Formulation of Violence Risk Using Evidence-Based Assessments: The Structured Professional Judgment Approach

To appear in: Sturmey, P., & McMurran, M. (Eds.). (2011). *Forensic case formulation*. Chichester, UK: Wiley-Blackwell.

Stephen D. Hart

Simon Fraser University and University of Bergen

Caroline Logan

Greater Manchester West Mental Health NHS Foundation Trust and University of Manchester

Author Note

Stephen D. Hart, Department of Psychology, Simon Fraser University, and Faculty of Psychology, University of Bergen; Caroline Logan, Adult Forensic Mental Health Services Directorate, Edenfield Centre, Greater Manchester West Mental Health NHS Foundation Trust and School of Community Based Medicine, University of Manchester.

The views expressed herein are those of the authors and do not necessarily reflect those of their authors or any other organization with which they are affiliated. The authors contributed equally to the preparation of this chapter.

Address correspondence to Stephen D. Hart, Department of Psychology, Simon Fraser University, 8888 University Drive, Burnaby, British Columbia, Canada, V5A 1S6. E-mail: hart@sfu.ca

Formulation of Violence Risk Using Evidence-Based Assessments: The Structured Professional Judgment Approach

Formulation of violence risk has been a neglected topic in forensic mental health. This neglect may have been due to the proliferation of actuarial risk assessment procedures in the 1990s and 2000s, procedures that (as we will discuss) do not provide a basis for thinking sensibly about formulation. Thankfully, it appears the field is shifting away from numbers-based actuarial thinking about violence risk and toward evidenced-based clinical thinking—or, as Hart (2008) put it, from formula to formulation.

Our goal in writing this chapter is to help stimulate discussion and improve practice with respect to the formulation of violence risk. The first part of the chapter discusses the practice of violence risk assessment. We define evidence-based risk violence assessment and describe two major approaches, focusing on a group of discretionary procedures known collectively as *structured professional judgment (SPJ) guidelines*. In the second part, we discuss formulation in (forensic) mental health and then review approaches to formulation of violence risk, including the SPJ approach. The third and final part presents a case study that illustrates formulation of violence risk using SPJ guidelines.

Part 1: The Practice of Violence Risk Assessment

Violence risk assessment and management are critical elements of the delivery of forensic mental health services by professionals from disciplines including psychology, psychiatry, nursing, social work, and occupational therapy (Hart, 2001; Doyle & Dolan, 2002). Forensic mental health professionals have various legal and ethical duties to prevent violence. One set of duties, owed to the general public, involves protecting them from violence perpetrated by people treated in community settings. A second set of duties, owed to health care staff and

service users, involves protecting them from violence perpetrated by people treated or detained in institutional settings. Finally, a third set of duties, owed to people who receive services, is to help them avoid the self-harmful consequences of perpetrating violence in either community or institutional settings.

There have been many advances in the field of violence risk assessment over the past two decades or so (Hart, 2006; Monahan, 2006). Epidemiological research has revealed that violence is not the rare phenomenon it was once believed to be, but rather a pervasive social problem that takes many distinct forms. Also, epidemiological and clinical research has identified important risk factors for various forms of violence. These risk factors are characteristics of people and the social and physical environments in which they live that appear to play a causal role in violence.

The advances in risk assessment were not limited to research. The growing research literature provided a solid foundation for the development of evidence-based risk assessment procedures. These procedures are designed for use in forensic mental health settings, as well as in general mental health, corrections, law enforcement, and other settings. They structure the way that evaluators gather, weigh, and combine information so that their risk assessments reflect current views of best practice. No longer are evaluators forced to rely solely on personal experience, intuition, or instinct when conducting violence risk assessments. Evaluators now have access to a host of risk assessment procedures, each designed for use in specific settings, with specific populations, and for specific forms of violence.

What is Evidence-Based Violence Risk Assessment?

Evidence-based means an action or decision was guided by, based on, or made after reviewing relevant information in the form of observation, research, statistics, or well-validated theory (Sackett & Rosenberg, 1995). The concept, now used widely in many disciplines, was

popularized in medicine, where the classic definition is "the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients" (Sackett, Rosenberg, Muir Gray, Haynes, & Richardson, 1996, p. 71).

With respect to the assessment of risk for violence, there is a large evidence base. For example, considerable attention has been devoted to the identification of (putative) risk factors for violence. Thousands of studies have been conducted around the world by researchers from various disciplines, and there have been several excellent summaries of the research literature in recent years (e.g., Otto & Douglas, 2010). Other research has examined the efficacy of various forms of treatment or the impact of moderators, such as age, on violence. Causal theories of violence also have been developed. Yet the evidence base is still insufficient to identify exactly what are critical risk factors, how they relate to each other, or the causal roles they play with respect to violence.

Evidence-based assessment of violence risk, then, may be defined as *the process of gathering information about people in a way that is consistent with and guided by the best available scientific and professional knowledge to (a) understand their potential for engaging in violence against others in the future and (b) determine what should be done to prevent this violence from occurring* (Hart, 2009). But even those who accept this definition in principle may have widely divergent views concerning how to apply it in practice. In abstract or general terms, the concept of evidence-based decision making is widely recognized and accepted across disciplines. But the devil is in the details. There is considerable disagreement concerning even a basic definition of evidence-based decision making (e.g., Justice, 2008; Tanenbaum, 2005; Timmermans & Mauck, 2005). Disagreement concerning its principles and practice is even more pronounced (Miles, Polychronis, & Grey, 2006), especially with respect to cumulating disparate

and contradictory research findings, using research based on individuals to make systems-level decisions (and vice versa), and incorporating values and ethics into the decision making process (e.g., Atkins, Slegel, & Slutsky, 2005; Borry, Schotsmans, & Dierickx, 2006; Kemm, 2006; Steinberg & Luce, 2005).

Opinions about evidence-based practice with respect to assessment of violence risk generally fall into two camps. On the one hand are people who hold broad views, a group that may be characterized as *latitudinarian* (Hart, 2003a). They consider evidence-based decision making to be a guiding philosophy, core value, or aspirational standard. They believe 'evidence-based' describes the general process underlying a decision, not just the specific procedures use to make the decision. They emphasize that the evidence base itself is always inadequate, flawed, or incomplete, and decision makers must always use their judgment or discretion to fill in the gaps. On the other hand are people who hold narrow views, who may be characterized as *orthodox* (Hart, 2003a). They consider decision making to be evidence-based only when the specific procedures used are directly derived from or supported (i.e., confirmed or validated) by empirical research. They emphasize the frailties and inadequacies of human cognition, and so attempt to find ways to minimize reliance on judgment or discretion.

The debate between those with broad versus narrow views of evidence-based assessment of violence risk is active and intense in the field. Unless one appreciates the profound difference between latitudinarian and orthodox views, it is difficult to appreciate how the search for evidence-based risk assessment has led professionals in such different directions, as we will discuss below.

Approaches to Evidence-Based Violence Risk Assessment

There are two basic evidence-based approaches to reach opinions about violence risk:

discretionary and non-discretionary (e.g., Meehl, 1954/1996; Monahan, 1981/1995, 2006). These terms refer to how information is weighted and combined to reach a final decision, regardless of the information that is considered and how it was collected (Meehl, 1954/1996).

The hallmark of the discretionary approach – also referred to as the clinical or judgmental approach – is that the evaluator exercises substantial professional judgment in the decision-making process, including which information to consider and how to gather it, as well as how to weight and combine it. It is sometimes characterized as "informal, subjective, [and] impressionistic" (Grove & Meehl, 1996).

In contrast, the hallmark of the non-discretionary approach – also referred to as the actuarial or statistical approach – is that, based on the information available to them, evaluators make an ultimate decision according to fixed and explicit rules, developed *a priori* (Meehl, 1954/1996). It is also generally the case that the non-discretionary approach relies on empirical research to determine which information to consider, how to gather it, and how to weight and combine it. It is very specific in focus, designed to predict certain outcomes over certain timeframes in certain populations. The non-discretionary approach is sometimes characterized as "mechanical" and "algorithmic" (Grove & Meehl, 1996).

