Judgments of Violence Risk:
The Impact of Information about Variable Risk Factors

by

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ABSTRACT

Despite perceived promise of variable (i.e., dynamic) risk factors for violence risk assessment, little research has examined the influence this type of factor has on risk estimates and case management decisions. This study explores whether risk judgments and case management decisions change when evaluators are provided with information relevant to variable risk factors. Mental health professionals ($N = 155$) completed a file-based risk assessment. Participants were randomly assigned a case history and to one of three 'information' conditions: (1) the patient’s past functioning, (2) the patient’s past and recent functioning, and (3) the patient’s past and recent functioning, and his plans for the future. Results showed that information about present functioning and future plans had an effect on some risk judgments and case management decisions. The findings suggest that evaluators consider information relevant to variable risk factors when assessing risk. Implications of the findings for violence risk research are discussed.
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INTRODUCTION

In recent years, violence risk assessment has seen a shift in conceptualization from violence prediction to violence prevention (Hart, 1998). Along with this conceptual shift, the nature of the risk factors considered relevant for achieving this goal of 'violence prevention' changed as well. Historically, fixed risk factors have been the central focus of violence risk assessment. Although fixed (often referred to as static or historical) risk factors remain an important consideration for evaluators during risk assessment, researchers have identified a number of shortcomings of these factors (Hart, 1998). To address the limitations of fixed risk factors, variable (often referred to as dynamic) risk factors were introduced and are argued to be highly relevant for violence prevention. In fact, it has been suggested that variable risk factors are the most important targets for risk prevention (Douglas & Kropp, 2002; Douglas & Skeem, 2005; Mills, 2005). Despite the suggestion that these factors are important, there remains little empirical evidence regarding the use of variable risk factors (Douglas & Skeem, 2005; Philipse, Koeter, Van der Staak, & Van den Brink, 2005). The purpose of the current study was to explore the effect of variable risk factor information on violence risk assessments. Specifically, this study examined whether the inclusion of variable risk factor information had an effect on an evaluator’s perception of risk and on risk management decisions.

This paper will provide a brief review of the nature of risk factors, including a description of the risk terminology used in this paper. Next, an overview of the research
regarding variable risk factors conducted thus far, as well as their use within risk
assessment measures will be provided. Third, the risk management research will be
reviewed. Finally, the current study will be presented.

Risk Factors

A risk factor is “a measurable characterization of each subject in a specified
population that precedes the outcome of interest and which can be used to divide the
population into 2 groups (the high-risk and the low-risk groups that comprise the total
population)” (Kraemer et al., 1997, p. 338). In the context of this study, risk factors are
variables that have been shown to be associated with violence, and can be individual,
historical, clinical or contextual in nature (Borum, 1996). The focus of this study is on the
nature of risk factors for violence involved in the risk assessment process: (1) fixed (i.e.,
static) risk markers, and (2) variable (i.e., dynamic) risk factors.

The first type of risk factor to be discussed is the fixed, or static, risk marker. Unfortunately, within the violence risk assessment field there remains inconsistency with
regard to terminology. Although the term ‘static risk factor’ is frequently used throughout the published literature, this paper will adopt the risk terminology proposed by Kraemer and colleagues (1997). As such, a fixed risk marker is a risk factor that cannot be
demonstrated to change, such as race, gender, or year of birth (Kraemer et al., 1997). To
date, a substantial amount of research has explored different fixed risk markers and their predictive ability with regard to general violence and sexual violence (see Quinsey,
Harris, Rice, & Cormier, 2006). The results of this research reveal that a number of fixed
risk markers are related to future violence. For instance, history of previous violence has
been established as a fixed risk marker. Tardiff, Marzuk, Leon, and Portera (1997) found that for psychiatric patients released from an acute care unit, those who had a violent episode in the week prior to admission were nine times more likely to engage in violence in the two weeks following discharge. Similar results have been reported for other community violence studies with mentally disordered individuals (Walsh et al., 2004) and non-mentally disordered individuals (DeLisi, 2001), as well as for institutional violence (Watts, Leese, Thomas, Atakan & Wykes, 2003). Other examples of empirically established fixed risk markers include age of first violent offence (Moffit, Caspi, Harrington, & Milne, 2002), and childhood victimization (Glasser, Kolvin, Campbell, Glasser, Leitch, & Farrelly, 2001).

Due to the abundance of empirical support for the reliability and predictive ability of specific fixed risk markers, some have argued that risk assessments should focus only on these factors. In fact, actuarial risk assessment measures were developed to predict future violence based almost entirely on fixed risk markers (Dvoskin & Heilbrun, 2001; Gendreau, Little, & Goggin, 1996). Actuarial measures use a number of empirically supported risk markers, which are scored, weighted and summed according to a set of specific rules, to obtain an overall score that indicates the probability of future violence. Multiple actuarial measures have been developed over the years to predict both general violence (e.g., Violence Risk Appraisal Guide [VRAG]; Quinsey, Harris, Rice, & Cormier, 1998) and sexual violence (e.g., Static-99; Hanson & Thornton, 1999). During the time when an ‘all or nothing’ prediction scheme was used by mental health systems (e.g., involuntarily holding an individual until it was decided [i.e., predicted] that it was safe to return the individual to the community, at which point he or she was simply
released), the use of fixed risk markers and actuarial methods was viewed as acceptable (Dvoskin & Heilbrun, 2001). Currently, however, simple violence prediction is not the goal of a risk assessment (Hart, 1998), nor is a one-time assessment sufficient. Instead, the goal of risk assessment is violence prevention. Hart (1998) conceptualizes risk assessment as the process of evaluating individuals to characterize the risk that they will commit acts of violence and developing interventions to manage or reduce that risk.

Steadman and colleagues (1993) have stressed the importance of the ongoing nature of this process, with decisions being made at different times with regard to the management of the individual. Clinically, the ongoing nature of the assessment process will help the evaluator to identify when a meaningful change in risk has occurred and where to intervene with the client (Mills, 2005). With this new conceptualization of risk assessment, a number of limitations of fixed risk markers were revealed.

Specifically, there are two substantial limitations to fixed risk markers that are relevant to the current conceptualization of risk assessment. The first limitation is related to the ability of fixed risk markers to detect change in risk level. Research has demonstrated that an individual's risk level can fluctuate over time (Douglas & Skeem, 2005; Gendreau & Goggin, 1996). However, it is not possible to evaluate changes in risk over time when focused only on fixed risk markers (Grubin & Wingate, 1996; Hart, 1998; Heilbrun 1997; Philipse et al., 2005). As a result of this inability to assess risk level fluctuations, necessary adjustments to supervision, treatment, or other management strategies cannot be made and an increase in risk level may occur.

The second limitation of fixed risk markers is the restricted value they provide for risk management planning (Dempster & Hart, 2002; Philipse et al., 2005; Wong &
One major purpose of a risk assessment is to identify problem areas that can be addressed in treatment or that can be influenced by an intervention(s) in order to reduce risk and prevent future unwanted behaviour. Many fixed risk factors cannot be specifically addressed in treatment. For instance, a treatment program cannot influence the age of the first violent incident or gender and therefore, these factors are not helpful for developing a case management strategy. It is important to note that despite these limitations, fixed risk markers are still necessary for the risk assessment process, such as for estimating longer term risk for violence (Hart, Webster, & Douglas, 2001) or for informing treatment intensity (Douglas & Kropp, 2002). However, alone, fixed risk markers are no longer sufficient for risk assessment and as a consequence, the focus has shifted to variable risk factors.

According to Kraemer et al.'s (1997) terminology, variable risk factors are risk factors that change either spontaneously or through intervention. This type of factor is frequently referred to as ‘dynamic’ in the literature. For many years, variable risk factors were not of interest in the research for a number of reasons, including the supposed unreliability of variable risk factors, and the view that assessment of variable risk factors would not enhance the prediction of criminal behaviour (Gendreau et al., 1996). It is now recognized that variable risk factors offer a number of benefits to risk assessment and that these risk factors specifically address the arguments presented against fixed risk markers. By definition, variable factors have the ability to change. In turn, by continually assessing these factors, any fluctuations in a particular factor, and therefore in the overall level of risk, will be recognized and appropriate adjustments to treatment, supervision, and management can be made. Similarly, treatment programs can be developed that focus
specifically on the variable risk factors that are relevant in a specific case. For example, an individual with substance abuse problems can be referred to substance abuse treatment. With the appropriate intervention strategies (e.g., treatment programs that specifically address identified risk factors), it is hypothesized that violence risk can be minimized. With these strengths, variable risk factors have provided a promising new direction for risk assessment for both research and clinical practice.

**Variable Risk Factor Research**

Despite the promise of variable factors, there is limited published research regarding variable risk factors. The majority of studies of potentially variable risk factors have used single time-point estimates (Douglas & Skeem, 2005). For instance, Dempster and Hart (2002) found that the inclusion of psychosocial risk factors, which were considered variable factors but measured at only one time, improved the model fit in the prediction of sexual violence reoffending. Further, in a meta-analysis of the predictors of general recidivism for adult offenders, Gendreau and colleagues (1996) found that variable risk factors (referred to as criminogenic needs) produced correlations with recidivism that were equal to or greater than those correlations found with fixed factors, such as criminal history. Although these studies may be useful for demonstrating the promise of certain variables for predicting risk, there is one major shortcoming with these studies: single time-point studies are unable to demonstrate if risk factors are changeable and whether or not the change is associated with violence.

*Dual time-point studies.* A step up from single time-point studies is dual time-point studies. These studies assess variable risk factors at one time and re-assess the
factors at a later time to determine whether any change in risk factors predicts violence (Douglas & Skeem, 2005). There are a handful of studies that have employed this methodology. First, there are studies that have demonstrated the ability of certain risk factors to change over time. For instance, research with the Clinical and Risk Management Scales of the Historical-Clinical-Risk Management-20 risk assessment measure (HCR-20; Webster, Douglas, Eaves, & Hart, 1997) has revealed that scores on these scales can change over time.

Briefly, the HCR-20 comprises 20 items to be considered while evaluating risk level – 10 Historical items, 5 Clinical items, and 5 Risk Management items. Both the Clinical Scale items and the Risk Management items are considered potentially variable. The Clinical Scale items relate to the current or recent clinical functioning of the individual and the Risk Management factors relate to future considerations of situation and context (Douglas & Kropp, 2002). Research with the HCR-20 has supported the ability of the C and R scale scores to change over time and their capacity to change in the context of treatment. Douglas and Belfrage (2001) examined the change in HCR-20 items across two time periods in both civil and forensic psychiatric patients in Canada and Sweden. The results for the civil psychiatric sample showed a decline from a score of 7 to 4 (out of 10) for the Clinical subscale between admission and discharge. This represents a large change in scores as indexed by Cohen’s \( d \). Further, the proportion of civil psychiatric patients who scored in the 8-10 range on the Clinical subscale also decreased from 48% to 3% between admission and discharge, meaning that less people received high scores on the Clinical items at discharge. The results suggest that the patients stabilized throughout their stay within the hospital. With the forensic samples, a decrease
on the C, as well as the R subscale score was seen, however, compared to the civil sample, the changes were moderate in size.

In a separate study, Belfrage and Douglas (2002) examined the change in HCR-20 scores in a sample of Swedish forensic psychiatric patients. Again, the results revealed that the C and R subscale scores decreased over time. Patients who remained in treatment longer had significantly lower scores on the C and R scales compared to patients who were admitted to the hospital for shorter lengths of time. Both of these studies provide support for the C and R subscales as variable, but they did not examine if these changes predicted violence.

There are a few dual time-point studies that have examined both the change in variable risk factors and the association between the change and future violence or general criminality. Hanson and Harris (2000) found that variable risk factors were predictive of sexual recidivism, even after controlling for the fixed risk factors. Specifically, the results showed that recidivists increased in anger and subjective distress just prior to reoffending. However, the Hanson and Harris study suffered from a number of serious shortcomings that limit the strength of this study (e.g., it was retrospective and may have suffered from bias).

Similar to the research with the HCR-20, research on the Level of Services Inventory – Revised (LSI-R; Andrews & Bonta, 1995) has revealed the ability for certain risk factors to change, but this research has also demonstrated a corresponding change in recidivism risk when a change in risk factors occurs. The measure and some of the research is briefly reviewed here.
The LSI-R is a 54-item instrument, of which 36 are variable factors and 18 are fixed factors (Simourd, 2004). The items are classified into 10 subcomponents (with corresponding proportion of variable factors as determined by Simourd, 2004): criminal history (10% variable), education/employment (50%), financial (100%), family/marital (75%), accommodation (100%), leisure/recreation (100%), companions (100%), alcohol/drug problem (78%), emotional/personal (80%), attitude/orientation (100%). Two early studies demonstrated that changes in LSI-R scores are related to recidivism. First, Andrews and Robinson (1984) administered the LSI-R to probationers at intake and again six months later. The results revealed that changes in LSI-R scores over time were associated with changes in recidivism. For instance, probationers who scored in the moderate-risk range at intake but whose scores decreased at the 6-month mark showed a decrease in risk level (low-risk at six months) and the recidivism rate was 0%. In contrast, probationers who scored in the moderate-risk range both at intake and the 6-month mark had a recidivism rate of 33%. Similar results were found by Motiuk, Bonta, and Andrews (1990; as cited in Andrews & Bonta, 2006). The LSI-R was administered to 55 inmates who were released from prison and re-assessed while on probation. Those who scored in the low risk range at baseline and remained in the low-risk range at follow-up demonstrated a 0% recidivism rate. However, those who moved from low-risk to moderate or high-risk at follow-up demonstrated a 33% recidivism rate. Since these early studies, other studies have replicated these results (Raynor, Kynch, Roberts, & Merrington, 2000; Raynor, in press, as cited in Andrews & Bonta, 2006).

Multiple time-point estimate studies. Finally, there are multiple time-point estimate studies that have explored changes in variable risk factors, however, these
studies are limited in number. Brown (2002) conducted a 3-wave, prospective study with adult male offenders about to be released from federal institutions in the Ontario region. The purpose of the study was to examine the predictive ability of variable risk factors. Variable risk factors were assessed at three times during this study: (1) pre-release, (2) one-month post release and, (3) three-months post release. The results revealed that seven variable risk factors (employment, single/unsupportive partner, negative affect, perceived problem level, substance abuse, social support, and expected positive consequences of crime) significantly changed over time and that these changes predicted general revocation or new criminal offence.

In another multiple time-point estimate study, variable risk factors were assessed 26 times in a sample of 135 psychiatric patients (Mulvey, Odgers, Skeem, Gardner, Schubert, & Lidz, 2006). Both patients and collaterals were interviewed weekly over a six month period to evaluate changes in variable risk factors (e.g., substance abuse, psychiatric symptoms, treatment) and their relation to violence. The study found that drinking, drug use and violence occurred in acute bursts and the three activities were highly likely to co-occur on a given day. In addition, violence, alcohol, and drug use (with the exception of marijuana) “today” significantly predicted whether violence occurred within the next one or two days. These studies overcome the limitations of the single time-point and dual time-point studies and begin to investigate the effect of changes in variable risk factors, however further research is required to obtain a better understanding of how these factors influence future behaviour.

