whether the pattern of findings differ for violent offenders, domestic violent offenders, sex offenders against adults, and sex offenders against children

### **How Do Adversarial Allegiance, Race, and Treatment Influence Risk Communication?**

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Recent research reveals alarming allegiance effects in forensic risk assessments, whereby risk scores presented Crown-retained experts tend to be significantly higher than risk scores presented by Defence-retained experts. It is unknown to what extent this effect is known to laypeople (e.g., potential jurors) and whether it will impact their interpretation of risk assessment information. Also unclear is the extent to which offender characteristics such as race and treatment participation may also impact risk interpretation, all other things being equal.

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Data were collected from two studies from Amazon’s Mechanical Turk. In the first study (approximately 300 participants), participants read vignettes about offenders with the following manipulations: score (high/low), description of risk level (e.g., nominal labels of “high” or “low” versus descriptions of the Justice Center’s Standardized Risk Levels), and source of the risk results (Crown, defence, court-appointed). In the second study (approximately 600 participants), the vignettes had the following manipulations: score (high/low), race (African-American, Caucasian, Latino, Native American, Asian, Middle Eastern), and treatment participation (completed or did not complete). Participants answered questions about offenders’ risk/dangerousness and their perceived influence of the risk assessment information and other variables on their responses. Analyses will examine the extent to which adversarial effects, offender race, and treatment participation moderate laypeople’s interpretation of risk assessment results.

### **Learning Goals :**

After attending this presentation, audience members will be able to:

- Discuss whether and how laypeople differentially interpret risk assessment information that is provided by Crown, Defence, or a court-appointed expert.
- Discuss whether and how offender race impacts interpretation of risk assessment information
- Discuss whether and how treatment participation impacts interpretation of risk assessment information

### **Does Using Graphs Help in Certain Types of Risk Communication?**

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Research into the benefits of graphs in risk communication has had somewhat mixed results. It is possible that the helpfulness of graphs depends on the type of information being communicated, and the type of person to whom we are communicating.

Data were collected from Amazon’s Mechanical Turk (approximately 400 people). Participants read vignettes about offenders with either a high or low risk score, and these results were communicated either as a percentile, a risk ratio, or as an absolute recidivism estimate. Additionally, each participant either received the numerical information on its own, or with a graph. Participants answered questions about offenders’ risk/dangerousness and their perceived influence of the risk assessment information and

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other variables on their responses. Participants also completed measures assessing both objective and subjective senses of numeracy. Analyses will explore whether the addition of graphs appeared to assist in distinguishing high risk from low risk offenders, and whether this effect may depend on the type of risk metric being communicated, as well as how comfortable the participants are with numbers (assessed both objectively and subjectively).

### **Learning Goals:**

After attending this presentation, audience members will be able to:

- Discuss the impact of graphs in facilitating discrimination between high and low risk offenders
- Discuss whether graphs of certain types of data (e.g., percentiles, risk ratios, recidivism estimates) appear to be more helpful in risk communication
- Discuss the extent to which the utility of graphs is moderated by recipients' objective numeracy and subjective comfort with numbers

**L. Maaike Helmus, Ph.D.** is part of the Forensic Assessment Group. Her research has focused on offender risk assessment, particularly regarding risk scale development and validation, and risk assessment for subgroups such as sex offenders, domestic violence offenders, and Indigenous offenders. She is part of the development team for Static-99R, Static-2002R, BARR-2002R, STABLE-2007, ACUTE-2007, and the Risk of Administrative Segregation Tool (RAST), as well as being a certified trainer for Static-99R, Static-2002R, and the BARR-2002R. Winner of the prestigious Governor General's Gold Medal for her work in risk assessment, Dr. Helmus has been the recipient of numerous grants and awards from organizations including the Association for the Treatment of Sexual Abusers (ATSA) and the Social Sciences and Humanities Research Council of Canada.

**Daniel Murrie, Ph.D.** serves as Director of Psychology at the *Institute of Law, Psychiatry and Public Policy* (ILPPP), is a Professor in the Department of Psychiatry and Neurobehavioral Sciences at the *University of Virginia School of Medicine*, and an instructor in the *UVA School of Law*. Dr. Murrie's teaching duties involve training psychologists and psychiatrists in forensic mental health assessment, including sex offender risk assessment. As a forensic psychologist, he performs a variety of criminal and civil forensic evaluations of juveniles and adults, including many related to sexual offending. As a researcher, Dr. Murrie has co-authored 50 peer-reviewed scientific publications, three books, and numerous book chapters, all addressing forms of forensic mental health evaluation, including psychopathy assessment and sex offender risk assessment.

**N. Zoe Hilton, Ph.D., C.Psych.**, is associate professor of psychiatry at the University of Toronto, senior research scientist at the Waypoint Research Institute, Waypoint Centre for Mental Health Care, and a registered psychologist. Her research publications primarily concern interpersonal violence, risk assessment, risk communication, and the Ontario Domestic Assault Risk Assessment (ODARA).