It is worth noting here that, to some extent, all violence risk assessment is discretionary. Even when using "non-discretionary" risk assessment procedures, professionals still must use their judgment to determine which procedure to use and how to administer, score, and interpret the procedure. Furthermore, the use of non-discretionary procedures does not constitute a comprehensive evaluation, and evaluators typically are urged or required to consider the relevance of information in addition to that included in the procedure, such as aging or physical health or condition. Finally, non-discretionary risk assessment procedures provide limited, if any,

guidance concerning the identification of potentially effective risk management strategies.

Discretionary procedures.

The discretionary approach comprises three major procedures. The first is *unstructured professional judgment,* also referred to as *unaided clinical judgment*. This is decision-making in the complete absence of structure, a process that is fairly and accurately characterized as "intuitive" or "experiential." Historically, it is the most commonly used procedure for assessing violence risk and therefore is very familiar to mental health professionals, as well as to courts and tribunals. But there is no way to determine the extent to which unstructured professional judgment was informed, guided, or structured by the scientific and professional literature. Also, there is no body of scientific evidence supporting the usefulness of unstructured professional judgments of violence risk. Despite its strengths, then, unstructured professional judgment cannot be considered evidence-based according to either narrow or broad definitions and we will not consider it further in this chapter.

The second is referred to *anamnestic risk assessment* (e.g., Otto, 2000). Anamnesis–from the Greek for "remembrance" or "recollection"–refers to the process of history-taking in medicine. Anamnestic risk assessment imposes a limited degree of structure on the evaluation process to the extent that the evaluator must, at a minimum, identify the personal and situational factors associated with the offender's past violence. The assumption here is that a series of events and circumstances, a kind of behavioural chain, led up to the offender's act of violence. The evaluator's task therefore is to understand the links in this chain and suggest ways in which the chain could be broken. But anamnestic risk assessment cannot be considered evidence-based for the same reasons that unstructured professional judgment cannot, and so we will not consider it further.

The third procedure is *structured professional judgment*, also known as *guided clinical judgment*. Here, decision-making is assisted by guidelines that have been developed to reflect the "state of the discipline" with respect to scientific knowledge and professional practice. Such guidelines—sometimes referred to as clinical guidelines, consensus guidelines, or clinical practice parameters—are quite common in medicine, although used less frequently in psychiatric, psychological, or correctional assessment (Kapp & Mossman, 1996). Structured professional judgment procedures are evidence-based according to both broad and narrow definitions. First, the guidelines are directly informed, guided, and structured by the scientific and professional literature. Second, there is a substantial and growing body of scientific evidence supporting the view that assessments of violence risk made using structured professional judgment guidelines are both reliable and valid (e.g., Otto & Douglas, 2010).

A good example of a structured professional judgment procedure for assessing risk for sexual violence is the *Risk for Sexual Violence Protocol* or *RSVP* (Hart et al., 2003; see also Hart & Boer, 2010). The *RSVP* guidelines are presented in the form of a reference book or manual. They are intended for use in a wide range of civil and criminal justice contexts to assist forward planning in individual cases by guiding decisions about risk assessment and management. The target population comprises people aged 18 and older who have a known or suspected history of sexual violence. Administration of the *RSVP* involves 6 steps. In Step 1, evaluators gather case information, guided by a number of recommendations presented in the manual. In Step 2, evaluators code the presence of 22 individual risk factors from 5 domains, as well as any additional case-specific risk factors. Presence ratings are made for two timeframes: more than one year prior to the evaluation ("past") and within the year prior to the evaluation ("recent"). Presence ratings for each timeframe are made using a 3-point ordinal scale (*Absent*, *Possibly or*

partially present, or *Present*), and may be omitted when there is insufficient information. In Step 3, evaluators determine the relevance of the individual risk factors. "Relevant" risk factors are those the evaluator believes are functionally (i.e., causally) related to the examinee's perpetration of sexual violence in the future, or are likely to substantially impair the effectiveness of risk management strategies designed to prevent future sexual violence. Relevance ratings are using a 3-point ordinal scale (*Not relevant*, *Possibly or partially relevant*, or *Relevant*).

In Step 4, evaluators identify and describe the most likely scenarios of future sexual violence. They conjecture about what might happen in the future in light of information about the examinee's sexual violence history gathered in Step 1, risk factors identified as present and relevant in Steps 2 and 3, and probable living circumstances in the future. These descriptions of "possible futures" or "feared outcomes" are referred to as *scenarios*, short narratives designed to simplify complex forecasts in a way that facilitates planning. Evaluators are encouraged to develop multiple scenarios, then "prune" those that are implausible in light of the facts of the case at hand or more general knowledge about sexual violence. The remaining plausible scenarios form the basis for the development of risk management strategies. The procedures used in this step of the *RSVP* were derived from more general scenario planning methodology, which has been used successfully for many years in other fields to plan under situations of great or unbounded uncertainty.

In Step 5, evaluators develop strategies for managing sexual violence risk in light of the relevant risk factors and scenarios of risk. The development of strategies is based on consideration of the sexual violence that might occur under each scenario, as well as relevance of individual risk factors. To ensure the risk management strategies are comprehensive, evaluators are encouraged to consider four general categories: monitoring, treatment, supervision, and

victim safety planning. Within each category, users identify specific strategies, and then are encouraged to consider in explicit and specific terms how these strategies should be implemented in the case at hand (i.e., to move from strategies to tactics). The development of good risk management plans in Step 5 depends strongly and directly on the quality of the scenarios developed in Step 4.

In Step 6, evaluators document their judgments regarding overall risk in the case. This facilitates clear communication, and is also very important for liability management. Evaluators are encouraged to make judgments concerning case prioritization or overall risk, risk for serious physical harm, any indication of other risks the examinee may pose, any immediate actions taken or required, and critical dates or triggers for case review. Critically, the *RSVP* does not provide a formula or other algorithm for calculating risk based on the presence of various factors; instead, evaluators must use their discretion to consider, decide, and explain the relevance or meaningfulness of any factors that are present with respect to the risks posed and management of those risks.

Non-discretionary procedures.

There are two major types of non-discretionary procedures. The first is the *actuarial use of psychological tests*. Classically, psychological tests are structured samples of behaviour designed to measure a personal disposition, that is, an attempt to quantify an individual's standing on some dimension of psychosocial functioning. On the basis of past research, one can identify cutoff scores on the test that maximize some aspect of predictive accuracy. For example, psychopathy, as measured by the Hare Psychopathy Checklist-Revised (Hare, 2003), may be associated with violence risk in a meaningful way. The actuarial use of psychological tests is not evidence-based according to either broad or narrow definitions. First, reliance on a single test

clearly is not informed, guided, and structured by the entirety of the scientific and professional literature, but only by a tiny fraction of that literature. Second, although empirical evidence may support the reliability and validity of individual psychological tests, it also indicates that the same tests are inferior to other available procedures. To be blunt, the actuarial use of psychological tests may be demonstrably better than nothing, but it is also demonstrably worse than some alternatives. We will not consider the actuarial use of psychological tests further.

The second type of procedure is the use of *actuarial risk assessment instruments,* also known as *actuarial tests*, *tools*, or *aids*. In contrast to psychological tests, actuarial instruments are designed not to measure anything, but solely to predict the future. Typically, they are high fidelity, optimized to predict a specific outcome in a specific population over a specific period of time. The items in the scale are selected either rationally (on the basis of theory or experience) or empirically (on the basis of their association with the outcome in test construction research). The items are weighted and combined according to some algorithm to yield a decision. In violence risk assessment, the "decision" generally is the estimated likelihood of future violence (e.g., re-arrest for a sexual crime against persons) over some period of time. Items not included in the actuarial instrument may not be taken into account. Actuarial instruments may be considered evidence-based according to the narrow definition, to the extent there is direct empirical evidence supporting their reliability and validity (Quinsey, Harris, Rice & Cormier, 2006). It is arguable, however, whether they are evidence-based according to the broad definition. The fact that they include only a relatively small set of risk factors and ignore all others means that they are not informed, guided, and structured by the entirety of the scientific and professional literature.