*Specific risk factors.* In addition to the research mentioned above, research that focuses on specific factors may provide some insight into potentially variable risk factors.
that may be relevant for violence assessments. According to Douglas and Skeem (2005), by focusing on factors that have empirical evidence demonstrating a relationship to violence, and that have empirical support demonstrating their ability to change over time, promising variable risk factors can be identified. Using these criteria, Douglas and Skeem completed a review of the research and produced a list of seven promising variable risk factors. The factors listed include: (1) negative affectivity (anger and negative mood), (2) psychosis, (3) impulsiveness, (4) antisocial attitudes, (5) interpersonal relationships, (6) substance abuse (and related problems), and (7) treatment alliance/adherence (treatment and medication compliance, and treatment-provider alliance). Douglas and Skeem note that there are some problems with deciding which factors are the most promising because of the way research has been conducted to date (e.g., studies examining different factors and studies focused on specialized forms of violence). Despite the limitations of the current research, Douglas and Skeem were able to find research supporting each of these factors as variable and related to violence. Only a small portion of this research is reviewed here.

The first factor Douglas and Skeem (2005) discuss is impulsiveness. Research with civil psychiatric patients has found impulsiveness is associated with self-reported violent thoughts (Grisso, Davis, Vesselinov, Appelbaum, & Monahan, 2000), and with future violent behaviour (Monahan, et al., 2001). This research supports the association between impulsiveness and violence. Further, Douglas and Skeem (2005) cite research that demonstrates the ability of impulsiveness to change over time. For instance, in a sample of patients with depressive symptomatology, Corruble and colleagues (1998) found a significant decrease in impulsiveness scores over a 4-week period, using the
Barratt’s Impulsiveness Scale (BIS-11; Barratt, 1994). Although the research discussed above reflects two separate streams of research, together they provide support for the idea of impulsiveness as a variable risk factor for violence.

Another promising variable is psychosis. Research focused on the risk factor ‘psychosis’ has been inconsistent to this point. There is clear evidence that psychotic symptoms can change over time (Cramer, Rosenheck, Xu, Henderson, Thomas, & Charney, 2001; as cited in Douglas & Skeem, 2005). However, the question is whether or not psychotic symptoms are associated with violence. There is a substantial amount of research that has demonstrated an association between psychotic symptoms and violence (Arango, Calcedo, Gonzalez-Salvador, & Calcedo, 1999; Bjorkly & Havik, 2002; Link, Stueve, & Phelan, 1998; McNiel & Binder, 1994; Swanson, et al., 2006). For instance, in a study of 39 psychiatric patients, with primary diagnoses of schizophrenia or delusional disorder, Bjorkly and Havik (2002) found that 54% of the patients had a positive identification of threat and control override symptoms (i.e., the belief that others are controlling one’s thoughts either by stealing thoughts or inserting them into one’s mind, and that others are plotting against one, following one and wanting to hurt one physically, [Bjorkly & Havik, 2002]), immediately prior to the violent incident. However, other research has failed to demonstrate an association between psychotic symptoms and violence (Lidz, Mulvey, & Gardner, 1993) and in some cases, a negative relationship between psychosis (specifically schizophrenia) and violence has been reported (Quinsey, Harris, Rice, & Cormier, 2006).

This has provided only a brief review of some of the research related to the promising risk factors identified by Douglas and Skeem (2005). Although the research
for each of these factors demonstrates the promise of these factors for risk assessment purposes at this time further research is needed to fully understand the effect that changes in these factors have on violence.

Variable Risk Factors in Risk Assessment Measures

In light of the violence prevention goal of risk assessment and the perceived benefits of variable risk factors, it is no surprise that these factors have been incorporated into risk assessment measures. In particular, these factors are associated with Structured Professional Judgment (SPJ) guidelines, as illustrated by the HCR-20 described above. The SPJ approach provides a set of guidelines to assist an evaluator when conducting a risk assessment. The guidelines provide the minimum set of risk factors that should be considered in each case. The risk factors included within SPJ measures are supported within the scientific and professional literature. However, contrary to the actuarial approach described earlier, the SPJ approach does not involve the use of explicit weighting or summing rules. Instead, the evaluator is given the flexibility to combine and weigh the factors as necessary for any particular case (Douglas & Skeem, 2005). In addition to the HCR-20, other SPJ measurement guides that have incorporated variable risk factors include the Sexual Violence Risk-20 (SVR-20; Boer, Hart, Kropp, & Webster, 1997), the Spousal Assault Risk Assessment guide (SARA; Kropp, Hart, Webster, & Eaves, 1999), and the Risk for Sexual Violence Protocol (RSVP; Hart, Kropp, Laws, Klaver, Logan, & Watt, 2003). Recently, two new risk assessment measures have been introduced that comprise variable risk factors. The Short Term Assessment of Risk and Treatability (START; Webster, Martin, Brink, Nicholls, &
Middleton, 2004) is a guide for assessing violence and related risks (e.g., self-harm, unauthorized leave) and comprises 20 variable risk and strength related factors. The Violence Risk Scale (Wong & Gordon, 2006) is another assessment tool composed of variable factors to predict recidivism. To date, only the HCR-20 has published research focused on the score changes for the variable risk factors over time, as discussed above.

It is clear from the number of risk assessment measures that are incorporating variable risk factors, researchers in this area strongly believe in the value of these factors. In particular, the inclusion of variable risk factors in these measures is deemed as important not only because it guides the assessment aspect of a violence risk assessment, but because it also guides the management decisions for a specific case. Management strategies can be developed and adjusted as necessary through the identification of case-relevant risk factors, especially variable risk factors (Douglas & Kropp, 2002). It is the use of these variable risk factors for case management and treatment decisions that will be discussed next.

**Risk Management**

The research discussed so far demonstrates the ability for variable risk factors to be assessed and that change in these factors is detectable. Another important area to research with regards to variable risk factors is the impact these factors have on risk management and treatment decisions. Risk management has been defined as “the task of constructing social and physical environments that, in combination with knowledge of the individual's assets and liabilities, will likely lead to substantial reduction in violence potential” (Webster, Douglas, Belfrage, & Link, 2000, p. 128). Some researchers (Gunn,
1996; Steadman et al., 1993) have stressed the importance of making treatment and case management decisions on a regular basis, and that it is not a one-time only decision. It is hypothesized that variable risk factor information is essential for developing case management strategies. The idea is to continually assess variable risk factors and to adjust management strategies and intervene when necessary (Mills, 2005). Unfortunately, despite the proliferation of research and developments in the area of violence risk assessment, very little of this attention has focused on risk management (Hart, Webster, & Douglas, 2001).

With respect to the risk management process, it is suggested that the violence prevention strategies should be derived directly from the risk assessment procedure (Douglas & Kropp, 2002). By identifying and assessing relevant variable risk factors, management strategies can be tailored and adjusted to meet the needs of the individual and prevent violence. There is evidence that demonstrates the effect of targeting the variable risk factors identified. As mentioned, research with the HCR-20 has demonstrated that scores on the Clinical and Risk Management Scales, both considered to be comprised of variable risk factors, can decrease over time and with longer treatment periods (Belfrage & Douglas, 2002; Douglas & Belfrage, 2001). Further, data from the ongoing Carleton University meta-analysis of the effects of treatment has demonstrated that interventions targeted at variable factors (referred to as criminogenic needs in that study), such as antisocial cognition, antisocial associates, or work/school problems had a mean effect size of .20 (range .15 - .22) compared with .05 (range .04 - .06) for interventions that did not target these factors (Andrews & Bonta, 2006). The interventions targeted at the variable factors are clearly having a greater impact, as a
larger effect size represents a larger reduction in recidivism (Wong & Gordon, 2006). This demonstrates the importance of targeting variable factors when developing a treatment and management plan.

**The Present Study**

The research has suggested that variable risk factors may have a substantial influence on risk assessment and risk management. There is evidence that there are risk factors that are variable; that is, the level of the factor or the presence (versus absence) of the factor is able to change. Further, it has been hypothesized that variable risk factors are important for risk management decisions in the effort to prevent violence. However, there is little research exploring the influence variable risk factor information has on the risk assessment process and whether evaluators take the variable factor information into consideration when conducting an assessment.

The current study sought to explore the effect of variable risk factor information on risk judgments and risk management decisions. In particular, the current study examined whether providing variable risk factor information for a risk assessment has an effect on: (1) the identification of relevant risk factors; (2) the identification of risk management strategies; and (3) the risk estimates. In order to examine the effect of variable risk factor information, 155 mental health professionals with experience conducting violence risk assessments were asked to conduct a file-based risk assessment, based on either past functioning information, past and recent functioning information, or past and recent functioning information, as well as release plan information.
METHOD

Overview

Mental health professionals with experience conducting violence risk assessments were recruited to conduct a risk assessment for a hypothetical forensic psychiatric patient. The assessment was based on file information and evaluators were asked to make risk judgments and case management decisions for the patient’s upcoming Review Board hearing. The entire risk assessment was completed online. Participants were randomly assigned a case history and to one of three conditions: (1) information concerning the patient’s past functioning (Past), (2) information concerning the patient’s past and recent functioning (Past/Recent), and (3) information concerning the patient’s past and recent functioning, as well as the patient’s plans for the future (Past/Recent/Future). After reviewing the case history, participants were directed to an on-line survey and asked to complete a series of risk judgments and case management decisions. The entire study procedure is described in detail below. Prior to beginning the current study, ethical approval was obtained from the Simon Fraser University Office of Research Ethics.

Participants and Procedure

One hundred and fifty-five mental health professionals from around the world (19 countries in total) with at least one year of experience conducting violence risk assessment participated in the current study. Participants were recruited by email from
five professional organizations: (1) The International Association of Forensic Mental Health Services (IAFMHS), (2) The American Psychology-Law Society (AP-LS), (3) The Consortium for Applied Research and Evaluation in Mental Health (CareMH), (4) the Criminal Justice Section of the Canadian Psychological Association (CPA), and (5) the PSYLAW Listserve.

IAFMHS is an international association that aims to enhance the standards of forensic mental health services in the international community and promote an international dialogue about forensic mental health (IAFMHS, 2006). The association is composed of various mental health professionals, including psychologists, psychiatrists, criminologists, social workers, and nurses.

AP-LS is division 41 of the American Psychological Association. It is an interdisciplinary organization devoted to scholarship, practice, and public service in psychology and law (AP-LS, 2006). It should be noted that this project was reviewed by an AP-LS committee member prior to permission being granted to contact the members of the organization (the other organizations requested documentation stating that ethical approval had been obtained for the study).

CareMH is a network of people focused on improving the well-being of persons with serious mental illness by promoting applied research, evaluation, and knowledge transfer in mental health services (CareMH, 2006). CareMH membership is composed of a variety of professions, including education, family medicine, law, nursing, psychiatry, psychology, and social work.
The Criminal Justice Section (CJS) of CPA represents individuals who work in a variety of criminal justice and forensic settings, including corrections, law enforcement, the courts, hospitals, and community mental health (CPA, 2006).

Finally, the PSYLAWS Listserve is an on-line forum for mental health professionals to discuss current issues and ask clinical and research related questions with the focus on forensic and mental health issues.

For all organizations, members were contacted via email requesting participation in the current study. Members of AP-LS, CareMH, and CJS were sent an email on my behalf by an administrator of each organization, respectively, in order to protect confidentiality of the members. I contacted the members of IAFMHS directly. In order to ensure the confidentiality of the IAFMHS members, the email was addressed to ‘Undisclosed Recipients’ and the email addresses of the members were not revealed to other members of the organization. With regard to the PSYLAWS Listserve, the participant recruitment email was posted in the discussion forum, which was then disseminated to the members of the Listserve through email.

The recruitment email sent to each organization remained the same. The email provided basic details of the study (e.g., focus of study, experience required to participate, approximate time commitment). In addition, the email informed the potential participants that participation in the study was voluntary and had been approved by the Simon Fraser University Office of Research Ethics. Finally, the email contained my contact information (email address) and instructed any individual interested in participating or interested in further information, to contact me (Appendix A).
Potential participants who contacted me were sent a reply email that contained further information about the study, including the study instructions, the survey website, a password, and a case history. The case histories were randomly assigned to each participant. The random case history that was provided also determined which condition the participant was in (i.e., Past; Past/Recent; Past/Recent/Future). The case histories were developed from the files of 10 forensic psychiatric patients and there were three versions of each case, for a total of 30 case histories (further information about the case histories, as well as the conditions in the study, is provided below). In order to randomly assign the case histories, a random number sequence generator (www.random.org) was used to produce a number sequence of 1 to 30, which represented each case history. The numbers generated did not contain duplicates within each sequence. Therefore, the random number generator was used 10 times in order to develop a recruitment list that was able to accommodate 300 potential participants and that had an equal number of each case. As participants volunteered for the study, they were provided the next case history according to the previously established order.

Upon receiving the case history, participants were instructed to review the case prior to commencing the study. When the participants had reviewed the case history, they were directed to the study website to complete the survey (described below). The entire survey was completed on-line using the Remark Professional Software (Version 3). As participants completed a section of the survey, the data was automatically stored in a secure on-line data file that I was able to download. Upon completion of the survey, the participant was provided the option of receiving a free Mental Health, Law, and Policy Institute (Simon Fraser University) risk assessment manual as compensation for
completing the survey. In order to receive the free manual, participants were asked to email me with their manual choice, password from the study, and mailing address. The password was requested only to verify that the study had been completed. The Remark Professional Software allowed for the list of passwords associated with completed surveys to be downloaded; however the data was not downloaded with the passwords when this option was used, thus the confidentiality of the participants was protected.

Approximately three weeks following the initial contact by a potential participant, those who had not yet completed the survey were sent a reminder email. The reminder email informed the participant that the study remained on-line for completion and that free manuals remained available for those who completed the survey. In addition, the email requested that participants who were no longer able to continue with the study to contact me in order to update my records (Appendix B).

It was impossible to determine the response rate for this sample. First, there is considerable overlap between all organizations contacted, which makes it difficult, if not impossible to determine how many people received the recruitment email. Similarly, since the recruitment email was sent on my behalf for three of the organizations, it is unclear how many emails did not reach the intended destination. However, overall 294 people volunteered for the study. Of these 294 people, nine people did not meet the inclusion criteria of having at least one year of violence risk assessment experience, ten people withdrew from the study, the data from five participants was lost due to technical difficulties, and 115 people did not complete the survey for unknown reasons, leaving a final sample of \( N = 155 \).
Most respondents were male \((n = 95; 61.3\%)\) and were 42.65 \((SD = 11.34)\) years of age, on average. Psychology was the most common profession \((n = 120, 77.4\%)\), followed by psychiatry \((n = 19; 12.3\%)\) and nursing \((n = 9; 5.8\%)\). The majority of participants were from the U.S.A \((n = 82; 52.9\%)\), followed by Europe \((n = 31; 20.0\%)\), Canada, \((n = 21; 13.5\%)\), and Australia/New Zealand \((n = 18; 11.6\%)\). The mental health professionals had been working an average of 13.35 years \((SD = 9.57)\) in their current profession and had an average of 8.64 years \((SD = 7.53)\) of experience conducting violence risk assessments. Finally, mental health professionals conducted an average of 30.49 \((SD = 37.59)\) violence risk assessments per year. Table 1 presents the breakdown of the sample by condition. Of note, no significant differences were found between the experimental groups for age, number of years in current profession, or number of years of forensic experience.