A good example of an actuarial instrument for assessing risk for sexual violence is the

STATIC-99 (Hanson & Thornton, 1999; see also Anderson & Hanson, 2010). The STATIC-99 is an actuarial instrument developed to assess risk for sexual and violent recidivism in adult males who have been charged with or convicted of a sexually motivated offence. It was created by combining items from two other actuarial instruments. The 10 items in the STATIC-99 were not selected because of their relevance or importance according to the scientific and professional literature, but rather because they significantly discriminated between known groups of recidivists and non-recidivists in four samples of sex offenders from Canada and the United Kingdom. Administration of the STATIC-99 begins with a review of the offender's official records; an interview may also be conducted, if the evaluator deems it necessary. Next, the evaluator gives a numerical score between 0 and 3 for each item, following detailed instructions contained in the test manual. The item scores are then summed to yield total scores, ranging from 0 to 12. Finally, evaluators can use information in the test manual to assign the offender to a relative risk category or to estimate the absolute risk (specific probability) he will commit sexual violence over the next 5, 10, or 15 years. Evaluators are advised not to use judgment or discretion to change the STATIC-99 risk estimates in light of factors not included in the test (such as age, physical health, treatment completion, etc.), but rather to administer additional actuarial instruments.

Evaluation of Evidence-Based Violence Risk Assessment

Many different criteria can be used to evaluate the adequacy of violence risk assessment procedures (Hart, 2001). They can be divided into three major groups: efficacy, effectiveness, and utility. In this context, **efficacy** is the consistency and accuracy with which risk assessment procedures can be used to forecast future violence in controlled research settings. In technical terms, this means there should be some body of research demonstrating that evidence-based risk

assessment procedures have acceptable levels of inter-rater reliability and predictive validity. Demonstrating the efficacy of violence risk assessment procedures may seem a simple matter, but it is not. Evaluating inter-rater reliability requires multiple evaluators to assess the same group of patients or offenders under a range of conditions–ideally, with samples of evaluators, patients or offenders, and conditions that are sufficiently large and diverse to permit systematic analysis of factors that may moderate inter-rater reliability. This type of research is extremely resource intensive. Evaluating predictive validity is even more difficult. It is necessary to recruit a cohort of patients or offenders, assess them, follow them up over long periods of time, and then detect violence that occurs in institutional or community settings. The sample must be sufficiently large and the follow-up sufficiently long to yield a base rate of violence amenable to statistical analysis. Ideally, the design permits analysis of potential moderating factors such as demographic characteristics, changes over time in risk factors, and critical life events or interventions that occur during the follow up. In contrast, **effectiveness** here is the consistency and accuracy of violence risk assessment procedures in field settings. The objective of effectiveness research is to evaluate the extent to which the findings of efficacy research generalize to less controlled conditions. It is, arguably, even more difficult to conduct than efficacy research and typically is conducted only after some evidence of efficacy has been found. Finally, **utility** refers to the more general usefulness or social validity of violence risk assessment procedures. Utility research addresses issues such as the acceptability of procedures in the eyes of various consumer groups (e.g., service users, service providers, courts, tribunals and review boards, policy makers), the relative costs and benefits of implementing procedures, and so forth. It is usually conducted only after research has supported the effectiveness of a procedure.

Evaluative research may be difficult to conduct, but it is clearly not impossible (for

summaries, see Otto & Douglas, 2010). With respect to efficacy, the inter-rater reliability of discretionary (SPJ) and non-discretionary (actuarial) violence risk assessment procedures has been supported in a large number of studies. An even larger number of studies have established their predictive validity using true prospective, pseudo-prospective (follow-back), and retrospective designs, although most were not able to control for the effect of changes over time in risk factors and life events or interventions during follow-up. In crude terms, the inter-rater reliability of both types of assessment procedures may be characterized as "good" to "excellent," with actuarial procedures being slightly more reliable than SPJ procedures on average. Their predictive validity may be characterized "fair" or "moderate," with no difference between actuarial and SPJ procedures. With respect to effectiveness, there has also been some research supporting the reliability and validity of SPJ and actuarial risk assessment procedures in field settings. The inter-rater reliability of actuarial procedures appears to be no better than that of SPJ procedures in field settings, with both being "good" on average. The predictive validity of both actuarial and SPJ procedures is "fair" or "moderate" in field settings. Finally, a relatively small number of studies have examined the utility of risk assessment procedures, with generally positive results. SPJ procedures tend to be more readily accepted by some stakeholders than are actuarial procedures, in part because they more directly guide decision making with respect to risk management.

This last point is crucial for the present chapter. Actuarial risk assessment procedures are solely prediction-oriented. They conceptualize risk solely in terms of the probability or likelihood of future violence. Their goal is to discriminate between individuals who have a high versus low likelihood of future violence, based on the extent to which they resemble statistical profiles of recidivists versus non-recidivists from a particular study. The two criteria used to

select items for inclusion are the accuracy and efficiency with which they can differentiate between known groups of recidivists and non-recidivists. The items need not be conceptually or practically relevant—they may be neither causal risk factors (i.e., treatment targets) nor responsivity factors (i.e., characteristics that mediate or moderate potential treatments). SPJ procedures, in contrast, go beyond prediction to focus on prevention. They conceptualize risk in terms of the nature, severity, imminence, frequency, duration, and likelihood of future violence. Their goal is to speculate about the types of violence individuals might plausibly perpetrate, and then to use these speculations or forecasts to develop management plans aimed at preventing violence. The criteria used to select risk factors include scientific, practical, and legal relevance or acceptability.

Some commentators have argued that, in some clinical and legal contexts, risk assessments need only be predictive (e.g., Heilbrun, 1997; Quinsey et al., 2006). With respect, we disagree. In clinical contexts, evaluators need to know what to do with a patient or offender. A probability estimate is of no assistance here. Say the finding of an actuarial risk assessment procedure is that a patient has a "10% [25%, 50%...] likelihood of violence." Is this a 10% chance that, laboring under persecutory delusions, he will take an axe and kill his family within the next week or so? Or a 10% chance sometime within the next 10 years he may do at least one thing to at last one person for some reason that falls within the general definition of violence, and which may or may not have serious consequences? The actuarial instrument cannot discriminate these two interpretations—it is not worried about such distinctions. Similarly, in legal contexts, we can think of no issue that concerns only the probability of violence. Also relevant are the nature of the violence (e.g., imminent risk of serious physical injury, long-term risk of sexual harm), what caused the violence (e.g., mental disorder), whether certain conditions can manage

the risks (e.g., total confinement versus something less restrictive), and so forth. To the extent that these latter issues are not addressed by an actuarial risk assessment procedure, it is useless or even misleading, appearing to give a legally relevant answer when it does not.

We conclude that of the two approaches to evidence-based violence risk assessment, only the SPJ approach assists the development of risk management plans based on an understanding of the causes of past violence. The actuarial approach is not intended and cannot be used for this purpose. Therefore, we focus in the remainder of our discussion on formulation of violence risk using SPJ assessment procedures, referring to actuarial procedures only for the purposes of comparison.

Part 2: Formulation of Violence Risk

To date, four major approaches to formulating violence risk have been developed. In this section, we provide a brief description and evaluation of them.

Offence Paralleling Behaviour.

The Offence Paralleling Behaviour, or OPB, approach to formulation was developed Lawrence Jones, Michael Daffern, John Shine, and colleagues (e.g., Jones, 2002, 2004; Daffern et al., 2007). In some respects, OPB may be considered a refinement of the anamnestic approach to focus specifically on violence. Like the anamnestic approach, it is not tied to a specific theory of violence and relies heavily on systematic analysis of past violence. One refinement is that it focuses evaluators to consider the psychological functions of violence—that is, the ways in which violence is potentially rewarding for the individual. Another refinement is that evaluators look for evidence of behaviour that parallels past violent offences in topographical or functional terms (hence, “offence paralleling behaviour”). OPB is clinically very useful, as it provides a target for treatment that is easier to assess and treat than is actual violence. Yet another

refinement is the focus on building motivation to change as part of the development of case management plans.