**Study Materials**

**Case Histories**

Ten case files of men found Not Criminally Responsible on account of Mental Disorder (NCRMD) and held in custody at a forensic psychiatric hospital in Western Canada were used to develop realistic case histories. In Canada, an NCRMD verdict means that the accused has, beyond a reasonable doubt, committed the acts alleged in the charge but was not legally or morally responsible for those acts on account of a "mental disorder" (British Columbia Review Board, 2006). For the ten cases used in this study, the men were detained in a forensic psychiatric hospital subject to the conditions or restrictions determined by a Review Board. The information to develop the case histories
was gathered from ten case files previously cleaned of any identifying information (e.g., name, date of birth). To further protect the identity of the patients, other potentially identifying information, such as dates and specific details of the crime, were changed in the case histories.

Three versions for each of the ten cases were developed, for a total of 30 case histories. The first version comprised only past functioning information. That is, any information pertaining to the individual up until approximately one year prior to the time the case history was written. The second version included both past and recent functioning information – all information available at the time the case history was written. Finally, the third version included past and recent functioning information, as well as information regarding release plans. The three versions of each case history represented the three conditions of the study (10 cases per condition; Past, Past/Recent, and Past/Recent/Future). The type of information provided in the case histories is provided below. Please see Appendix C for an example of a complete case history.

The first page of the case history provided the participant with study instructions and general information. The general study information explained to the participant the role of a forensic psychiatric hospital, the reasons for being admitted to such a hospital, the term NCRMD, and the role of the Review Board. Further, the instructions explained that the participant was to review the case history and answer a series of risk assessment and risk management questions based on the information provided.

The next section of the case history contained the details of the case. All three versions of a case contained the same past functioning information sections. The
information provided in the past functioning section was based mostly on the empirically supported factors found within the HCR-20 risk assessment guide (Webster et al., 1997). Each case history began with a general overview of the case, including the age, index charge (i.e., most recent criminal charge), number of admissions to the Forensic Psychiatric Secure Hospital, diagnosis, date of the last review board hearing, and date of the upcoming review board hearing. The past functioning information sections included: (1) family history, (2) educational history, (3) employment history, (4) substance abuse history, (5) relationship history, (6) mental health history, (7) criminal history, and (8) adjustment after hospitalization (only for those who had been in hospital for longer than one year at the time of the report). In addition, two cases contained intelligence testing results.

The ‘recent functioning’ section of the case history referred to the year prior to the case history being written, which usually represented the time between the last Review Board hearing and the present Review Board hearing. The recent functioning section included information regarding the individual’s behaviour and attitude throughout the year, the individuals’ insight into his mental illness, treatment adherence, presence of symptoms, relationship information (if applicable) and leisure time information. Further, this section described how any of the above factors fluctuated throughout the previous year. For instance, one case provided a description of the patient’s anger problems and poor behaviour (and how his behaviour eventually improved) over a five month period.

The ‘release plans’ section contained information regarding any plans and decisions that have been made for the individual’s release from the hospital. The information focused on living arrangements (e.g., apartment/suite found, neighbourhood
to live in), the potential stressors and destabilizers the individual may encounter, his plans for coping with any stressors, his plans for financial support (e.g., employment arranged, benefits arranged), social support, and plans for occupying leisure time.

Survey

The on-line survey was the same for each participant, regardless of condition (described below, see Appendix D for the complete on-line survey).

*Password and Demographic Information.* The first page of the survey welcomed the participants to the survey and requested that they enter the password they had been provided via e-mail. After gaining access to the survey, the participants were asked to complete a series of general demographic questions (e.g., gender, age, country where assessments are conducted, number of years of experience in current position and number of years of experience conducting violence risk assessments). The responses to these questions were used to screen participants for meeting the inclusion criteria of the study (i.e., at least one year of experience conducting violence risk assessments). Upon submitting the responses to these questions, participants were directed to one of two screens. Those who met the inclusion criteria were directed to the next screen of the study (informed consent, described below). However, those who did not meet the study inclusion criteria (less than one year of experience conducting violence risk assessments) were directed to a page that informed them that they did not meet the criteria for this study, and thanked them for their time and interest.

*Informed Consent.* The next page of the online survey provided the participants with an informed consent form. The informed consent form briefly described the study
and explained to the participant how their responses would remain anonymous and confidential. As required by the Simon Fraser University Office of Research Ethics regulations, the participants were informed of the limits of the confidentiality agreement (i.e., any information that suggests the person is a danger to themselves or another person, or any indication of child or elder abuse was required to be reported). Finally, the informed consent form outlined the risks and benefits of this research, and provided contact information for the participants if they had questions or concerns about the study. Participants were instructed to read the informed consent form and click on either 'I accept' or 'I decline' at the bottom of the page. The participants were informed that by selecting 'I accept,' they were voluntarily agreeing to participate in the study and were directed to the first part of the questionnaire. Participants who selected 'I decline' were directed to a page that informed the participant he or she had declined to continue with the study, and thanked the participant for his or her time.

*General Study Information.* Individuals who agreed to participate in the study were provided with general study information and instructions. The information provided on this page was the same as the information provided on the first page of the case history (described above), and included the role of a forensic psychiatric hospital, the reasons for being admitted to such a hospital, the term NCRMD, and the role of the Review Board. Further, the instructions explained that the participant was to review the case history and answer a series of risk assessment and management questions based on the information provided. The participants were informed that after completing the series of questions on each screen, he or she must click on 'Submit' to upload their responses to the database and move on to the next page. The participants were warned that after
submitting the completed responses, they would be unable to return to a previous screen. The participants were encouraged to have their copy of the case history available while completing the survey.

**Risk Factors.** The first part of the questionnaire (screens 4 and 5) focused on the relevant risk factors for the case. The first part of the ‘risk factors’ section (screen four) asked participants to identify and list all of the major (most important) risk factors for violence that were apparent in the case. This was an open-ended question and participants were provided enough space to provide a maximum of 20 risk factors.

On the next screen (screen five), the participants were provided with a list of risk factors that “some people believe are related to risk for violence” and asked to indicate which factors were present and relevant in the case. The list of risk factors was based mostly on the risk factors included in the HCR-20 assessment guide (e.g., relationship instability, major mental illness, exposure to destabilizers). Another structured professional assessment guide, the Short Term Assessment of Risk and Treatability (START; Webster, et al., 2004) was used to provide additional potentially variable risk factors. There is some overlap between the factors on the HCR-20 and the factors on the START, but the START has some additional items and these were included in this survey (poor coping, poor conduct, and material resources). One listed risk factor (Did not live with parents up until the age of 16) was selected from the Violence Risk Appraisal Guide (VRAG; Quinsey et al., 1997). The complete list of risk factors is provided in Appendix D.
Risk Scenarios. This section (screen 6) required the participants to develop risk scenarios. A ‘risk scenario’ is a brief narrative of the kind of violence the participant is most concerned the patient in the specific case might perpetrate if released (Hart et al., 2003). For the purposes of the current study, violence was defined as “actual, attempted, or threatened physical harm of another person that is deliberate and non-consensual” (Webster, Douglas, Eaves, & Hart, 1997, p. 24). The participant was instructed that the scenario should reflect the information known about the patient, including his history of violence and the risk factors present in the case. In developing risk scenarios, the participant was asked to consider the nature of the violence (kind of violence, likely victims); the severity of violence (the extent of psychological and physical harm, such as could it be life-threatening?); the imminence of violence (how soon the patient may engage in violence); the frequency or duration (how often the violence might occur, if it will be chronic or acute); and the likelihood (how common this type of violence is and how likely it is to occur). Participants were asked to develop as many risk scenarios as they thought were relevant, up to a maximum of five scenarios.

Risk Management. The Risk Management section (screens 7 and 8) was similar to the Risk Factor section, described above. First, participants were asked to develop risk management strategies. These were ideal management strategies that the participant would recommend to the Review Board if he or she was managing the specific case (e.g., recommended treatment programs, living arrangements, supervision intensity). For the purpose of this study, the participants were instructed not to consider the specific laws that pertain to the location the participant works in; instead, they were asked to describe ideal strategies. This instruction was given to provide the opportunity to compare the
strategies across countries and jurisdictions that may have different regulations with respect to management options. Participants were asked to develop as many risk management strategies as they thought reasonable, up to a maximum of five.

Next, participants were provided with a list of potential management strategies and asked to decide whether they would, would not, or possibly would recommend any of the listed strategies (yes/no/possibly). Participants were also asked about the disposition they would recommend (i.e., custody [continued hospitalization], conditional discharge with varying degrees of supervision, or absolute discharge), living arrangements for the patient, therapy programs, and other conditions (e.g., no contact with victim, curfew, abstain from alcohol/non-prescription drugs). The complete list of risk management strategies is available in Appendix D.

Risk Judgments. The next section was the Risk Judgment section (screen 9). In this section, participants were asked to make a series of risk judgments that focused on the severity of violence, imminence of violence, target of violence, and type of violence that the perpetrator may commit. The participants also were asked to estimate the likelihood of general criminality (committing a crime that does not necessarily involve violence, e.g., theft, drug-related crime). The participants were asked two questions for each risk estimate: (1) “Will this occur?” (yes/no/possibly) and (2) “How concerned are you that it will occur?” (Scale of 1 to 10; 1 = low concern, 5 = moderate concern, 10 = high concern). The complete list of risk estimates is provided in Appendix D.

General Information. The final section (screen 10) gathered general information from the participants concerning their usual risk assessment procedures. Specifically,
participants were asked two questions: (1) what information was missing from the case history that may have been helpful for conducting this risk assessment, and (2) what risk assessment tool (if any) the participant regularly uses when conducting a risk assessment.

After submitting the responses for the final two questions, the participants were provided with a list of Mental Health, Law, and Policy Institute publications that were available. Participants were instructed to select one of the available manuals and to contact me with their choice and mailing information in order to receive their compensation. Finally, participants were thanked for their participation.

Data Analysis

Due to the large number of risk assessment decisions the participants were asked to make, only a subset of the total number of possible outcome measures were analyzed for this study. For these analyses, 2-factor between-subjects univariate ANOVAs were conducted to examine whether the nature of the information provided (i.e., Past, Past/Recent, Past/Recent/Future) influenced the risk management decisions and risk judgments made by the participants. In the ANOVA analyses described below, a randomized complete block design was used, as condition was entered as a fixed factor, case was entered as a random factor, and the risk decision was entered as the dependent variable. Therefore, ‘condition’ is the factor of interest in the analyses conducted. The current study had unequal cell sizes (see Table 2 for the number of participants in each cell). As such, Type III sums of squares was selected for the general linear model. This method was selected because it was reasonable to assume that the sampled populations are of equal size and the unequal cell sizes were a result of chance variation (Myers &
Well, 2003). Prior to conducting the ANOVA analyses, the dependent variable residuals were evaluated for non-normality. Three dependent variables (Risk factors listed, Risk factors checked, Severity) demonstrated non-normality and square root transformations were conducted on these variables and used in their respective analyses.
RESULTS

Risk Factors

The first series of analyses explored whether the variable risk factor information influenced the number and nature of the risk factors identified by the participant. First, to examine whether there was a difference in the number of relevant risk factors identified by the participant as a function of condition (Past; Past/Recent; Past/Recent/Future), a 2-factor, between-subject univariate ANOVA was conducted. The square root log transformed ‘Risk factors listed’ variable was used for this analysis. Results revealed that there was no significant difference in the number of risk factors listed by the participants as a function of condition.

The next 2-factor univariate ANOVA was conducted to examine whether the number of risk factors checked off from the list provided differed by condition, case, or the Case by Condition interaction. The square root transformation of the ‘Risk factors checked’ variable was used. Main effect results revealed that the number of risk factors checked off from the list differed as a function of condition, $F (2, 125) = 9.56, p \leq .001$. In addition, a case main effect was found, $F (9, 125) = 6.75, p \leq .001$. Tukey-Kramer post hoc testing for the condition main effect revealed that there was a significant difference in the mean number of risk factors ‘checked off’ between the Past/Recent/Future group (the raw estimated marginal means are presented: $M = 15.09, SE = .64$) and both the Past group (estimated marginal $M = 12.92, SE = .60$) and the Past/Recent group (estimated
marginal $M = 12.70, SE = .65$). The differences between the groups were significant at the $p \leq .05$ level. No significant difference was found between the Past and Past/Recent groups.

In order to conduct further analyses, the list of risk factors for participants to check off was broken down by the nature of the risk factor. In order to conduct this analysis, all risk factors that were considered variable (and not life-persistent, such as personality disorder) were summed to create a new variable, ‘Variable Factors.’ The list of the variable risk factors used for this analysis is provided in Table 3. A 2-factor univariate ANOVA was conducted to determine whether the number of variable risk factors identified differed by condition. The results revealed that there was a significant main effect for condition, $F(2, 125) = 10.01, p \leq .001$. Tukey-Kramer post hoc testing revealed the significant difference for the condition main effect occurred between the Past/Recent/Future group (estimated marginal $M = 11.72, SE = .48$) and the Past group (estimated marginal $M = 9.96, SE = .44$) and the Past/Recent group (estimated marginal $M = 9.63, SE = .48$). The differences between the groups were significant at the $p \leq .05$ level. No significant difference was found between the Past group and Past/Recent group.

**Risk Management**

To determine whether the nature of the risk factor information provided had an effect on the risk management decisions, a series of analyses was conducted that examined both the number of strategies endorsed and the types of strategies endorsed. First, a 2-factor univariate ANOVA was conducted to determine whether there was a difference in the number of management strategies checked off from the list of strategies
provided. In this section of the survey, participants were asked to indicate Yes, No, or Possibly for each of the risk management strategies provided. In order to analyze the data, the responses were dichotomized into No/Possibly and Yes for each risk management strategy. The number of ‘Yes’ responses were summed, resulting in a variable of the total number of management strategies endorsed. The 2-factor univariate ANOVA was conducted to determine whether the number of management strategies ‘fully’ supported differed as a function of the type of information provided. The main effect results revealed a difference in risk management strategies as a function of case, $F(9, 125) = 2.65, p \leq .05$, but no difference as a function of condition or the Case by Condition interaction.