With respect to strengths, the refinements of OPB increase its clinical utility relative to the anamnestic approach. It provides some additional guidance concerning the identification of risk factors and the development of case management plans. But it has weaknesses similar to that of the anamnestic approach. First, it does not provide a list of theory-derived principles or empirically based risk factors on which to focus. Second, aside from encouraging attention to the functional aspects of violence, it does not facilitate thinking about the causal roles played by risk factors. Third, it does not specify a procedure for speculating about future violence in light of the risk factors identified.

Good Lives Model.

Tony Ward and his colleagues have pioneered the application of the Good Lives Model, or GLM, to risk assessment of sexual and violent offenders (e.g., Ward, 2002; Whitehead, Ward, & Collie, 2007). This was a natural extension of their earlier work on treatment formulation for sexual offenders (e.g., Drake & Ward, 2003; Ward, Nathan, Drake, Lee, & Pathé, 2000). Like the biopsychosocial model, the GLM is not a theory of violence *per se*, but rather a way of conceptualizing complex problems that was imported from health care. Within the framework of the GLM, Ward views violence as a problematic means of trying to obtain *primary goods* – that is, "activities, experiences, or situations that are sought for their own sake and that benefit individuals and increase their sense of fulfillment and happiness" (Whitehead et al., 2007, p. 581), including such things as relatedness, autonomy, knowledge, mastery, play, and physical health. Problems arise when the strategies cannot obtain primary goods. Such problems typically take four forms: neglect of important primary goods; use of ineffective strategies to secure

goods; conflict of strategies to secure goods; and inability to implement strategies for securing goods. The GLM is based on simple principles, but actually facilitates complex thinking about internal or external factors that prevent people from obtaining primary goods and how to build their strengths and resources so they can obtain primary goods in a prosocial way.

With respect to strengths, GLM is clearly articulated. It also has a welcome focus on strengths and resources in the development of case management plans. Its major limitations are its failure to provide guidance concerning risk factors most likely to be related to violence, either in terms of principles derived or a list of empirically derived risk factors. Second, it provides little structure in terms of thinking about the causal roles of risk factors. Third, it does not specify a procedure for speculating about future violence or developing management plans in light of the risk factors identified.

Risk-Needs-Responsivity (RNR).

The RNR approach was developed by Don Andrews, James Bonta, and colleagues (e.g., Andrews, Bonta, & Hoge, 1990; Gendreau & Ross, 1979). It is not based on a theory of violence per se, but rather a theory of criminal behaviour known as the Psychology of Criminal Conduct (PCC) or the General Personality and Cognitive Social Learning (GPCSL) perspective (Andrews & Bonta, 2006). The RNR approach comprises three core principles, derived from research on correctional treatment and interpreted within the broader framework of PCC/GPCSL theory. According to the ***risk principle***, the level of services delivered to offenders should be commensurate with the risks they pose to re-offend. This means offenders at high risk for recidivism should receive more intensive assessment and management, relative to offenders at moderate or low risk. According to the ***need principle***, offender assessment and management should focus on criminogenic needs. This means services for offenders should target causal risk

factors for antisocial behaviour that have been validated by empirical research. According to the ***responsivity principle***, services should be delivered in ways that maximize their effectiveness. This means two things. First, in general terms, the focus of management programs should be on skills acquisition and enhancement through prosocial modeling, the appropriate use of reinforcement and disapproval, and problem solving, as research suggests this is the most efficient and effective way to change people's behaviour. Second, more specifically, it means that the design and management of programs delivered to offenders should match their individual learning styles, motivations, abilities, and strengths. To assist risk assessment and management using RNR, Andrews, Bonta, and colleagues have developed tools such as the Level of Service-Case Management Inventory, or LS-CMI (Andrews, Bonta, & Wormith, 2004). The LS-CMI is intended for use with male and female offenders, aged 16 and older, in institutions or the community. It comprises 11 sections that require evaluators to make a series of ratings based on a semi-structured interview with the offender and a review of relevant records, then document various opinions, recommendations, and decisions. Evaluators recommend, implement, evaluate, and document case management strategies based on the findings of structured assessments. This is done rationally or logically, rather than using an algorithm or formula.

The RNR approach has several noteworthy strengths. First, it is based on a well-articulated and well-established theory of criminal behaviour. Second, it provides clear structure in terms of identifying risk factors and thinking about their causal roles. Third, it provides clear structure in terms of developing case management plans. Finally, and crucially, there is good research support for at least some aspects of the RNR approach (Andrews, Bonta, & Wormith, 2006). With respect to potential weaknesses, PCC/GPSCL is a theory of general criminality, not

of violence, and therefore the RNR approach may undervalue some risk factors associated with violence but not other forms of criminal behaviour. Second, this approach is perhaps too structured. For example, it relies heavily on aggregate statistics derived from research on adult male offenders to identify and weight risk factors. This reduces its usefulness for developing individualized formulations within the population of adult male offenders, as well as its applicability to diverse populations (e.g., patients, females, youth, non-Western cultures). Third, this approach has been criticized for focusing too much on risk-enhancing factors and deficits to the exclusion of risk-reducing or protective factors (i.e., strengths, resources, and buffers). Finally, it does not facilitate speculation about future violence, and so relies on the assumption that it will resemble past violence.

Structured Professional Judgment approach. This approach has grown out of the application of SPJ guidelines. It is outlined in detail in the manuals for the *RSVP* (Hart et al., 2003) and the *Guidelines for Stalking Assessment and Management* (*SAM*; Kropp, Hart, & Lyon, 2008). It structures formulation in two different ways. First, it analyzes past violence using a decision theory framework. Second, it speculates about future violence and develops case management plans using scenario planning.

The decision theory framework may be considered a version of PCC/GPSCL tailored specifically to violence. It views violence a choice, that is, purposive behaviour intended to achieve one or more goals. The decision may be made quickly, based on bad information, and with little care and attention—that is, it may be a bad decision or a decision made badly—but it is a decision nonetheless. The bottom line is that people who engage in violence think before they act. Violence is clearly considered: Violent people choose who they commit violence against, what kinds of violence they will commit, and when they will commit it. Even the most

violent people spend most of their lives not committing violence, so we must ask ourselves, why did they choose to commit specific acts of violence against specific people at specific times, but not other kinds of violence against other people at other time? Within the framework of decision theory, it is assumed that before people engage in violence, they have gone through the following 4-step thought process. First, the possibility of acting violently in a given situation entered their conscious awareness, and they entertained this notion rather than dismissing it or pushing it out of their minds. This begs the question, why is it these people thought about violence or entertained the notion, whereas others did not? Second, they evaluated the possible positive consequences of violence and determined that it might result in reward or benefit for them. Put simply they perceived violence might pay off. People are essentially lazy; they do not engage in purposive behaviour unless it pays off in some way. This point is critical: If you do not know in what ways violence was perceived as a potential reward or benefit by people, you really do not understand why they committed violence. Third, they evaluated the possible negative consequences of violence and determined the costs were acceptable. Violence always has costs, and sometimes they are enormous. It costs perpetrators time and energy; it may make them feel bad as a result of empathy with their victims, remorse for what they have done, or anxiety about possible punishment for what they have done; it may cause them distress by challenging their self-concepts as good or decent people; and it can cost them in terms of the loss of respect and love of others, the loss of relationships and employment, and even the loss of their freedom. But someone who acts violently has decided they are willing to accept these costs. Finally, they evaluated the options for committing violence and determined it was feasible. Even if people want to engage in violence, they may have to overcome all kinds of practical barriers. They have to figure out how to locate the victim; how to contact or approach the victim; how to threaten or

harm someone; and how to try to get away and avoid detection or capture.