Next, a new ‘Disposition’ variable was computed from the five disposition-related factors in the survey (i.e., continued hospitalization, absolute discharge, release with frequent, moderate, or minimum supervision) and scored on a scale from 1 to 4, with 4 being the most restrictive disposition (i.e., continued hospitalization) and 1 being the least restrictive (i.e., release with minimal supervision or absolute discharge). In order to determine Disposition, the most restrictive disposition recommended by the evaluator was used. Specifically, if the evaluator responded Yes to Continued Hospitalization, Disposition was coded as a 4. Similarly, a response of Yes for Release with Frequent Supervision but only a Possibly for Continued Hospitalization, meant Disposition was coded as a 3. Finally, a Yes response for Release with Moderate Supervision was coded as a 2, and a Yes response for Release with Minimal Supervision and Absolute Discharge were collapsed and coded as 1. A 2-factor univariate ANOVA was conducted for the Disposition variable, however the results revealed no significant differences. Of interest,
when a 2-factor univariate ANOVA was conducted for each disposition-related factor independently, a significant Case by Condition interaction effect was found for Continued Hospitalization, $F(18, 125) = 1.88, p < .05$. This interaction result indicates that for some cases, the additional information provided increased the likelihood of the evaluator recommending continued hospitalization, whereas for other cases the additional information decreased the likelihood of continued hospitalization being recommended (resulting in a less-restrictive disposition). None of the remaining disposition-related factors revealed a significant result.

With respect to the remaining risk management strategies, there were too many strategies to analyze each one independently. Therefore, a principal component analysis was conducted to determine whether there were underlying factors for the risk management strategies. Principal components analysis (PCA) is applied to a single set of variables, such as the treatment and condition management strategies in this study, to examine which variables in the set form coherent subsets that are relatively independent of one another (Tabachnick & Fidell, 2001). The result of applying PCA to a set of factors is the development of 'components' that are composed of variables that are correlated with each other but are largely independent of other subsets of variables.

In this study, all program strategies (e.g., anger management, life skills program) and 'other' condition strategies (e.g., no contact with victim, curfew) were included in this analysis, whereas the strategies related to disposition decisions (i.e., continued hospitalization, absolute discharge, conditional discharge) and residential arrangement decisions were not included. Principal components analysis was conducted using a varimax rotation. The analysis resulted in three components. The risk management
strategy variables for each component, with their rotated component matrix factor loadings, are provided in Table 4. Component 1 was named ‘Life-skills and Programming,’ component 2 was named ‘Family Problems and Sexual Offending Management,’ and component 3 was named ‘Substance Abuse Management.’

Two-factor univariate ANOVA’s were conducted separately for each of the new variables. The results revealed a significant Case by Condition interaction effect for the Family Problems and Sexual Offending management strategies, $F(18, 125) = 1.83, p \leq .05$. In addition, a case main effect was found for the Substance Abuse Management variable, $F(9, 125) = 11.30, p \leq .001$, and for the Life-skills and Programming variable, $F(9, 125) = 2.80, p \leq .05$.

**Risk Estimates**

A series of steps was taken to analyze the risk estimates made by the participants. The first step in analyzing whether any differences in the risk estimates occurred as a function of the nature of the information provided was to compute a composite of the overall risk level. Two separate steps were required to accomplish this. First, two separate variables were computed with respect to the likely severity of the violence and the likely imminence of the violence. To compute the Severity variable, three variables were used (Likelihood to commit minor violence, Likelihood to commit moderate violence, and Likelihood to commit severe violence) and the Severity variable was scored on a scale from 1 – 4, where 4 was the most severe violence. In order to determine the overall severity, the most severe type of violence that the evaluator believed would occur was used (as indicated by a response of ‘Yes’). For instance, if the evaluator responded Yes
for Likely to commit severe violence, Severity was coded as 4; for an evaluator who thought moderate violence was the most severe type of violence likely to occur (i.e., responded Yes for Likely to commit moderate violence, but No or Possibly for Likely to commit severe violence) Severity was coded as 3; an evaluator who answered that minor violence was the worst type of violence likely to occur was coded as Severity = 2; finally, an evaluator who thought that minor violence was either not likely to occur or only possible to occur was scored as 1.

A similar process was conducted with the 'Imminence of violence' variable. Two variables were used to compute the Imminence variable: (1) Likely to commit violence within the next 6 months and (2) Likely to commit violence after 6 months. The Imminence variable was placed on a 3-point scale, where 3 represented violence occurring within a short period of time (i.e., six months). For this variable, if an evaluator responded Yes for Likely to commit violence within the next 6 months, Imminence was coded as 3. An evaluator who answered Yes for Likely to commit violence after 6 months was coded as 2, and an evaluator who answered Possibly or No for Likelihood to commit violence after 6 months, was coded as 1.

The above computations resulted in two new variables, Severity (4-point scale) and Imminence (3-point scale). To produce an overall risk estimate for each participant, a new variable (Overall risk) was computed by multiplying the Severity variable and Imminence variable. This produced an ‘Overall Risk’ variable that ranged from 1 to 12, where 1 represented ‘low risk’ (minor violence after a long period of time) and 12 represented ‘high risk’ (severe violence likely to occur within the next 6 months).
The mean overall risk level for each Case by Condition cell is provided in Table 5. An examination of the overall risk for some cases appeared to show a substantial change in risk level across conditions (e.g., Case 7). Further, in some cases it appeared that the risk level increased, whereas in other cases the risk level appeared to decrease or remained unchanged. However, when the 2-factor univariate ANOVA was conducted, no significant results were revealed for overall risk as a function of condition, nor was a significant Case by Condition interaction effect found.

Next, Severity and Imminence were analyzed (independently) to determine whether any differences occurred as a function of condition. First, the results of the 2-factor univariate ANOVA with Severity (square root transformed) as the dependent variable revealed a significant Case by Condition interaction effect, $F(1, 8, 125) = 1.75, p < .05$. Table 6 provides the mean severity levels for each case and condition. This table illustrates that for some cases, the nature of the information increased the severity level, whereas in other cases, the nature of the information decreased the severity level. For instance, for Case 2 the mean level of severity decreased between the Past and Past/Recent groups (Past, estimated marginal $M = 3.33, SE = .46$; Past/Recent, estimated marginal $M = 2.50, SE = .56$) whereas for Case 8 the mean level of severity increased for the same groups (Past, estimated marginal $M = 1.80, SE = .50$; Past/Recent, estimated marginal $M = 2.50, SE = .56$). Similarly, for Case 5 the level of severity decreased between the Past/Recent and the Past/Recent/Future groups (Past/Recent, estimated marginal $M = 3.00, SE = .46$; Past/Recent/Future, estimated marginal $M = 1.60, SE = .50$) but the severity level increased for Case 9 between the same two groups (Past/Recent,
estimated marginal $M = 1.75, SE = .56$; Past/Recent/Future, estimated marginal $M = 3.17, SE = .46$). No significant effect was found for the imminence of violence.

Finally, the remaining risk estimates (i.e., target of violence [family or stranger], type of violence) were examined separately by conducting a series of 2-factor univariate ANOVA analyses. There were two outcomes for each question: (1) Do you think this violence will occur (No = 1, Possibly = 2, Yes = 3), and (2) What is your concern that this type of violence will occur (scale 1 – 10, 1 = low and 10 = high). A significant Case by Condition interaction was found for the use of a weapon for the 3-point scale, $F (18, 125) = 1.83, p \leq .05$. However, only a case main effect was found when the ‘Concern’ scale (10-point scale) was used for the weapon estimate, $F (9, 125) = 5.71, p \leq .001$. For the ‘Hostile violence’ analyses (i.e., violence that stems primarily from some emotional factor or reaction), a significant case main effect was found for the 3-point scale, $F (9, 125) = 2.64, p \leq .05$, however no significant result was found for the Concern rating scale (10-point scale). For the remaining violence risk estimates, a similar pattern of results was found. That is, a significant case effect was found for each risk estimate for both the 3-point scale and the 10-point scale. Only the 3-point scale results are reported here: commit violence against family/friend, $F (9, 125) = 8.54, p \leq .001$; commit violence against a stranger, $F (9, 125) = 2.56, p \leq .05$; commit instrumental violence, $F (9, 125) = 2.52, p \leq .05$; and will commit general crime (will not necessarily involve violence), $F (9, 125) = 9.73, p \leq .001$. No main effects for condition were revealed in any of the analyses.
DISCUSSION

Primary Findings

Researchers have stated that variable risk factor information may be the most useful type of information for violence risk assessments and for preventing future violence (Douglas & Skeem, 2005; Mills, 2005). There is a growing body of research that has demonstrated the promise of this type of information. Research has illustrated that certain variable risk factors can fluctuate over time and that changes in certain factors are related to changes in recidivism levels (Andrews & Robinson, 1984). However, there has been no research that has examined how variable risk factor information influences the risk assessment process (if it does at all). Specifically, it is unknown whether the inclusion of variable risk factor information has an effect on the risk factors identified, risk management decisions, and risk estimates.

The current study examined these issues. The sample used in this study comprised mental health professionals from around the world (19 countries). The fact that the sample was obtained from multiple professions (e.g., psychology, nursing, social work) and from multiple countries allows for the generalizability of the results to risk assessment evaluators in general, and not to a single profession or country. However, Psychology was by far the most common profession identified, thus generalizing these results to the other professions identified in this study must be done with caution.
Similarly, caution must be taken with respect to generalizing the results to various countries, as the majority of participants were from the U.S.A.

In the present study, 'case' was entered into the analyses as a random factor, as opposed to a fixed factor; therefore, the results can also be generalized beyond the ten cases used in this study to cases of a similar nature. Specifically, the results can be generalized to male forensic psychiatric patients (all cases involved a male patient) with a history of schizophrenia (9 of the 10 cases involved schizophrenia).

Overall, the results of the current study revealed that some risk estimates and case management decisions are affected by information related to the recent functioning and future plans of the patient. This finding suggests that evaluators do notice the variable risk factor information and consider it in their assessments.

**Risk Factors**

No significant difference was found for the number of risk factors evaluators listed when asked in an open-ended question to indicate the relevant (most important) risk factors for their particular case. There are a couple of possible explanations as to why no difference was found. First, it is possible that all of the evaluators focused only on the 'past functioning' information when determining the relevant risk factors. If this is the case, no condition main effect would be expected since the past functioning information remained the same for all versions of the case histories. An alternative explanation focuses on the nature of the risk factors listed. It is possible that the nature of the risk factors listed by the evaluators differed based on the information provided, but that the overall number did not. For instance, evaluators who received information related to the
patient’s recent functioning and future plans may have focused more on these factors and did not list as many ‘past functioning’ or historical factors. By simply counting the number of risk factors listed by the evaluators it is impossible to determine whether they attended to variable risk factor information, or only to past functioning information. Further analysis into the nature of the risk factors listed would provide greater insight into whether the evaluators consider the variable risk factor information.

When the evaluators were provided with a list of potential risk factors, a significant difference was found for the condition main effect, specifically between the group with all of the information (Past/Recent/Future) and the other two groups. In this situation, it is possible that providing a list of potential risk factors encouraged the evaluators to consider risk factors that they had previously either ignored, or had simply not been aware of. For instance, evaluators who were provided with information related to recent functioning or future plans may have been influenced to consider the variable factors they had originally not attended to. Again, by only counting the number of risk factors ‘checked off’ it is not possible to determine whether the evaluators are considering the variable risk factors as relevant, or whether the list of risk factors simply provided the evaluator with more ‘historical’ factors to consider. However, the next analysis conducted helped to clarify this issue. The 2-factor univariate ANOVA revealed that the number of ‘variable’ risk factors identified differed as a function of the information provided. Again, the group that was provided with information pertaining to the patient’s past and recent functioning, as well as his future plans, identified significantly more variable risk factors than the other two groups. This finding suggests that the evaluators who were provided with information related to variable risk factors,
specifically those related to future release plans, did attend to these factors and considered them relevant for the given case.

Of interest from the above results is the fact that the significant differences were found only between the group with all of the information (past, recent, and future plans) and the other two groups. There were no significant differences between the group that received only information pertaining to past functioning and the group that received information pertaining to past and recent functioning. It is possible that significant differences were not found between these groups because of the wording in this section of the survey. The question did not clearly instruct the evaluator to consider the relevant risk factors for the current risk decisions being made. Instead, some evaluators may have interpreted the instruction as “indicate the risk factors that were relevant for the index offence.” However, since some evaluators did select risk factors related to the patient’s future plans, it appears that the majority of the evaluators did interpret the question properly and listed the relevant risk factors for the current risk decisions (as opposed to the risk factors for the index offence).

A second potential explanation, and the more likely explanation, for the lack of significant findings is the wording provided for some of the specific risk factors. For some of the risk factors, it was difficult to determine whether the factor was referring to historical problems or current problems and participants in both conditions may have selected these factors. For instance, the factor ‘Employment Instability’ could refer to both past problems with employment or current problems with employment. Improved wording for the risk factors listed, such as ‘History of Employment Problems’ may help
to determine how much evaluators consider historical/fixed factors and more recent variable factors.

**Risk Management Decisions**

The effect of the risk factor information provided on risk management strategies was examined in multiple ways. It was first examined by determining whether the number of risk management strategies selected differed as a function of either the factors, or the interaction. To determine whether the variable risk factor information had an effect on the number of management strategies employed, the number of ‘Yes’ responses was examined. The results revealed that there was no significant difference in the number of strategies ‘definitely’ recommended as a function of the condition. As discussed with respect to the number of risk factors selected, a simple count of the risk management decisions may not provide good insight into whether the variable risk factor information is being considered. The variable risk factor information may influence the type of case management decisions, such as disposition decisions or specific treatment programs. A series of analyses was conducted to explore whether this was the case.

The first case management decision examined was the new Disposition variable. No significant results were revealed when the disposition was computed to a 4-point scale, where higher scores reflected more severe and restrictive dispositions. Next, the individual disposition decisions were analyzed. The only significant result was a significant Case by Condition interaction for Continued Hospitalization. This result suggests that the decision for continued hospitalization for each case depends on the nature of the information provided, but that the nature of the information does not
influence the decision the same way in each case. In some cases, the additional
information pertaining to recent functioning and future plans may influence the evaluator
to continue hospitalization, whereas in other cases, information of the same nature will
influence the evaluator to recommend a different disposition (i.e., absolute discharge or
conditional discharge). Therefore, it appears that evaluators were considering the
information provided for this decision.

With the remaining treatment and condition strategies, a principal components
analysis was conducted, which resulted in three components. A case main effect was
found for the Substance Abuse Management strategies, as well as the Life-skills and
Programming strategies. At the very least, the results for these two analyses suggest that
evaluators considered the information on a case by case basis, and did not simply
recommend random programs for a patient. With respect to the Substance Abuse
Management, the estimated marginal means for the number of strategies for each
experimental condition show that almost four of these strategies are selected out of a
possible 5 strategies. It is possible that evaluators are considering the information
provided and feel that the strategies are necessary for relapse prevention. However, it is
also possible that the nature of the information provided does not have an effect on the
decisions with respect to substance abuse management decisions. For instance, it is
possible that any patient who has a history of substance use problems will be
recommended for these programs, regardless of the current state of the persons’
substance use (e.g., no drug/alcohol use for many years).

The nature of the information provided may actually have had an effect on the
Life-skills and Programming strategies selected, but that this was not picked up by the
analyses conducted in the current study. The Life-skills and Programming variable included a number of different therapy programs, such as anger management, financial planning, and cognitive behavioural therapy. A similar mean number of Life skills and Programming strategies were selected for each condition, but again, it is unclear by counting the strategies, which were selected and whether the information provided influenced the decision. Approximately five treatment programs were selected for each condition, which suggests that the evaluators were not simply placing the patients into all available programs but were making decisions about the priority treatment programs for each patient. For instance, an evaluator from the ‘Past’ group may have decided that an anger management program was a priority for the patient based on the number of violent incidents he had been involved throughout his lifetime up to the previous year (since no information pertaining to the patient’s functioning in the previous year was provided to this group). However, a person with more recent information may have learned that the patient successfully completed an anger management program in the previous year and decided that educational or vocational training was more important as the patient nears a possible release date. A simple count of the treatment strategies does not clearly illustrate the effect that the type of information may have. Further analysis of the risk management strategies selected by the evaluators may provide insight into the information being considered. In addition, supplemental questions in the study could help to better understand how these decisions were made. For instance, simply asking evaluators to explain why they chose a specific strategy may have helped to determine whether they considered the recent functioning information or only past functioning information.
The final risk management analysis revealed a significant Case by Condition interaction for the Family Problems and Sexual Offending strategies. The significant interaction means that for some cases, the nature of the information provided did have an effect on the decision to suggest more (or less) risk management strategies focused on relationship issues (e.g., spousal assault) and sexual offending behaviour (e.g., no contact with children), but that the nature of the information did not influence the risk management decisions in the same way for every case. Again, it appears that evaluators were considering the variable risk factor information when it was provided.

Risk Judgments

An overall risk judgment was determined from the combination of two other variables: the likely severity of the violence and the likely imminence of the violence. Although some cases appeared to show variation in the risk level across conditions, the results from the Overall risk analysis did not reach significance, thus the changes in risk level for these cases cannot be interpreted. The overall risk variable that was computed was a reasonable estimation of a global risk judgment. However, one potential reason for the lack of significant results may have been due to the ‘Possibly’ response option. Evaluators frequently selected the ‘Possibly’ response option for the risk judgments, regardless of the nature of the information provided. A global risk judgment question, asking participants to rate the patient’s risk level as Low/Moderate/High, would have been substantially easier and may have helped to determine whether the nature of the information had a significant effect on the overall risk judgment. However, similar problems may have been encountered if evaluators frequently selected the Moderate
response option. Other options that may have assisted to determine whether the nature of the information has an effect on the global risk estimate would be to dichotomize the risk level as Low/High or provide a 5-point rating scale (i.e., Low, Low/Moderate, Moderate, Moderate/High, High). Another option is to ask the evaluator to decide what the most likely severity of violence will be (Minor/Moderate/High) and not to rate the likelihood of each severity variable separately (as was done in the present study).

A significant Case by Condition interaction effect was found for the likely severity of the violence. Again, this result means that the severity judgments for the cases differed depending on the condition (i.e., nature of the information provided) and that not all changes occurred in the same direction. Again, the results suggest that the nature of the information provided had an influence on the severity of violence judgment, but that the influence was not the same in every case. Providing evaluators with information concerning the patient’s recent functioning as well as his plans for the future may have increased the likely severity of violence in some cases, while in others it decreased the likely severity. For instance, if an evaluator was informed that within the past year the patient successfully completed an anger management program and demonstrated he was able to control his aggressive behaviour, the evaluator may have felt it unlikely that the patient would be involved in severe violence, but that there remained a chance that he would be involved with minor violence. In other cases, information that is similar in nature may have influenced the evaluator in the other direction. For example, if the patient had not successfully completed an anger management program and continued to react aggressively, evaluators may have felt severe violence was likely. In the examples provided, the nature of the information provided is consistent, but it influences the risk
estimates in different directions. With regard to the likely imminence of violence, the results revealed no significant effect.

The final result of interest was the significant Case by Condition interaction effect for the likely use of a weapon during a violent incident. Again the results suggest that the nature of the information provided had an influence on this decision, depending on the case being evaluated. It appears that in some cases, knowing about the patients’ future plans, or how he was functioning recently, influenced whether it was appropriate to recommend this condition. Of course, it is important to note that the significant interaction effect did not occur when the 10-point Concern scale was analyzed, which raises doubts concerning the reliability of the interaction. For the remaining violence risk judgments (e.g., target of violence) the results reveal the case had a significant influence on the risk judgments. This finding suggests that evaluators considered the patient’s criminal history when they made decisions about future offending. For instance, when asked about the likelihood of offending against a family member, it appears that the majority evaluators who reviewed a case where the patient had previously offended against a family member rated the likelihood as high (i.e., ‘Yes’) regardless of the nature of the information provided. It appears that a patient’s past criminal record had a strong influence on these decisions.

Overall, the present study is a good first step in determining the influence of such information and provides support for the optimism with respect to the relationship between variable risk factors and violence. In addition, these results support the need for future research in this area. There are specific strengths to the present study that are worth noting and that can be built upon for future research.
First of all, this study supports the use of online surveys as a method for collecting data. The online methodology had a number of positive features, such as increased participant recruitment, as well as timely survey completion with minimal cost. With respect to recruiting participants, the present study was successful at recruiting a large number of mental health professionals from around the world. Not only did the online recruitment accelerate data collection by increasing the number of potential participants, it also allows for the generalization of results beyond mental health professionals in a relatively restricted geographical region. In addition, the use of online recruitment and survey completion allowed the participants to complete the study at their convenience. A related feature of the online study was the Pause option. Participants were able to ‘pause’ the study as necessary and return to it at a later time. This feature may be very useful when recruiting participants from certain populations (e.g., professionals) who have busy schedules and require flexibility to complete a survey at their convenience. Substantial time can be saved with an online study as participants do not have to wait for the study materials to be sent by mail. Similarly, for this study, the data was obtained in a timely manner; as soon as a participant completed the survey, his or her data was available for downloading into the statistical software. Although there were a number of strengths with the current study, there were some notable limitations (including limitations to the on-line methodology).

Limitations and Future Research

The present study provided the participants with different types of information in order to make the risk assessment decisions. Unfortunately, in some sections of the
survey, the wording of the instructions was not clear and perhaps allowed for differing interpretations. In particular, as mentioned above, the wording in the risk factor section was unclear with regards to what factors the participant should have focused on: those related to the index offence, or those related to the current case management decisions. Although the results suggest that many of the participants interpreted the instructions as they were intended, more direct and clear instructions could result in stronger confidence in the results. Similarly, the wording of some risk factors did not clearly indicate whether the factor referred to past functioning or recent problems. Again, by providing specific wording that clearly delineated the timing of risk factors (e.g., history of employment problems as opposed to employment instability) differences between the Past and Past/Recent groups may have been found.

Another issue with the survey is with respect to the ‘check boxes’. The use of the check boxes to gather information did not provide sufficient insight into the decisions made by the evaluators or what influenced the decisions. The use of the check boxes resulted in a number of ‘counting’ outcomes. As explained previously, a simple count of the boxes checked may not clearly demonstrate how the variable risk factor information is being used to make decisions. Although the number of risk management strategies endorsed may be the same for all conditions, the exact strategies selected may differ based on the type of information provided. The simple check boxes do not allow an easy evaluation to determine whether this is the case. For future studies, in addition to using check boxes, specific questions that ask the participants to describe and explain what influenced their decision(s) should be used. This would allow for a greater in-depth
analysis of the nature of the information that is being considered while making risk assessment decisions.

The ‘Recent Functioning’ and ‘Future Plans’ sections of the case histories provided the evaluators with information pertaining to variable risk factors. The factors that were selected for these sections were obtained from the HCR-20 and are factors that have empirical support demonstrating their changeability (Douglas & Skeem, 2005; Webster, Douglas, Eaves & Hart, 1997). Further, descriptions of how various factors had changed over time, within the year between the last review board hearing and the time the case history was written, were provided. However, these factors were measured inconsistently and in a minority of instances, may have only included a single-time point estimate. For instance, the case history may have stated that a patient’s insight has improved over the past year, but not provide any specific details as to the extent of improvement or how it may have fluctuated during that time before improving. The case histories were developed from existing files and therefore, were somewhat limited in the information available (e.g., the daily case notes were not available). As discussed, a single time point estimate does not capture the change in the risk factor, nor does it capture the effect that the change has on the risk assessment process (Douglas & Skeem, 2005). The single time-point estimates for variable risk factor information occurred infrequently in this study, however future studies should ensure that information regarding clear changes in risk factors is included, in order to determine whether the fluctuations result in a change of risk estimate.

Future research should continue to explore the different risk factors and the influence that they may have on an evaluator. This study suggests that evaluators do
attend to the variable risk factor information, but it is unclear from this study whether certain risk factors have more (or less) of an influence on the risk assessment procedure. Again, a great deal of information could be obtained by simply adding specific questions where the evaluators are asked to describe the factors that had the strongest influence. Of course, it is also important to determine whether the factors that the evaluators are focused on are, in fact, related to the patient’s likelihood of being violent. As such, a separate, but related, stream of research should be explored. That is, research should continue to determine which factors have an association with the likelihood of future violence, such as the research being conducted by Skeem and colleagues (2006). This research can then be used to assist mental health professionals to focus on relevant information when conducting a risk assessment.

The present study is unable to demonstrate whether the nature of the information provided improved the risk judgments. The findings of this study only demonstrated that evaluators do take the variable risk factor information into consideration when making some risk judgments. However, it is also important to determine whether the additional information is improving the accuracy of the risk judgments. The accuracy of the risk judgments could be determined with follow-up data. The risk judgments provided could be compared to future criminal history reports or inpatient aggression incident reports. For instance, if the evaluator estimated that the patient would likely be violent within the next 6 months, this response can be compared to actual incident or criminal reports to determine whether violence did occur during this time period. Similarly, the severity of violence, the target of violence, and the type of violence could be coded from the reports and compared in a similar manner. It is important to know that evaluators are considering
the variable risk factor information provided, however if this information is not being used to improve the risk assessment process then we are left to question continuing to provide this type of information and what changes are required in order to improve risk assessment.

Despite the advantages of the online methodology, there are some limitations as well. The current study suffered due to the loss of data. Participants reported ‘Error’ messages and it was difficult to determine why the error occurred in most instances. In these cases, the responses that the participant had previously submitted were lost and the participant was required to re-start the survey. Frequently, when a participant was informed that he or she would have to start the survey again, the participant withdrew.

A second limitation of an online study is the effect it has on the sample. Internet use is not uniform among different groups, such as age groups. For instance, in Canada, over 53% of internet users are between the ages of 25 and 54, and almost 40% are between 2 and 24 years old (Public Works and Government Services Canada, 2006). As a consequence, the population of individuals over the age of 54 may be under-represented in online studies. In the current study, almost 82% of the sample was under the age of 55, but it is uncertain whether this is representative of the mental health professional population.

A third potential problem with online studies is the lack of direct contact between the participant and the researcher at the time the survey is being completed. Participants may be confused by the instructions and either abandon the study or complete the study incorrectly. It is suggested that the contact information for the researchers should be
provided regularly throughout the survey, especially for sections where it may be reasonable to expect that the participants may not be familiar with what is asked of them. This strategy is recommended based on participant feedback in the present study. After completing the entire study, some participants indicated that they hoped they had completed a section properly (e.g., the risk scenario section). It is possible that participants did not send an email at the time of completing the survey because the contact information was not immediately available. By providing the contact information, participants who are unclear as to what is expected of them may be encouraged to contact the researchers in order to clarify the instructions. This is only a small change to the survey design, but may provide greater confidence that participants are completing the survey as intended.

Another potential problem with online studies is the risk of multiple responses from the same participant. Several steps were taken to minimize this risk in the present study. First, since participants were required to obtain a password to participate in the study, a record of names and email addresses was kept and no duplicates were found in either list. Passwords were used in order to restrict the survey only to mental health professionals who volunteered to participate and the passwords were restricted to single-time use. This means that the passwords remained valid until the participant completed the entire survey and after completing the study, the password became invalid and could not be re-used. Finally, computer IP addresses were recorded to examine whether any duplicates occurred; none were found.

One final limitation to discuss is with respect to the study design. Although this study was able to recruit a large number of mental health professionals, the study suffered
from having only a small number of participants in each cell and unequal cell sizes. With the 2-factor univariate ANOVA analyses, unequal cells can exaggerate the consequences of heterogeneity of variance (Myers & Well, 2003). As a result, the probability of a Type I error increases and there is a greater risk of incorrectly rejecting a null hypothesis (Tabachnick & Fidell, 2001). Therefore, the results must be interpreted with caution. Future studies should attempt to achieve equal cell sizes in order to improve the confidence in the findings.

Conclusion

The goal of risk assessment is to prevent future violence from occurring and to develop appropriate management strategies for the individual (Kropp et al., 2002; Steadman et al., 1993). As such, the risk assessment process may have serious consequences for the individuals involved. Risk assessments are used to make a number of decisions, such as parole and probation decisions, as well as commitment decisions (Dempster & Hart, 2002), as seen in the current study. In light of important decisions and consequences, it is imperative that we continue to research and improve the risk assessment process. One integral element of the assessment is the nature of the factors considered. Historically, fixed risk factors were considered the most important factors for an assessment (Quinsey et al., 1998), but the focus has now changed and variable risk factors are viewed as an essential aspect of a risk assessment above and beyond fixed factors (Douglas & Skeem, 2005; Mills, 2005). At this point, there is little research that has examined the use of variable risk factors for risk assessment. The current study attempted to address some of the questions regarding the use of variable risk information.
The present study used a new methodology to conduct an exploratory examination of the influence of variable risk factor information on violence risk assessment. The overall goal of this study was to determine whether information related to variable risk factors has an effect on risk estimates and case management decisions. The results of this study suggested that information related to variable risk factors had an effect on some risk estimates and management decisions. This is significant because no studies have yet examined whether variable risk factor information influences the evaluator during a risk assessment. The findings from the present study provide support for the growing body of research that is exploring the use of variable risk factors for risk assessment.
REFERENCES


Variable Risk Factor Information


APPENDICES
Appendix A: Recruitment Email

Dear Madam/Sir,

I am a Master’s student in the Department of Psychology at Simon Fraser University currently working on my thesis under the supervision of Dr. Stephen Hart and Dr. Kevin Douglas. I am recruiting mental health professionals who have experience conducting violence risk assessments and who can read and write in English to participate in an on-line research project. The focus of the study is on violence risk factors and violence risk management. Participation in this study will involve reading one case history and making a series of risk estimates and case management decisions. The study can be completed on-line and will require approximately 30-45 minutes of your time. A free Mental Health, Law and Policy Institute (SFU) publication is available for first 150 participants to complete the survey (e.g., HCR-20, HCR-20 Companion Guide, Risk for Sexual Violence Protocol).

If you are interested in participating in this study or would like to obtain further information, please contact Cathy Wilson at cwilson2@sfu.ca.

This study has been approved by the Simon Fraser University Office of Research Ethics.

Thank you,

Cathy Wilson
Appendix B: Reminder Email

Hello,

You recently volunteered to participate in research project concerning violence risk assessment. I just wanted to let you know that the survey remains on-line and there are free manuals still available! Should you require the web link, case history, or your password, please contact me and I will be happy to send them. If you feel that you are no longer able to participate in this study, please let me know and I will update my records.