According to the decision theory framework, the task of risk assessment is to understand how and why people made decisions to engage in violence, and to understand the various factors that impinged on or influenced their decision making. Risk factors are things that influence decision making. They can play several causal roles. They can motivate, disinhibit, or destabilize decisions. Motivators increase the perceived rewards or benefits of violence. Disinhibitors decrease the perceived costs or negative consequences of violence. Destabilizers generally disturb people's ability to monitor and control their decision making. Also according to decision theory, the task of risk management is to determine effective strategies to encourage decisions to act prosocially and discourage decisions to act non-violently. SPJ guidelines such as the RSVP and SAM direct the attention of evaluators to risk factors that are considered generally important according to systematic reviews of the scientific and professional literature, and then to help evaluators understand the relevance of these risk factors in the case at hand using decision theory.

Scenario planning is a management strategy used for more than 50 years in such fields as business, health care, and the military (Ringland, 1998; van der Heijden, 1997). According to Chermack and Lynham (2002, p. 366), "[s]cenario planning is a process of positing several informed, plausible and imagined alternative future environments in which decisions about the future may be played out, for the purpose of changing current thinking, improving decision making, enhancing human and organization learning and improving performance." It is most appropriate for situations in which decisions must be based on incomplete knowledge — that is, in situations where various sources of uncertainty make it impossible to predict an outcome using approaches based on frequentist views of probability (e.g., van der Heijden, 1994). In our view,

this accurately characterizes the state of affairs with respect to violence risk assessment (Hart, 2003b). With respect to violence risk assessment, each scenario is a story about violence the person might commit. It is not a prediction about what will happen; rather, it is a general forecast or speculation about what could happen, in light of the evaluator's general knowledge and experience and the specifics of the case at hand. Although the number of possible scenarios that could be constructed is almost limitless, in any given case only a few distinct scenarios seem reasonable, credible, or internally consistent to evaluators in light of what is known about fact and theory (e.g., Chermack & van der Merwe, 2003). Other scenarios developed may be theoretically possible, but they will be perceived as implausible and subsequently dismissed or "pruned" (e.g., Pomerol, 2001). There are some useful strategies for generating scenarios (e.g., van Notten, Rotmans, van Asselt, & Rothman, 2003). To start the process, consider one in which the person commits violence similar to the current or most recent act – what might be called a repeat, "flat trajectory," linear projection, or point projection scenario. Imagine how this would unfold: What would it take for the person to decide to commit violence of that sort again? Then consider a "better case" or optimistic scenario, one in which the trajectory of violence decreases and the person commits a less serious act. Next consider a "worst case" scenario, also known as a pessimistic or "doom" scenario, one in which the trajectory increases and the person commits a more serious, and perhaps even life-threatening, act of violence. Finally, consider some "twist" or "sideways trajectory" scenarios in which the nature of violence changes or evolves, such as with respect to the manner of victim selection or the type of coercion used. In the SPJ approach, the evaluator constructs as many scenarios as seem plausible based on theory, research, experience, and case facts. In our experience, three to five general scenarios usually are sufficient to capture the range of plausible outcomes. Then, for each scenario, the evaluator

develops a detailed description in terms of the nature, severity, imminence, frequency or duration, and likelihood of violence. The scenarios of future violence are then used to develop case management plans that identify general strategies and specific tactics with respect to monitoring, supervision, treatment, and victim safety planning (e.g., Hart, Douglas, & Webster, 2001; Hart et al., 2003; Kropp et al., 2008).

Like the RNR approach, the SPJ approach to formulation has the strengths of being based on a clearly articulated and well-established theory. It provides structure or guidance for identifying risk factors, conceptualizing their causal roles, speculating about future violence, and developing case management plans. It also has research support (for reviews, see Otto & Douglas, 2010). Unlike RNR, the risk factors it focuses evaluators on are related to violence, rather than criminal behaviour more generally. Also, although the SPJ approach is structured, it is more flexible than the RNR approach and thus more readily adapted to new or unusual contexts. Finally, the SPJ approach is the only one of those reviewed in this chapter that focuses as much on the future as it does on the past.

Part 3: An Illustrative Case Formulation

To illustrate our approach to formulation of violence risk using SPJ guidelines, we present below the findings of a sexual violence risk assessment conducted for sentencing purposes (Hart, 2009). Identifying details have been changed to protect the privacy of those involved. The findings are followed by a formulation of the case developed using the RSVP. In addition, to highlight the differences between SPJ and actuarial approaches to violence risk assessment, we then present a formulation of the same case using the STATIC-99.

Summary of Findings

Mr. David Hackett, a 37 year old man, was the subject of a sexual violence risk

assessment following convictions for sexual assault, aggravated assault, and assault causing bodily harm. The risk assessment was requested by the prosecutor and undertaken with the consent and participation of the defendant and his counsel. Mr. Hackett was in custody at the time the assessment was completed.

Index offences. Mr. Hackett was convicted of a sexual assault against Ms. Easton, a 38 year old sex trade worker. According to the victim, the offence stemmed from an incident that occurred on 21 July 2006 at about 0245 hrs. Mr. Hackett approached her while she was working as a prostitute. Ms. Easton and Mr. Hackett agreed upon a price for certain sexual acts, Ms. Easton entered the SUV that Mr. Hackett was driving, and Mr. Hackett drove to another location and parked the vehicle. Ms. Easton and Mr. Hackett engaged in sexual activity, but he was unable to reach orgasm. When Ms. Easton complained about the length of time it was taking Mr. Hackett to reach orgasm, he became angry, grabbed her by the throat, and threatened her with his fist. Mr. Hackett ordered Ms. Easton to exit the vehicle, and she complied. Mr. Hackett then ordered Ms. Easton to bend over the back seat of the car while standing, restrained her by placing a hand on her back, and raped her vaginally and anally. During the rape, Mr. Hackett threatened to kill Ms. Easton if she resisted. The use of physical coercion did not adversely affect Mr. Hackett's sexual arousal; indeed, if anything, it increased his arousal. The sexual assault continued until another vehicle approached, at which time Ms. Easton was able to gather her belongings and leave. She ran to a pay phone and reported the sexual assault to police, providing a description of Mr. Hackett and the license plate number of his vehicle.

Mr. Hackett was also convicted of an aggravated assault and an assault causing bodily harm – both sexually motivated – against Ms. Jackson, a 32 year old sex trade worker. According to the victim, the offences stemmed from an incident that occurred on 25 August 2006

at about 2245 hrs. Mr. Hackett approached her while she was working as a prostitute. Ms. Jackson and Mr. Hackett agreed upon a price for certain sexual acts, Ms. Jackson entered the SUV that Mr. Hackett was driving, and Mr. Hackett drove to another location and parked the vehicle. Ms. Jackson and Mr. Hackett engaged in sexual activity, but initially he was unable to achieve an erection and subsequently was unable to reach orgasm. Mr. Hackett asked Ms. Jackson to exit the vehicle and bend over the car back seat of the car while standing up so that he could have intercourse with her while standing behind her. When Ms. Jackson complained about the length of time it was taking Mr. Hackett to reach orgasm, he grabbed her by the throat, threatened to kill her, and continued the sexual activity. The use of physical coercion appeared to increase Mr. Hackett's sexual arousal. Ms. Jackson lost consciousness briefly during the assault. When she regained consciousness, she struggled, escaped Mr. Hackett's choke hold, and fell to the ground. Mr. Hackett hit her while she screamed and kicked at him, and eventually he got into his vehicle and fled the scene. The incident was reported by witnesses who heard Ms. Jackson screaming. Ms. Jackson provided a description of Mr. Hackett and his vehicle to police when they attended the scene, and a witness provided a description of the vehicle. Ms. Jackson suffered significant physical injury as a result of the assault, and medical evidence suggested that the strangulation could have resulted in her death.

Mr. Hackett was arrested by police based on the information provided by the victims. He was released on bail pending trial. While on bail, Mr. Hackett contacted one of the victims, Ms. Jackson. He approached her while she was working as a prostitute and attempted to negotiate a price for certain sexual acts. Ms. Jackson recognized Mr. Hackett immediately, but pretended she did not. She entered Mr. Hackett's vehicle, and he drove to a gas station. When he entered the station, she took his personalized cheques from the glove compartment of the vehicle, left the

scene, and contacted the police. Mr. Hackett said that he had looked for Ms. Jackson on several occasions. He said he wanted to speak with her in an attempt to convince her to drop the charges against him by apologizing or offering her money. No charges were recommended or laid as a result of this incident.