Please feel free to contact me if you have any questions or concerns (cwilson2@sfu.ca). Thank you again for your assistance on this project.

Thank you,
Cathy
Appendix C: Complete Case History

Dear Madam/Sir,

Welcome to the Violence Risk Assessment Research Project.

You are being asked to review the case of an individual who has been found Not Criminally Responsible on account of Mental Disorder (NCRMD; described below) and has been committed to a secure forensic psychiatric hospital for treatment.

This individual has a Review Board hearing scheduled and as a clinician reviewing the case, you are asked to assist the Review Board by answering a series of risk assessment and management questions based on the information provided.

The case information has been provided here. You may print it out, review the content, and/or make notes as you desire. When you are ready to commence the survey, it is recommended that you have a copy of the case information with you to assist with your decisions. Please treat the case history document as confidential; do not share it with others, and delete it once you have completed the study. Below, you will find background information that will provide you with the further details regarding the circumstances of this case.

Background Information

The Provincial Secure Forensic Hospital (PSFH) is a hospital that provides inpatient psychiatric care for individuals referred by the Courts for treatment and assessment. The patient may be admitted prior to his or her court appearance for a fitness evaluation. This evaluation is to determine whether the individual is too ill to be tried in court as a result of his or her persistent severe mental disorder. If a person is found 'Unfit', he or she is committed to the hospital for treatment until fitness returns. After fitness returns, the individual is released to court to deal with the outstanding charge(s). There are a number of possible outcomes that may result from the court hearing, including a disposition of Not Criminally Responsible on Account of Mental Disorder (NCRMD). An NCRMD verdict means that the accused has, beyond a reasonable doubt, committed the acts alleged in the charge but was not legally or morally responsible for those acts on account of a "mental disorder".
A person who is found NCRMD can be given one of three possible dispositions: absolute discharge (accused is released with no sentence or conditions), conditional discharge (accused may live in the community subject to the conditions and restrictions of the Review Board), or custody (accused is detained in a hospital subject to the conditions or restrictions determined by the Review Board). The Review Board is the key legal decision-maker concerning mentally disordered persons in conflict with the law and is made up of the NCRMD accused, the Director of Adult or Youth Forensic Services and the provincial Attorney General. For an individual given either a conditional discharge or custody disposition, he or she is entitled to mandatory periodic reviews (one every 12 months) by the Review Board. At the Review Board hearing, the Board reviews the current disposition and/or conditions and whether to continue with the current disposition or make revisions.

The index offence refers to the offence that resulted in the most recent NCRMD verdict.

Thank you, Cathy Wilson, M.A. Candidate, Department of Psychology, Simon Fraser University

Case 3

Overview

Robert Brown is a 29 year old white male admitted to the Provincial Secure Forensic Hospital (PSFH). Mr. Brown was found Not Criminally Responsible on account of Mental Disorder (NCRMD) for a charge of Assault with a Weapon and given a conditional discharge. However, the conditional discharge was revoked on 28 December 1998 and he was committed to PSFH. This was his 2nd admission to PSFH. His diagnosis is Paranoid Schizophrenia, Polysubstance abuse (now in remission), and Antisocial Personality Disorder traits. His last Review Board hearing was on 22 August 2005 and he was returned to hospital at that time. His next Review Board hearing is scheduled for 25 August 2006.

Background Information

Family History
Robert Brown is the 2nd oldest of four children. He lived with his natural mother and father until the age of 9, when his mother took all four children and left his father. Mr. Brown’s natural father was physically abusive to his children, as well as physically and sexually abusive to his wife (in front of the children). Mr. Brown’s father has been described as “not right in the head” but does not have any formal psychiatric history. After the divorce, Mr. Brown’s father stated that he wanted nothing to do with any of his children; he has had no contact with the family since the divorce and has never provided any financial assistance. The next few years were difficult for Mr. Brown and his family. His mother worked long hours to support the four children, and he and his older sister were relied on to care for the younger siblings. His mother reports that Mr. Brown was very helpful during this time and did not have any behavioural problems. When he was 13, his mother remarried. There is no evidence of abuse or domestic violence in this relationship and Mr. Brown had a good relationship with his step-father.

In addition to the physical abuse Mr. Brown suffered, Mr. Brown disclosed that he was sexually abused when he was eight years old by an older male friend of the family. There are few details available regarding this abuse as Mr. Brown has refused to provide any information other than the fact that it occurred on more than one occasion.

Mr. Brown started to have behavioural problems when he was 15 years old. He began experimenting with drugs, which quickly escalated into frequent use. It was at approximately the same time that he had his first contact with the criminal justice system. At age 16, he was convicted of Theft Under $1000 and the next year he was convicted of Break and Enter and Theft.

Educational History

Mr. Brown did not enjoy school as a child – he claims he would have rather been playing outside - but still did well academically. He did fail grade 2, however, this was the result of missing too much school due the family relocating numerous times (they moved five times within one year). Other than missing a great deal of school in grade two, he had good attendance at school and did not skip classes. He was never suspended or expelled from school, but was involved in 3 or 4 minor fights in grade 3. He claims that the fights were usually a result of a bully provoking him. Mr. Brown did not cause
significant injury to his opponents during the fights – the worst injury he caused was a bloody lip.

His performance at school dropped in high school, at around the age of 15, when he began experimenting with drugs. He began to skip classes and his grades dropped significantly. Only a few months prior to completing grade 12, Mr. Brown impulsively dropped out of school. He reports that he quit school because he was sick, lost interest in school and wanted to do drugs and have fun instead.

*Employment History*

After leaving school, Mr. Brown had difficulty finding a job but was eventually able to find some part-time work at a recycling facility. He worked there for five months before quitting because he did not enjoy the work. Over the next two years (from the age of 18 to 20), he moved from part-time job to part-time job with significant periods of unemployment in between jobs and never staying at one job for longer than three months. Most of his work experience is from working four consecutive summers (during high school) in construction. Mr. Brown claims that when he was employed, he was a hard worker and motivated, was always on time and only missed for legitimate reasons – however he admits that he would quickly become bored with a job and quit (he claims he always informed his employer when he was quitting). He did not use drugs or alcohol at work, but admits that he did go to work while still intoxicated on a couple of occasions. He did not have any conflicts with co-workers and had only one conflict with an employer, which was easily resolved after talking the situation through. Prior to his admission to PSFH, Mr. Brown was living at home, was working part-time and collecting social assistance.

*Substance Abuse History*

As mentioned, Mr. Brown began experimenting with drugs at the age of 15. He quickly began to use drugs on almost a daily basis, which continued between the ages of 15 and 19. However he denies that he was ever addicted to any drug. In his late teens, he was using marijuana, acid, cocaine, ecstasy, and mushrooms. Once he was into heavy drug use, his functioning began to deteriorate and he became increasingly isolated, angry, lost friends, and had unpredictable behaviour. On one occasion when he was 18 years old, after a 10 day LSD binge, Mr. Brown climbed a bridge with the intention of jumping
off, but was eventually convinced to come down by a friend. He was also involved in more fights when he was using drugs, none resulting in any arrests or charges. Prior to his index offence, Mr. Brown was drinking alcohol approximately 2-3 times per week, but had quit using all drugs with the exception of marijuana, which he was using on a daily basis.

**Relationship History**

Mr. Brown reports that he started dating when he was 15 years old and has had approximately 20 romantic relationships. One of his relationships resulted in him living with his girlfriend for four months before the relationship ended. His longest relationship was in high school for three and a half years. There are no reports of any abuse or violence in any of his relationships, however he has admitted to cheating on at least one girlfriend (he claims she was also cheating). Brown denies that he has had any one-night stands because he finds them too risky.

In September 2004 (during his index stay in the hospital), Mr. Brown became involved in a romantic relationship with a woman he met in the hospital. For the first year of the relationship, the hospital staff reported that there were significant conflicts between the couple but there are no reports of any abuse. After the first year, the relationship appeared to improve, there were fewer arguments and the two provided support for each other.

**Mental Health History**

Mr. Brown’s first contact with a mental health professional occurred when he was 20 years old after his family noticed a change in his behaviour. He had been demonstrating unpredictable behaviour for a number of years, but his family now noticed that his behaviour seemed even more bizarre; he was talking to himself and occasionally shaking his head violently. He was also continuing to isolate himself and was frequently angry. His family thought it was related to his drug use and offered to get him help, but Mr. Brown declined their offers. In June of 1997, he overdosed on tranquilizers, but denied that it was a suicide attempt. Towards the end of that year, Mr. Brown’s behaviour and functioning markedly deteriorated. In October he was evicted from his apartment and returned to his parents. His neighbours complained that they could hear Mr. Brown at all hours of the night and that it often sounded like he was yelling at someone. When the
building manager confronted Mr. Brown about this, he quickly became angry and threatened the manager. The manager did not press charges but Mr. Brown was ordered to move out of the building immediately.

When Mr. Brown moved back home following his eviction, his daily functioning continued to fluctuate. He suffered from insomnia, decreased energy, short memory and concentration, confusion, and he would ramble incoherently. He was also irritable and aggressive. On one occasion he threatened both his mother and sister by placing his fist in their faces. There was no known reason for the threats. On another occasion, Mr. Brown walked through the house with a baseball bat in his hand, threatening to hit anyone who stepped in his way. He eventually put the bat down and left the house without incident. At this point, his family was successful in getting Mr. Brown to a psychiatrist. The psychiatrist diagnosed him with having early onset schizophrenia symptoms and recommended medications. However, the medications were never started apparently because of financial difficulties. In early December 1997, Mr. Brown disclosed to his mother that he had been sexually abused at the age of 8 by a 25 year old male friend of the family. Shortly after this disclosure, his mother noted that he became obsessed with cleaning and she could hear him talking to himself in the shower, saying things such as “faggot, pig, gross”. Also after this disclosure, Mr. Brown’s functioning began to deteriorate faster. He began to threaten and insult his brother at any opportunity. He believed that the family dog was staring at him and telling him to do things. He began to hit the dog and on one occasion he had to be restrained by his brother from severely attacking the dog. On 2 January 1998, he told his mother that he was hearing voices in his head, threatening and yelling at him. The same day, he threatened to kill his step-father and was taken to the hospital emergency room. He was held in the hospital overnight, but was released the next morning.

His next contact with a mental health professional occurred after he committed his index offence (see below).

**Criminal History**

Mr. Brown’s first contact with the criminal justice system was at the age of 16 for a charge of Theft Under $1000. He was convicted and sentenced to 30 days probation. His next contact was later that same year, when he was convicted of Breaking and
Entering and Theft. For this conviction, he was given 9 months probation and 100 hours of community work service.

In November 1997 he was convicted of Assault. There are few details available regarding the circumstances of this offence, but he was sentenced to pay a fine and 6 months probation. When asked, Mr. Brown claimed that this offence was a result of a “misunderstanding” and would not provide further details. At the time of this conviction, Mr. Brown also had charges of Resisting Arrest stayed.

Mr. Brown’s index offence occurred approximately one week after he was taken to the hospital for threatening to kill his step-father. On 8 January 1998, Mr. Brown took a knife from the kitchen and threatened his brother. Mr. Brown made a stabbing motion towards him and threatened to rip open his back, but his brother was able to leave the room without being physically harmed. Mr. Brown then moved throughout the house yelling threats that he would kill his entire family and throwing objects. He finally isolated himself in the basement and continued to yell to his family upstairs for approximately three hours before he calmed down. His mother finally called the police. When the police arrived, he verbally threatened them, saying that he could beat up the cops and that he would build a bomb and blow up the police station. The police were able to arrest him without incident and suggested that he be taken for a 30 day mental health evaluation. He was admitted on 8 January 1998 for a fitness evaluation (his first admission to PSFH). He was found fit and released to court to deal with his Assault with a Weapon charge. On 14 February 1998, Mr. Brown was found NCRMD for the offence and was given a conditional discharge. He remained in the community until 28 December 1998, when he was detained for breaching the conditions of his release (non-compliance with medications).

Adjustment after Hospitalization

He was committed to PSFH from the end of December 1998 until May 1999. During this time, Mr. Brown’s attitude and behaviour significantly improved. His progress notes indicate that he was cooperative with both the staff and other residents and that he was compliant with hospital rules. In May 1999 he was given another conditional discharge and moved to a boarding house. He was successful in the community for approximately three years – until 2002, when he started to have problems again. During
early 2002, he had short periods of employment but was mostly unemployed and on social assistance. When he was employed, his employer reported that he was unreliable, hung-over on numerous occasions and unmotivated. He had problems managing his money. Mr. Brown was associating with street people and individuals with criminal histories and would often allow them to sleep in his apartment, despite a condition to not associate with criminals. He was required to pay for a number of damages to his apartment after letting these various people stay with him. In June 2002, his community treatment team decided that Mr. Brown should be returned to hospital.

Mr. Brown demonstrated a steady improvement in behaviour and attitude while in the hospital, but in November 2003, Mr. Brown did not return from a hospital day leave. He voluntarily returned to the hospital a couple of days later and told staff that he just 'needed to get away for a while'.

He was given another conditional discharge in February 2004, but was returned to hospital in May 2004 because he was using drugs (marijuana) and alcohol and his mental health had started to deteriorate.

Mr. Brown last met with the Review Board on 22 August 2005 and was returned to hospital because the Review Board felt that he had not yet properly addressed his drug and alcohol issues and did not have a full understanding the effects those substances had on his mental health. He has a Review Board hearing scheduled for 25 August 2006.

Recent Functioning (August 2005 – August 2006)

In the year since Mr. Brown’s last Review Board hearing (22 August 2005), his attitude and behaviour have slowly improved. When he first returned to the ward following the Review Board decision, Mr. Brown had problems controlling his anger and had multiple conflicts with other hospital residents. In September 2005, he was feeling angry and frustrated and confronted another patient, threatening to punch him, but no physical attack occurred. During that same month, he had a conflict with another patient that turned physical. Mr. Brown and the patient were yelling at each other, and then started to push each other. Mr. Brown attempted to kick the patient in the head but staff were able to restrain him and he was sent to seclusion. In October, Mr. Brown admitted to wanting alcohol and to almost daily thinking of harming someone, but reported that he was able to talk himself out of it. The following week he disclosed thoughts of wanting to
‘kill Jimmy’. At the end of August, he was found in another patient’s room, repeatedly striking him in the head with a closed fist. When questioned about this incident, Mr. Brown explained that he thought the victim was trying to hurt him and he was protecting himself. In November 2005, he was still frustrated, losing his temper, hitting the wall and swearing at staff.

In December and January, improvement in his attitude and behaviour was noted and Mr. Brown was given more freedom; only minor problems were noted by staff (e.g., returning 30 minutes late from day leave). Mr. Brown’s behaviour and attitude continued to improve – he demonstrated better control of his anger when faced with conflict.

In May 2006, Mr. Brown was interviewed regarding his alleged participation in two separate incidents. In the first incident, he was accused of taking part in a sexual assault at the hospital. A witness claimed that she saw him holding the victim down while another patient assaulted her. He was then investigated for an incident with a co-patient; he was accused of stealing personal belongings from a resident’s room. The investigation cleared him of both incidents, but he felt ganged up on and threatened suicidal behaviour. He later laughed off these threats of suicide.

Throughout this past year, he has reported to staff that his medications worsen his condition and at times has refused to take them. He has also indicated that he is suspicious of everyone and he especially does not trust the doctors in the hospital; he feels that the psychiatrists, nurses and psychologists have caused a mental disorder in him. However, his progress notes over the past month (July 2006) indicate that his insight into his mental illness and need for treatment has significantly improved and he appears motivated for treatment.

He denies that he currently has problems with the voices in his head and indicates that he just ignores them now. He has completed a symptom management program and feels he has a better understanding of his mental illness. He also completed a drug and alcohol program in July 2006 and has denied a desire to drink alcohol for the past 3 months.

Mr. Brown is currently involved in a romantic relationship. He met his partner in hospital, as she is currently hospitalized at PSFH as well, and the two have been a couple for 2 years. Although when the relationship began there was considerable conflict
between the couple, over the past 10 months the relationship has stabilized and the couple provides significant support for each other.

Release Plans

Upon Mr. Brown’s release from the hospital, he plans on renting an apartment with his girlfriend, close to where her mother lives. He reports that the neighbourhood he and his girlfriend are looking at is a quiet neighbourhood and he is not concerned about potential dangers there. He is hoping to have a job lined up prior to his release from hospital and has sent his resume to potential employers. He is searching for employment in either construction, where he has previous work experience, or the food industry. He has also looked into a culinary arts course for the fall as working in the food industry is his long-term career goal.

Mr. Brown admits to feeling anxious about the future. He is concerned that it may take him a while to find a job, so he and his girlfriend have been saving money. He also reports that he is stressed about paying bills, paying rent, and, when he finds a job he is concerned about always getting to work on time. He indicates that the stress is daily, but feels he is able to handle it.

Mr. Brown is concerned about drugs and alcohol, but he thinks that with the support of his girlfriend he will not have a problem abstaining. He does not intend to associate with any of the people he associated with prior to the offence. However, he has not outlined any plan of what he will do if he does encounter his old associates or is pressured to use drugs and/or alcohol. His treatment team is encouraging Mr. Brown to develop a thorough plan to address these issues.

Mr. Brown feels that he has a great deal of social support from family and friends to assist him in his transition back to the community. He feels his girlfriend is an excellent source of support, as she has had similar experiences and also has to deal with a mental illness. His parents and siblings, as well as his girlfriend’s mother, have all indicated that they are supportive and willing to help Mr. Brown and his girlfriend as needed. His treatment team has met with both families (his and his girlfriend) and agrees that they will be a good source of support for him. The treatment team also feels that the support from his family will be very important when Mr. Brown is first released into the
community as it is not expected that his girlfriend will be released at the same time (she has a Review Board hearing in November).

At this time, Mr. Brown has no plans to take any programming. He intends to keep busy by working, going to the gym, going to movies, being with his girlfriend and friends and sometimes just being alone. However, if he does have spare time he will consider participating in day programming. He indicates that he will remain compliant with his medications, as it is “too much” to not stay with treatment. When asked to elaborate on what he means by “too much” Mr. Brown replied that not being on his medications causes too many problems in his life – with family, friends, work. He thinks it will be very stressful if he does not continue with his medications. He states that living with his girlfriend will be helpful in terms of complying with his medication as they will be able to remind each other to take them. He will also attend appointments to meet one-on-one with a counsellor, as required. Mr. Brown indicates that if he begins to experience worse symptoms, he will phone his psychiatrist for assistance.

Mr. Brown does not consider himself to be at risk for committing another crime and feels very positive about the future.
Appendix D: Survey

Welcome to the Violence Risk Assessment Research Project

Please login below to begin the study

Password

Reset  Submit

Participant Information (Screen 1)

Please provide the following demographic information to ensure that you meet the inclusion criteria for this study.

1. Age
2. Gender
   - Male
   - Female
3. Language
   - English is my first language
   - English is NOT my first language
4. Please indicate your mental health profession
Variable Risk Factor Information

- Psychology
- Psychiatry
- Nursing
- Social Work
- Other

5a. Years of experience in your current profession?
- 0
- 1 or more

5b. If 1 or more years of experience, please specify the number of years:

6a. Years of forensic risk assessment experience?
- 0
- 1 or more

6b. If more than 1 year of violence risk assessment experience, please specify the number of years:

7. In which country do you conduct most of your risk assessments?

8. Number of risk assessments completed per year (approximate)?

Informed Consent: Research Disclosure (Screen 2)

Contact Person/Principal Investigator: Cathy Wilson
Simon Fraser University, Department of Psychology
8888 University Drive
Burnaby, British Columbia
Canada, V5A 1S6

Senior Supervisor: Dr. Stephen Hart
Simon Fraser University, Department of Psychology

The university and those conducting this study subscribe to the ethical conduct of research and to the protection at all times of the interests, comfort, and safety of participants. This form and the information it contains are given to you for your own protection and to ensure your full understanding of the procedures, risks, and benefits described below.

You are being invited to participate in a research project

Approximately 150 mental health professionals with a specialization in violence risk assessments will be invited to participate in this research project. The purpose of this study is to investigate the influence of specific risk factors associated with violence risk estimates.

Participation in this study involves reading one case history and completing a questionnaire. The questionnaire consists of questions regarding the factors presented in the case history and asks the participant to make a series of risk estimates and
management decisions. Your participation in this study will require approximately 30 - 45 minutes. Your participation in this project is completely voluntary.

All identifiable information gathered will be kept confidential to the full extent permitted by law

Your answers will remain confidential. A master list of names with email addresses will be kept in a locked cabinet at Simon Fraser University. Your study materials, with no identifying information will be stored in a separate locked cabinet. When the final report of our findings is completed, no identifying information will be included.

As per Review Board regulations, I must inform you of the limitations of the confidentiality agreement. The limitations of confidentiality include any information that suggests that you are a serious danger to yourself or another person and/or any information regarding the occurrence or risk of abuse or neglect of a child or elderly person. In either case, the appropriate authorities will be contacted and provided with certain information related to this risk. Other than this, your responses will remain confidential.

There are no risks in this research

Due to the voluntary nature of your research participation and your freedom to withdraw from the study at any time, there are no risks associated with this project.

There are several benefits of participating in this research

Your participation in this research project will assist us to determine how some certain risk factors may influence a violence risk assessment. The information provided in this study will assist with furthering our knowledge of violence risk assessment and risk management.

In addition, for completing this study you will receive a free manual published by the Mental Health, Law and Policy Institute (Simon Fraser University). In order to obtain this manual, you will be required to email the Principal Investigator (Cathy Wilson: cwilson2@sfu.ca) with your password, manual choice, and mailing address. Your password will be used to confirm that you have completed and submitted your answers. The password confirmation list is separate from the submitted data and your responses will remain anonymous.


Permission for the Study

Permission was sought and obtained from both the American Psychology-Law Society and the International Association of Forensic Mental Health Services to contact you with information regarding this study.

Clicking on the “I accept” button on the bottom of this screen signifies that you have received a copy of this consent form describing the procedures and that you
voluntarily agree to participate in the study. By filling out this questionnaire, you are consenting to agree in this study.

Questions and Contacts

If you have any questions about this research study, you may contact Cathy Wilson at Simon Fraser University, at 604-268-7239 or Dr. Stephen Hart (Senior Supervisor) at Simon Fraser University at 604-291-5485.

If you have any questions about your rights as a participant in research, or about the responsibilities of researchers, or if you have any questions, concerns or complaints about the manner in which you were treated during this study, please contact the Psychology Department Chair, Dr. Daniel Weeks by email at dweeks@sfu.ca or phone at 604-291-3250.

Copies of the results of this study upon its completion can be obtained by contacting:

Catherine Wilson  
Department of Psychology 
8888 University Dr.  
Burnaby, BC V5A 1S6  
○ I accept  
○ I decline 

Study Information (Screen 3)

Study Instructions

You are being asked to review the case of an individual who has been found Not Criminally Responsible on account of Mental Disorder (NCRMD; described below) and has been committed to a secure forensic psychiatric hospital. This individual has a Review Board hearing scheduled and as a clinician reviewing the case, you are asked to assist the Review Board by answering a series of risk assessment and management questions based on the information provided.

The case information has been provided as a PDF email attachment. You may print it out, review the content, and/or make notes as you desire. When you are ready to commence the survey, it is recommended that you have a copy of the case information with you to assist with your decisions.

When you have answered all of the questions on one page, press the ‘Submit’ button to move to the next page; you will be unable to return to a page once it has been submitted.

The ‘Pause’ button allows you to pause in the middle of the survey and return to that page at a later time. If you press ‘Pause’ you will be prompted to input your email address. You will then be sent an email with the link to continue the study from where you stopped. You will be required to re-enter your password when you return to the study.
** DO NOT use the arrow keys (i.e., Back, Forward) on your web browser to navigate through the survey (you will receive an error message and be required to sign in again in order to continue with the study)**

If you have any questions while completing this questionnaire or if you experience any technical difficulties, please contact Cathy Wilson at cwilson2@sfu.ca.

When you have completed the study, please email Cathy Wilson at cwilson2@sfu.ca in order to obtain your free manual. Please include your password in the email as this will be used to confirm that the survey has been completed and submitted. Please note that the password confirmation is separate from your data and your data will remain anonymous.

**Background Information**

The Provincial Secure Forensic Hospital (PSFH) is a hospital that provides inpatient psychiatric care for individuals referred by the Courts for treatment and assessment. The patient may be admitted prior to his or her court appearance for a fitness evaluation. This evaluation is to determine whether the individual is too ill to be tried in court as a result of his or her persistent severe mental disorder. If a person is found ‘Unfit’, he or she is committed to the hospital for treatment until fitness returns. After fitness returns, the individual is released to court to deal with the outstanding charge(s).

There are a number of possible outcomes that may result from the court hearing, including a disposition of Not Criminally Responsible on account of Mental Disorder (NCRMD). An NCRMD verdict means that the accused has, beyond a reasonable doubt, committed the acts alleged in the charge but was not legally or morally responsible for those acts on account of a “mental disorder.”

A person who is found NCRMD can be given one of three possible dispositions: absolute discharge (accused is released with no sentence or conditions), conditional discharge (accused may live in the community subject to the conditions and restrictions of the Review Board), or custody (accused is detained in a hospital subject to the conditions or restrictions determined by the Review Board). The Review Board is the key legal decision-maker concerning mentally disordered persons in conflict with the law and is made up of the NCRMD accused, the Director of Adult or Youth Forensic Services, and the provincial Attorney General. For an individual given either a conditional discharge or custody disposition, he or she is entitled to mandatory periodic reviews (one every 12 months) by the Review Board. At the Review Board hearing, the Board reviews the current disposition and/or conditions and whether to continue with the current disposition or make revisions.

In the current study, violence is defined as *actual, attempted or threatened harm to a person or persons*. In addition, the index offence refers to the offence that resulted in the most recent NCRMD verdict.

**Risk Factors (Screen 4)**

Based on the information you have reviewed so far, what do you think are the major (primary, most important) risk factors for violence apparent in this case? Please briefly identify these risk factors.

*Violence – Actual, attempted or threatened harm to a person or persons.*
When you have identified all of the major risk factors please press 'Submit' to move on to the next section. Press 'Pause' if you need a break from completing the survey. Do not use the arrow keys on your web browser.

Risk Factors (Screen 5)

The following is a list of what some people view as risk factors for violence. Please indicate which of these factors were, in your opinion, both present and relevant in this case. Check all that apply.

Violence – Actual, attempted or threatened harm to a person or persons.

When you have identified the risk factors that were present and relevant in the case, please press 'Submit' to move on to the next section. Press 'Pause' if you need a break from completing the survey. Do not use the arrow keys on your web browser.

- Victim of sexual, physical, or emotional abuse
- Relationship instability
- Personality Disorder
- Young age of first violence
- Lack of social support
- Poor coping
- Impulse control problems
- Substance abuse
- Medication non-compliance
- Negative attitude
- Stress
- Employment instability
- Major mental illness
- Plans lack feasibility
- Did not live with parents until the age of 16
- Psychopathy
- Childhood delinquency
- Active symptoms of mental illness
- Material resources
- Prior supervision failure
- Insight
- Marital status
- Exposure to destabilizers
- Poor conduct
- Unresponsive to treatment

**Risk Scenarios (Screen 6)**

If the patient is released into the community, what are you worried he might do—what kinds of violence are you concerned he might commit, and under what circumstances? Please provide a brief description or “scenario” of the kinds of violence you are most concerned this patient might perpetrate. Your scenarios should reflect whatever you know about the patient, including his history of violence and the risk factors present in his case. For each scenario, you should outline:

1. The nature of the violence the patient might commit (kind of violence, likely victim(s), likely motivation)
2. The severity (what would be the psychological harm, the physical harm, could the violence escalate to serious or life-threatening violence?)
3. Its imminence (how soon might the perpetrator engage in violence, are there any warning signs that the risk is increasing?)
4. Its frequency or duration (how often might the violence occur, is the risk chronic or acute)
5. Its likelihood (how frequent or common is this type of violence, how likely is it that this violence will occur?)

You may describe as many or as few scenarios as you think are relevant. Space is provided for up to five different scenarios.

When you have completed the risk scenarios, please press ‘Submit’ to move to the next section. **Please note—if you need to pause on this page, please complete ALL of the risk scenarios that you wish to include prior to pressing ‘Pause’. If you pause on this page after completing at least one risk scenario, you will be moved to the next page when you**
return to the survey and you will be unable to return to this page. Do not use the arrow keys on your web browser.

Scenario 1: 

Scenario 2: 

Scenario 3: 

Scenario 4: 

Scenario 5: 

Risk Management Strategies (Screen 7)

Please recommend the strategies you would recommend for managing violence risk in this case. For the purposes of this study, please do not be concerned with the specific laws that pertain to your jurisdiction—describe what your ideal case management strategies would be and what you would recommend to the Review Board if you were reviewing this case.

When you have described the risk management strategies you would recommend please press 'Submit' to move to the next section. Press 'Pause' if you need a break from completing the survey. Do not use the arrow keys on your web browser.

Strategy 1: 

Strategy 2: 

Strategy 3: 

Strategy 4: 

Strategy 5: 

Risk Management Strategies (Screen 8)

Please indicate whether you would recommend any of the following strategies in this case (Yes/Possibly/No).