The version of events that Mr. Hackett gave to police differed dramatically from those of the victims. Regarding the first offence, he denied completely any involvement in the incident on 21 July 2006 involving Ms. Easton. Regarding the second offence, he admitted to hiring Ms. Jackson to have sex with him, and further admitted that he was unable to achieve an erection. According to Mr. Hackett, however, when he exited the vehicle to urinate, he believed he saw Ms. Jackson going through the pockets of his jeans. When he confronted her, she became angry and aggressive. He grabbed her briefly by the neck to restrain her, slapped her with an open fist, and she fell to the ground. He then left the scene in his vehicle. Mr. Hackett was unable to provide a plausible explanation for the discrepancies between his version of events and that of the victims. He insisted that he was not in possession of his own vehicle at the time of the attack on Ms. Easton, having traded vehicles with a friend for about a week. He speculated that perhaps his friend committed the offence. Mr. Hackett also speculated that Ms. Easton and Ms. Jackson had fabricated much of their statements, perhaps in collaboration with each other, in an attempt to profit from criminal injuries compensation claims. During the interview conducted as part of the risk assessment, he reiterated this account even though he readily acknowledged it was completely implausible.

Prior offences. Mr. Hackett had no previous charges or convictions for criminal offences as a juvenile or an adult. He denied any significant conduct problems in childhood or adolescence, aside from driving on rural roads prior to receiving his driver's license. He admitted

to drinking and driving on occasion as an adult and received roadside suspensions from the police for suspicion of driving while intoxicated, but was never arrested for or charged with an offence.

Mr. Hackett was the subject of a complaint of sexual assault in 1999. His wife at the time, Carrie Hackett, was pregnant with the couple's first child. Mr. Hackett met a woman while drinking in a bar, went for a car ride with her, and engaged in sexual relations with her. According to the complainant, she did not provide consent to the full extent of the sexual activity in which they engaged; she described Mr. Hackett's actions as coercive. Mr. Hackett admitted to police that he had sexual relations with the complainant, but denied any coercion. The complainant was ambivalent about participating in the police investigation, and no charges were laid in the matter.

Social history. Mr. Hackett was raised by his natural parents in a large family. The family members enjoyed close relationships. For example, in childhood and adolescence Mr. Hackett and his brothers were coached in boxing by their father; and Mr. Hackett worked with his father and brother for a time after graduating from high school.

Mr. Hackett's academic adjustment was average. His grades at school were average. His attendance and behaviour were also average; he had some minor problems and was suspended on one occasion for fighting, but was never expelled. He was sociable and had many friends. He was active in athletics.

Following graduation from high school, Mr. Hackett attended college for three years and was qualified as a steel fabricator. He worked steadily in the field since completing college, obtaining additional specialty qualifications. He was employed steadily, receiving unemployment insurance benefits briefly on a single occasion. He was never fired from a job. In

addition to typical fabrication jobs, Mr. Hackett was involved in building race cars.

Mr. Hackett started dating in early adolescence. He started dating his future wife, Carrie, when he was 18 years old and she was 17. They moved in together a year later (when he was about 19 years old), and married 8 years later (when he was about 28 years old). The couple had a stable and caring relationship, but grew apart over the years. They separated 3½ years ago (when he was about 33 years old). There was no physical violence in the relationship, before or after separation. While together, the Hacketts had 2 children: a son now aged 8 and a daughter now aged 6. Ms. Hackett had primary responsibility for raising the children, but Mr. Hackett played an active role as father before and after the separation, Mr. and Ms. Hackett got along well together, and reported no difficulties raising their children together despite the dissolution of their marital relationship. Some 3 years ago (when he was about 34 years old), Mr. Hackett started dating Ms. Dawn Hunter. The relationship was stable, with no history of physical violence. Although Mr. Hackett reported the relationship is ongoing, Ms. Hunter indicated that it ended about 6 months previously.

Mr. Hackett had his first sexual relationship at the age of 15. His sexual relations with intimate partners have been typical in terms of the focus and intensity of his appetite. He has had sexual relationships with about 8 women.

Mr. Hackett admitted to trying marijuana on a few occasions in adolescence, but denied any other use of illegal drugs. He admitted to drinking alcohol since the age of 14, and said he drank socially as an adult, primarily on weekends. In the past, he has denied any problems stemming from alcohol abuse; but in the interview conducted as part of the risk assessment, he acknowledged that his drinking had contributed to marital and legal problems.

Mr. Hackett had no history of significant physical or mental health problems, aside from

substance use.

Analysis Using the RSVP

Risk factors. Analysis of the case using the RSVP indicated the presence of several basic risk factors, all of which were possibly relevant either to the risks posed by Mr. Hackett or the management of those risks. With respect to his history of sexual violence, Mr. Hackett had used physical coercion. With respect to psychological functioning, his account of his index offences and relations with women indicated possible or definite problems with respect to minimization and denial, attitudes that support or condone sexual violence, and problems with self-awareness. With respect to mental disorder, he had definite problems with substance use and, despite a lack of direct evidence, the nature of his offences raised the possibility of sexual deviation (specifically, a paraphilia such as biastophilia, sometimes referred to as paraphilic rape) and violent ideation. With respect to social adjustment, he had problems with intimate relationships. Finally, with respect to manageability, he had problems with supervision. No additional risk factors were identified.

Formulation. Based on his findings, the evaluator developed two competing formulations of Mr. Hackett's sexual violence. According to the first, Mr. Hackett's offences were motivated primarily by the desire to regain a sense of mastery or agency. Mr. Hackett experienced life stresses that made him feel distressed, angry, or insecure, especially with respect to his sexual relationships with women. Disinhibited by somewhat negative attitudes toward women (a hyper-masculine but fragile self-concept, a sense of male prerogative or sexual entitlement), a tendency to minimize and deny his problems to self and others, and alcohol intoxication, he used physical coercion to "steal sex" from women. According to the second formulation, Mr. Hackett's sexual violence was motivated at least in part by gratification of

violent sexual fantasies, possibly the result of an undiagnosed paraphilia, instead of or in addition to the desire to enhance a sense of agency.

Scenarios. Based on Mr. Hackett's history of past sexual violence and the formulations described above, the evaluator developed two scenarios of future sexual violence. The first scenario was a repeat of the index offences. This scenario, based on the first formulation, was as follows: Mr. Hackett experiences life stresses in his relationships with women that make him feel distressed, angry, and insecure; motivated by the desire to regain a sense of mastery and disinhibited by negative attitudes toward women, a tendency to minimize and deny his problems to self and others, or alcohol intoxication, he uses physical coercion to "steal sex" from women. The most likely victims in this scenario are adult females – including intimate partners, casual acquaintances, or prostitutes – who he perceives are denying him the sexual gratification to which he feels entitled. The violence would likely cause serious psychological harm and moderate to severe physical harm. The risk of sexual violence of this sort appears to be chronic (i.e., long-term) rather than acute, although one potential warning sign of imminent risk might be the onset of problems in an intimate relationship.

The second scenario was an escalation scenario, based on the second formulation. According to this scenario, Mr. Hackett experiences a recurrence or possibly even an escalation of sexually violent fantasies and, motivated primarily by the desire for sexual gratification (and perhaps secondarily by desire for a sense of mastery), acts on them; he may be disinhibited by negative attitudes toward women, a tendency to minimize and deny his problems to self and others, or alcohol intoxication. The likely victims of sexual violence are strangers, such as prostitutes, targeted because it is easy to dehumanize them and also easier to avoid apprehension. The harm to victims could be moderate to severe; indeed, depending on the nature of the

paraphilia or the lengths to which he might go to avoid apprehension in the future, it might be life threatening. The risk for this sort of sexual violence also appears to be chronic, rather than acute, although a recurrence or escalation of sexually violent fantasies could be triggered by threats to masculinity or sexuality, and could be accompanied by warning signs such as increased use of alcohol or pornography (especially violent pornography) or preoccupation with prostitutes (e.g., cruising areas frequented by prostitutes).