When you have completed this risk management section, press 'Submit' to move on to the next section. Press 'Pause' if you need a break from completing the survey. Do not use the arrow keys on your web browser.
<table>
<thead>
<tr>
<th>Variable Risk Factor Information</th>
<th>Yes</th>
<th>Possibly</th>
<th>No</th>
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<tbody>
<tr>
<td>1. Custody (continued hospitalization)</td>
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<td>2. Absolute discharge</td>
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<td>3. Release from hospital with community supervision:</td>
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<tr>
<td>a) Frequent contact (more than once per week)</td>
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<td>b) Moderate contact (once per week)</td>
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<td>c) Minimal contact (less than once per week)</td>
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<td>4. Residential condition:</td>
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<td>a) Group home or supervised facility</td>
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<td>b) Personal residence with conditions</td>
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<td>c) Personal residence with no conditions</td>
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<td>5. Treatment/therapy</td>
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<tr>
<td>a) Anger management program</td>
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<td>b) Dispute resolution</td>
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<td>c) Symptom management program</td>
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<td>d) Life-skills program</td>
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<td>e) Relapse prevention program</td>
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<td>f) Violent offender treatment program</td>
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<td>g) Spousal assault program</td>
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<td>h) Sex offender treatment program</td>
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<tr>
<td>i) Family/relationship treatment program</td>
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<td>j) Parenting skills program</td>
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<td>k) Financial counseling</td>
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<td>l) Substance abuse treatment program</td>
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<td>m) Educational/vocational training</td>
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<td>n) Crisis counseling</td>
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<tr>
<td>o) Cognitive behavioural therapy</td>
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<tr>
<td>p) Other therapy/treatment</td>
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<td>q) Medication</td>
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### 6. Other conditions:

<table>
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<tr>
<th>Condition</th>
<th>Yes</th>
<th>Possibly</th>
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<tbody>
<tr>
<td>a) No contact with victim (court ordered)</td>
<td>☐</td>
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<td>b) No contact with children under age 16 (court ordered)</td>
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<td>c) No contact with females (court ordered)</td>
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<td>d) No contact with males (court ordered)</td>
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<tr>
<td>e) Restraining order (court ordered)</td>
<td>☐</td>
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<tr>
<td>f) Report any new intimate relationship</td>
<td>☐</td>
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<td>g) Curfew</td>
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<td>h) Abstain from alcohol/non-prescription drugs</td>
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<tr>
<td>i) Submit to drug/alcohol use screen when requested by treatment team</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>j) Do not enter an establishment whose primary purpose is the sale of alcohol (e.g., bar)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>k) Weapons prohibition</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

### Risk Judgments (Screen 9)

Based on the patient’s history of violence, the risk factors present and relevant in the case, and the scenarios of violence you considered, please document your overall judgments regarding this patient’s violence risk. For each question, please decide if you think the specified violence will occur (Yes/Possibly/No). In addition to the risk judgments, please indicate how concerned you are that this violence will occur (1 = Low; 5 = Medium; 10 = High).

Please provide a response for each part of the question (‘Will this occur’ and ‘Concern rating’).

When you have completed this section, please press ‘Submit’ to move on to the next section. Press ‘Pause’ if you need a break from completing the survey. Do not use the arrow keys on your web browser.
### Violence – Actual, attempted or threatened harm to a person or persons

<table>
<thead>
<tr>
<th>Description</th>
<th>Will this occur?</th>
<th>Concern Rating?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a) Minor violence – Behaviour that meets the definition of violence but has (or potentially has) little or no physical or psychological damage to a person</td>
<td>Yes/Possibly/No</td>
<td>1 – 10</td>
</tr>
<tr>
<td>1b) Moderate violence – Behaviour that meets the definition of violence and causes (or has the potential to cause) some physical or psychological damage to a person</td>
<td>Yes/Possibly/No</td>
<td>1 – 10</td>
</tr>
<tr>
<td>1c) Severe violence – Behaviour that meets the definition of violence and causes (or has the potential to cause) considerable physical or psychological damage to a person</td>
<td>Yes/Possibly/No</td>
<td>1 – 10</td>
</tr>
<tr>
<td>2a) Short-term violence (within 6 months)</td>
<td>Yes/Possibly/No</td>
<td>1 – 10</td>
</tr>
<tr>
<td>2b) Long-term violence (after 6 months)</td>
<td>Yes/Possibly/No</td>
<td>1 – 10</td>
</tr>
<tr>
<td>3a) Friend/family will be the target of violence</td>
<td>Yes/Possibly/No</td>
<td>1 – 10</td>
</tr>
<tr>
<td>3b) A stranger will be the target of violence</td>
<td>Yes/Possibly/No</td>
<td>1 – 10</td>
</tr>
<tr>
<td>4a) Weapon use (any object designed or used for inflicting bodily harm)</td>
<td>Yes/Possibly/No</td>
<td>1 – 10</td>
</tr>
<tr>
<td>4b) Instrumental Violence – violence carried out to achieve some material or manipulative end. Violence that is goal directed and purposeful</td>
<td>Yes/Possibly/No</td>
<td>1 – 10</td>
</tr>
<tr>
<td>4c) Hostile/Reactive violence – violence that is emotionally-based; that stems primarily from some emotional factor or reaction (anger, irritation, jealousy, fear)</td>
<td>Yes/Possibly/No</td>
<td>1 – 10</td>
</tr>
<tr>
<td>5) General criminality (committing an offence that may or may not involve violence, e.g., theft, break and enter</td>
<td>Yes/Possibly/No</td>
<td>1 – 10</td>
</tr>
</tbody>
</table>

### General Questions (Screen 10)

What, if any, information was not included in the case history that you feel might have assisted or influenced your risk estimate?

Please list the risk assessment measures, if any, that you normally use when conducting a violence risk assessment.
## Appendix E: Tables

Table 1: Sample Characteristics by Condition

<table>
<thead>
<tr>
<th>Condition</th>
<th>Past Functioning</th>
<th>Past/Recent Functioning</th>
<th>Past/Recent Functioning and Future Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>$M = 42.65$</td>
<td>$M = 41.10$</td>
<td>$M = 44.12$</td>
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<tr>
<td></td>
<td>$SE = 1.52$</td>
<td>$SE = 1.65$</td>
<td>$SE = 1.64$</td>
</tr>
<tr>
<td>Gender</td>
<td>Male = 34</td>
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<td>Male = 35</td>
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<tr>
<td></td>
<td>Female = 23</td>
<td>Female = 22</td>
<td>Female = 15</td>
</tr>
<tr>
<td>Profession</td>
<td>Psychiatry = 3</td>
<td>Psychiatry = 6</td>
<td>Psychiatry = 10</td>
</tr>
<tr>
<td></td>
<td>Social Work = 2</td>
<td>Social Work = 0</td>
<td>Social Work = 1</td>
</tr>
<tr>
<td></td>
<td>Nursing = 5</td>
<td>Nursing = 3</td>
<td>Nursing = 1</td>
</tr>
<tr>
<td></td>
<td>Other = 3</td>
<td>Other = 0</td>
<td>Other = 1</td>
</tr>
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<td></td>
<td>$M = 13.83$</td>
<td>$M = 12.10$</td>
<td>$M = 13.95$</td>
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<tr>
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<td>$SE = 1.30$</td>
<td>$SE = 1.43$</td>
<td>$SE = 1.39$</td>
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<tr>
<td>Years of Experience in Current Profession</td>
<td>$M = 8.97$</td>
<td>$M = 8.61$</td>
<td>$M = 8.26$</td>
</tr>
<tr>
<td></td>
<td>$SE = 1.00$</td>
<td>$SE = 1.13$</td>
<td>$SE = 1.09$</td>
</tr>
</tbody>
</table>

Note. No significant differences were found between the experimental groups for age, years of experience in the current profession, or years of violence risk assessment experience.
<table>
<thead>
<tr>
<th>Case Number</th>
<th>Past</th>
<th>Past/Recent</th>
<th>Past/Recent/Future</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>6</td>
<td>5</td>
<td>18</td>
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<td>2</td>
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<td>4</td>
<td>14</td>
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<td>7</td>
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<td>6</td>
<td>5</td>
<td>15</td>
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<td>6</td>
<td>7</td>
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<td>7</td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>16</td>
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<td>8</td>
<td>5</td>
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<td>12</td>
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<td>9</td>
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<td>4</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>10</td>
<td>7</td>
<td>4</td>
<td>6</td>
<td>17</td>
</tr>
<tr>
<td><strong>Total Number in each Condition</strong></td>
<td><strong>57</strong></td>
<td><strong>48</strong></td>
<td><strong>50</strong></td>
<td><strong>155</strong></td>
</tr>
</tbody>
</table>
Table 3: Variable Risk Factors

<table>
<thead>
<tr>
<th>Variable Risk Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active symptoms of mental illness</td>
</tr>
<tr>
<td>Employment instability</td>
</tr>
<tr>
<td>Exposure to destabilizers</td>
</tr>
<tr>
<td>Impulsivity</td>
</tr>
<tr>
<td>Lack of insight</td>
</tr>
<tr>
<td>Lack of social support</td>
</tr>
<tr>
<td>Major mental illness</td>
</tr>
<tr>
<td>Marital status</td>
</tr>
<tr>
<td>Lack of material resources</td>
</tr>
<tr>
<td>Medication non-compliance</td>
</tr>
<tr>
<td>Negative attitude</td>
</tr>
<tr>
<td>Plans lack feasibility</td>
</tr>
<tr>
<td>Poor coping</td>
</tr>
<tr>
<td>Relationship instability</td>
</tr>
<tr>
<td>Stress</td>
</tr>
<tr>
<td>Substance abuse</td>
</tr>
<tr>
<td>Unresponsive to treatment</td>
</tr>
</tbody>
</table>
Table 4: Risk Management Strategies Component Loadings

<table>
<thead>
<tr>
<th>Component 1: Life-skills and Programming</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anger Management</td>
<td>.59</td>
</tr>
<tr>
<td>Dispute Resolution</td>
<td>.60</td>
</tr>
<tr>
<td>Symptom Management</td>
<td>.55</td>
</tr>
<tr>
<td>Life-skills Program</td>
<td>.66</td>
</tr>
<tr>
<td>Relapse Prevention Program</td>
<td>.60</td>
</tr>
<tr>
<td>Violent Offender Treatment Program</td>
<td>.56</td>
</tr>
<tr>
<td>Family Therapy</td>
<td>.56</td>
</tr>
<tr>
<td>Educational/Vocational Training</td>
<td>.60</td>
</tr>
<tr>
<td>Crisis Management Program</td>
<td>.41</td>
</tr>
<tr>
<td>Cognitive Behavioural Therapy</td>
<td>.43</td>
</tr>
<tr>
<td>Other Treatment Program</td>
<td>.36</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component 2: Family Problems and Sexual Offending</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex Offender Treatment Program</td>
<td>.53</td>
</tr>
<tr>
<td>Spousal Assault Program</td>
<td>.52</td>
</tr>
<tr>
<td>Parenting Skills Program</td>
<td>.52</td>
</tr>
<tr>
<td>No contact with Victim(s)</td>
<td>.52</td>
</tr>
<tr>
<td>No contact with children under age 16</td>
<td>.67</td>
</tr>
<tr>
<td>No contact with girls</td>
<td>.72</td>
</tr>
<tr>
<td>No contact with boys</td>
<td>.68</td>
</tr>
<tr>
<td>Restraining order</td>
<td>.60</td>
</tr>
<tr>
<td>Report new intimate relationship</td>
<td>.34</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component 3: Substance Abuse Management</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substance Abuse Program</td>
<td>.64</td>
</tr>
<tr>
<td>No go to establishment where the primary purpose is alcohol consumption (e.g., bar)</td>
<td>.68</td>
</tr>
<tr>
<td>Submit to drug/alcohol screening</td>
<td>.74</td>
</tr>
<tr>
<td>Abstain from alcohol and non-prescription drugs</td>
<td>.77</td>
</tr>
<tr>
<td>Curfew</td>
<td>.48</td>
</tr>
</tbody>
</table>
Table 5: Mean Level of Overall Risk by Condition and Case Number

<table>
<thead>
<tr>
<th>Case Number</th>
<th>Past Mean risk (SD)</th>
<th>Past/Recent Mean risk (SD)</th>
<th>Past/Recent/Future Mean risk (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7.00 (5.42)</td>
<td>6.33 (2.94)</td>
<td>3.20 (2.17)</td>
</tr>
<tr>
<td>2</td>
<td>8.17 (3.37)</td>
<td>7.25 (4.27)</td>
<td>7.00 (4.69)</td>
</tr>
<tr>
<td>3</td>
<td>6.60 (4.98)</td>
<td>4.20 (3.96)</td>
<td>1.00 (.00)</td>
</tr>
<tr>
<td>4</td>
<td>5.25 (4.99)</td>
<td>5.20 (4.76)</td>
<td>5.00 (3.16)</td>
</tr>
<tr>
<td>5</td>
<td>4.00 (5.35)</td>
<td>6.83 (4.75)</td>
<td>3.60 (4.77)</td>
</tr>
<tr>
<td>6</td>
<td>6.29 (3.50)</td>
<td>4.40 (4.72)</td>
<td>4.20 (4.87)</td>
</tr>
<tr>
<td>7</td>
<td>8.33 (3.50)</td>
<td>1.80 (1.30)</td>
<td>1.00 (.00)</td>
</tr>
<tr>
<td>8</td>
<td>3.00 (2.00)</td>
<td>6.00 (5.35)</td>
<td>6.00 (4.36)</td>
</tr>
<tr>
<td>9</td>
<td>6.00 (4.55)</td>
<td>4.25 (2.36)</td>
<td>7.33 (4.13)</td>
</tr>
<tr>
<td>10</td>
<td>3.00 (2.89)</td>
<td>6.00 (5.35)</td>
<td>4.06 (3.47)</td>
</tr>
</tbody>
</table>

*Note.* Overall risk is based on a scale of 1 to 12.
Table 6: Mean Level of Severity of Violence by Condition and Case Number

<table>
<thead>
<tr>
<th>Case Number</th>
<th>Past</th>
<th>Past/Recent</th>
<th>Past/Recent/Future</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean risk (SE)</td>
<td>Mean risk (SE)</td>
<td>Mean risk (SE)</td>
</tr>
<tr>
<td>1</td>
<td>2.57 (.42)</td>
<td>2.83 (.46)</td>
<td>2.20 (.50)</td>
</tr>
<tr>
<td>2</td>
<td>3.33 (.46)</td>
<td>2.50 (.56)</td>
<td>2.50 (.56)</td>
</tr>
<tr>
<td>3</td>
<td>3.00 (.50)</td>
<td>2.00 (.50)</td>
<td>1.00 (.56)</td>
</tr>
<tr>
<td>4</td>
<td>2.25 (.56)</td>
<td>2.40 (.50)</td>
<td>2.29 (.42)</td>
</tr>
<tr>
<td>5</td>
<td>1.75 (.56)</td>
<td>3.00 (.46)</td>
<td>1.60 (.50)</td>
</tr>
<tr>
<td>6</td>
<td>2.71 (.42)</td>
<td>2.00 (.50)</td>
<td>2.00 (.50)</td>
</tr>
<tr>
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<td>3.17 (.46)</td>
<td>1.40 (.50)</td>
<td>1.00 (.50)</td>
</tr>
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<td>2.50 (.46)</td>
<td>1.75 (.56)</td>
<td>3.17 (.46)</td>
</tr>
<tr>
<td>10</td>
<td>1.57 (.42)</td>
<td>2.25 (.56)</td>
<td>2.00 (.46)</td>
</tr>
</tbody>
</table>

Note. Severity of violence is scored on a scale of 1 to 4.