Management plans. Taking into account the risk factors, formulation, and scenarios, the evaluator recommended several potential case management strategies. The first strategy was participation in assessment and treatment programs. In light of a cluster of risk factors related to Mr. Hackett's minimization and denial, problems with self-awareness, and problems with supervision, it was recommended that treatment should focus initially on enhancing his motivation for positive change by sensitizing him to the seriousness of his problems—past, present, and future—and developing a positive working alliance with a treatment provider. Subsequently, treatment should address his problems with substance use, as well as a cluster of risk factors related to his negative attitudes toward women and intimate relationship problems. A focus of the later stages of treatment should be his negative attitudes related to masculinity. It was recommended that Mr. Hackett undergo further assessment of possible paraphilia concurrent with his treatment; if further evidence of paraphilia was uncovered, then it should be added to the list of treatment targets. Give his intellectual functions and basic social skills were intact, and that he did not present with symptoms of psychopathic personality disorder, the evaluator viewed Mr. Hackett as a good candidate for group and individual treatment programs, including those with cognitive-behavioral or emotional-interpersonal theoretical orientations.

The second strategy was close monitoring by corrections or mental health professionals

with expertise in sexual violence to detect any changes in risk factors that may be triggers (distal or proximal) of sexual violence, such as intimate relationship problems, problems with alcohol use, and possible sexual deviation.

The third general strategy was close supervision either in the form of a custodial sentence or an intensive supervision program that included electronic monitoring, conditions to refrain from associating with prostitutes and abstain from drinking alcohol. The evaluator again emphasized the problems developing effective management strategies until the causes of Mr. Hackett's sexual violence were better understood.

Conclusory opinions. The evaluator opined that, despite a limited history of sexual offences, Mr. Hackett posed substantial risks for future sexual violence. The level of risk (also known as case prioritization) was characterized as moderate, meaning that an elevated or above-average level of effort and intervention would be required to prevent future sexual violence. The evaluator was very concerned that the sexual violence was severe in nature, and may have involved sexual arousal after or in reaction to physical coercion. Also, he was concerned that the offences appeared to occur suddenly and at a relatively late age, without clear motives, warning signs, or triggers.

Analysis Using the STATIC-99

Based on his age, Mr. Hackett received a score of 0 on Item 1. Based on the length of his marriage, he received a score of 0 on Item 2. As one of his index offences was for non-sexual violence, he received a score of 1 on Item 3. As he had no prior convictions, he received a score of 0 on Items 4, 5, and 6. Based on the nature of his index offences, he received a score of 0 on Item 7, 1 on Item 8, 1 on Item 9, and 0 on Item 10. Summing the item scores, Mr. Hackett's total scores on the STATIC-99 was 3 out of a possible 12.

Following is a narrative interpretation of these findings, based on data and recommendations presented in the test manual:

> The recidivism estimates provided by the STATIC-99 are group estimates based upon reconvictions and were derived from groups of individuals with these characteristics. As such, these estimates do not directly correspond to the recidivism risk of an individual offender. The offender's risk may be higher or lower than the probabilities estimated in the STATIC-99 depending on other risk factors not measured by this instrument.
>
> Mr. Hackett scored a 3 on this risk assessment instrument. Individuals with these characteristics, on average, sexually reoffend at 12% over five years, 14% over ten years, and 19% over 15 years. Based upon the STATIC-99 score, this places Mr. Hackett in the Moderate-Low risk category (between the 24th and the 61st percentile) relative to other adult male sex offenders.

Comment

This case study clearly illustrates the SPJ approach to formulation. Evidence-based SPJ guidelines focus evaluators on risk factors that are present and relevant, which in turn are used to develop a case formulation. A decision theory framework is used to structure thinking about the past and present, whereas scenario planning is used to structure thinking about the future. The SPJ risk assessment is an attempt to both synthesize and analyze what is known and, just as important, what is not known about the offender. The evaluation is comprehensive in nature, reflecting the breadth of factors deemed critical in the relevant literature. Rather than offer a prediction of what will happen, the evaluator speculates systematically about what the offender might or could do in the future and how to prevent it.

The case study also illustrates actuarial risk assessment. The actuarial approach tries to provide an estimate of the probability of future sexual violence based on statistical profiles of known groups of recidivists and non-recidivists. The evaluation strives for simple and objective findings based on consideration of a small number of specific factors. It is not intended to and, in fact, cannot assist the formulation of violence risk or the development of case management plans except in the most superficial of ways. It is focused on prediction, not prevention.

Conclusion

In this chapter, we have addressed the critical task of formulation in violence risk assessment and management. We began by discussing the practice of violence risk assessment, defining evidence-based practice and describing the major approaches. Next, we discussed formulation in mental health and reviewed the different ways in which formulation may be undertaken in respect of violence risk assessment, including the SPJ approach. Finally, we presented a case study in which a formulation was proposed linking risk assessment using a set of SPJ guidelines (in this instance, the *RSVP*) to risk management.

Our goal in writing this chapter was to help to stimulate discussion about the critical role of formulation in risk assessment and to examine options for best practice. We hope we have accomplished this, and more. Violence risk assessment is a critical task in mental health and correctional settings, yet its fundamental purpose–the prevention of harm–has for too long been overshadowed by the pursuit of precision in the assessment of probability estimates, arguably impossible in the individual case (Hart et al., 2007), using tools whose application generates little in the way of understanding about harm potential and far less about what to do to prevent it. This chapter has prioritized the pursuit of understanding in its focus on formulation, and provided a theoretically sound and empirically-based framework for its achievement. It is only

through understanding the risk potential of our clients through the process of formulation that rational and proportionate risk management can be achieved.

References

Anderson, D., & Hanson, R. K. (2010). Static-99: An actuarial tool to assess risk of sexual and violent recidivism among sexual offenders. In R. K. Otto & K. S. Douglas (Eds.), *Handbook of violence risk assessment tools* (pp. 251-268). Milton Park, UK: Routledge.

Andrews, D. A., & Bonta, J. (2006). *The psychology of criminal conduct,* 4th ed. Cincinnati, OH: Anderson.

Andrews, D. A., Bonta, J., & Hoge, R. D. (1990). Classification for effective rehabilitation: Rediscovering psychology. *Criminal Justice and Behavior*, *17*, 19-52.

Andrews, D. A., Bonta, J., & Wormith, S. J. (2004). *Level of Service/Case Management Inventory (LS/CMI)*. Toronto: Multi-Health Systems Inc.

Andrews, D. A., Bonta, J., & Wormith, S. J. (2006). The recent past and near future of risk and/or need assessment. *Crime & Delinquency*, *52*, 7-27.

Atkins, D., Slegel, J., & Slutsky, J. (2005). Making policy when the evidence is in dispute. *Health Affairs*, *24*, 102-113.

Borry, P., Schotsmans, P., & Dierickx, K. (2006). Evidence-based medicine and its role in ethical decision-making. *Journal of Evaluation in Clinical Practice*, *12*, 306-311.

Chermack, T. J., & Lynham, S. A. (2002). Definitions and outcome variables of resource planning. *Human Resource Development Review, 1,* 366-383.

Chermack, T. J., & van der Merwe, L. (2003). The role of constructivist learning in scenario planning. *Futures, 35,* 445-460.

Daffern, M., Jones, L., Howells, K., Shine, J., Mikton, C., & Tunbridge, V. (2007). Refining the definition of Offence Paralleling Behaviour. *Criminal Behaviour and Mental Health*, *17*, 265-273.

Doyle, M. & Dolan, M. (2002). Violence risk assessment: Combining actuarial and clinical information to structure clinical judgements for the formulation and management of risk. *Journal of Psychiatric and Mental Health Nursing, 9*, 649–657.

Drake, C. R., & Ward, T. (2003). Treatment models for sex offenders: A move toward a formulation-based approach. In T. Ward, D. R. Laws, & S. M. Hudson (Eds.), *Sexual deviance: Issues and controversies* (pp. 226-243). Thousand Oaks, CA: Sage.

Gendreau, P., & Ross, B. (1979). Effective correctional treatment: Bibliotherapy for cynics. *Crime & Delinquency*, *25*, 463-489.

Grove, W. M., & Meehl, P. E. (1996). Comparative efficiency of informal (subjective, impressionistic) and formal (mechanical, algorithmic) prediction procedures: The clinical-statistical controversy. *Psychology, Public Policy, and Law*, *2*, 293-323.

Hanson, R. K., & Thornton, D. M. (1999). *Static-99: Improving actuarial risk assessment for sexual offenders.* Ottawa: Solicitor General of Canada (Corrections Research User Report 1999-02).

Hare, R. D. (2003). *Manual for the Hare Psychopathy Checklist – Revised*, 2nd ed. Toronto, Canada: Multi Health Systems.

Hart, S. D. (2001). Assessing and managing violence risk. In K. S. Douglas, C. D. Webster, S. D. Hart, D. Eaves, & J. R. P. Ogloff (Eds.), *HCR-20 violence risk management companion guide* (pp. 13-25). Burnaby, British Columbia: Mental Health, Law, & Policy Institute, Simon Fraser University, and Department of Mental Health Law and Policy, Florida Mental Health Institute, University of South Florida.

Hart, S. D. (2003a). Actuarial risk assessment: Commentary on Berlin et al. *Sexual Abuse: A Journal of Research and Treatment*, *15*, 383-388.

Hart, S. D. (2003b). Violence risk assessment: An anchored narrative approach. In M. Vanderhallen, G. Vervaeke, P. J. Van Koppen, & J. Goethals (Eds.), *Much ado about crime: Chapters on psychology and law* (pp. 209-230). Brussels: Uitgeverij Politeia NV.

Hart, S. D. (2006, December). *Assessing risk for violence: Promise and peril*. Public lecture presented at "The Assessment and Management of Personality Disordered Offenders, co-sponsored by the Northern Ireland Branch of the British Psychological Society and the Psychological Society of Ireland, Belfast, Northern Ireland.

Hart, S. D. (2009). Evidence-based assessment of risk for sexual violence. *Chapman Journal of Criminal Justice*, *1*, 143-165.

Hart, S. D., & Boer, D. P. (2010). Structured professional judgment guidelines for sexual violence risk assessment: The Sexual Violence Risk–20 (SVR-20) and Risk for Sexual Violence Protocol (RSVP). In R. K. Otto & K. S. Douglas (Eds.), *Handbook of violence risk assessment tools* (pp. 269-294). Milton Park, UK: Routledge.

Hart, S. D., Douglas, K. S., & Webster, C. D. (2001). Risk management using the HCR-20: A general overview focusing on historical factors. In K. S. Douglas, C. D. Webster, S. D. Hart, D. Eaves, & J. R. P. Ogloff (Eds.), *HCR-20 violence risk management companion guide* (pp. 27-40). Burnaby, British Columbia: Mental Health, Law, & Policy Institute, Simon Fraser University.

Hart, S. D., Kropp, P. R., Laws, D. R., Klaver, J., Logan, C., & Watt, K. A. (2003). *The Risk for Sexual Violence Protocol (RSVP): Structured professional guidelines for assessing risk of sexual violence*. Burnaby, British Columbia: Mental Health, Law, and Policy Institute, Simon Fraser University.

Heilbrun, K. S. (1997). Prediction versus management models relevant to risk assessment: The

importance of legal decision-making context. *Law and Human Behavior*, *21*, 347-359.

Jones, L. (2002). An individual case formulation approach to the assessment of motivation. In M. McMurran (Ed.), *Motivating offenders to change* (pp. 31-54). Chichester, UK: Wiley.

Jones, L. (2004). Offence paralleling behavior (OPB) as a framework for assessment and interventions with offenders. In A. Needs & G. J. Towl (Eds.), *Applying psychology to forensic practice* (pp. 34-63). Oxford: British Psychological Society Blackwell.

Justice, L. (2008). Evidence-based terminology. *American Journal of Speech-Language Pathology*, *17*, 324-325.

Kapp, M. B., & Mossman, D. (1996). Measuring decisional competency: Cautions on the construction of a "capacimeter." *Psychology, Public Policy, and Law*, *2*, 73-95.

Kemm, J. (2006). The limitations of 'evidence-based' public health. *Journal of Evaluation in Clinical Practice*, *12*, 319-324.

Kropp, P. R., Hart, S. D., & Lyon, D. (2008). *Guidelines for Stalking Assessment and Management (SAM): User manual.* Vancouver, Canada: ProActive ReSolutions Inc.

Meehl, P. E. (1996). *Clinical versus statistical prediction: A theoretical analysis and a review of the literature*. Northvale, NJ: Jason Aronson. (Original work published in 1954.)

Miles, A., Polychronis, A., & Grey, J. E. (2006). The evidence-based health care debate – 2006. Where are we now? *Journal of Evaluation in Clinical Practice*, *12*, 239-247.

Monahan, J. (1995). *The clinical prediction of violent behavior*. Northvale, NJ: Jason Aronson. (Original work published in 1981.)

Monahan, J. (2006). A jurisprudence of risk assessment: Forecasting harm among prisoners, predators, and patients. *Virginia Law Review*, *92*, 391-435.

Otto, R. K. (2000). Assessing and managing violence risk in outpatient settings. *Journal of Clinical Psychology*, *56*, 1239-1262.

Otto, R. K., & Douglas, K. S. (Eds.). (2010). *Handbook of violence risk assessment tools*. Milton Park, UK: Routledge.

Pomerol, J.-C. (2001). Scenario development and practical decision making under uncertainty. *Decision Support Systems, 31,* 197-204.

Quinsey, V. L., Harris, G. T., Rice, M. E., & Cormier, C. (2006). *Violent offenders: Appraising and managing risk*, 2nd ed. Washington, DC: American Psychological Association.

Ringland, G. (1998). *Scenario planning: Managing for the future.* Chichester, UK: Wiley.

Sackett, D. L., & Rosenberg, W. M. (1995). On the need for evidence-based medicine. *Journal of Public Health Medicine*, *17*, 330-334.

Sackett, D. L., Rosenberg, W. M., Muir Gray, J. A., Haynes, R. B., & Richardson, W. S. (1996). Evidence based medicine: What it is and what it isn't—it's about integrating individual clinical expertise and the best external evidence. *British Medical Journal*, *312*, 71-72.

Steinberg, E. P., & Luce, B. R. (2005). Evidence based? Caveat emptor! *Health Affairs*, *24*, 80-92.

Tanenbaum, S. J. (2005). Evidence-based practice as mental health policy: Three controversies and a caveat. *Health Affairs*, *24*, 163-173.

Timmermans, S., & Mauck, A. (2005). The promises and pitfalls of evidence-based medicine. *Health Affairs*, *24*, 18-28.

van der Heijden, K. (1994). Probabilistic planning and scenario planning. In G. Wright & P. Ayton (Eds.), *Subjective probability* (pp. 549-572). Chichester, UK: Wiley.

van der Heijden, K. (1997). *Scenarios: The art of strategic conversation.* New York: Wiley.

van Notten, P. W. F., Rotmans, J., van Asselt, M. B. A., & Rothman, D. S. (2003). An updated scenario typology. *Futures, 35,* 423-443.

Ward, T. (2002). The management of risk and the design of good lives. *Australian Psychologist*, *37*, 172-179.

Ward, T., Nathan, P., Drake, C. R., Lee, J. K. P., & Pathé, M. (2000). The role of formulation-based treatment for sexual offenders. *Behaviour Change*, *17*, 251-264.

Whitehead, P. R., Ward, T., & Collie, R. M. (2007). Time for a change: Applying the Good Lives Model of rehabilitation to a high-risk violent offender. *International Journal of Offender Therapy and Comparative Criminology*, *51*, 578-598.