Towards ongoing screening for risk of violence

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TOWARDS ONGOING SCREENING FOR RISK OF VIOLENCE

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A Project
Submitted to the School of Graduate Studies
of the University of Lethbridge
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Dedication

This project is dedicated to my family. Different parts of me, all of which were necessary, gained strength from different family members.

First, my apologies – oops, I mean thanks to my wife who held my nose to the grindstone during times when I began to wander.

Next, thanks to my children, who “needed” their daddy down on hands and knees wrestling so conveniently during times when it was difficult for him to sit at a desk. Their smiles remain contagious; certainly to them I owe many of mine.

Finally, thanks to my parents. Without their “tanning my backside” on occasion and offering their encouragement, who knows what type of project I may have been completing. To them I attribute the presence of my broad shoulders however, steering clear from inadvertently dedicating the former.
Abstract

The intent of this project is to provide clinicians (and others providing frontline services) with the justification and information necessary to recognize and manage the risk of violence during service-provision. The academic literature has widely acknowledged that mental health professionals must be able to assess risk competently. Making reference to applicable ethical codes, this ethical responsibility is made explicit. After having established risk assessment as a critical element of mental health service-provision, risk assessment of violence is described paying special attention to foundational concepts and key strategies inline with current best-practice research. It becomes clear that frequent snapshots of acute dynamic risk factors allow for risk prediction and, more importantly, risk reduction. Despite this conclusion, a considerable portion of clinicians use solely clinical judgment or neglect to assess risk of violence altogether. Working towards resolution of this problem, the writer encourages that the ongoing consideration of risk be introduced as a mentality for clinicians. It is in this vein that a collection of variables empirically supported to predict violence was culled from the extant literature, integrated into a screening resource, and presented as a springboard to adopt a risk screening mentality without delay. The preliminary draft of this screening tool, titled the T-BAR (Time for a Brief Assessment of Risk), offers a conceptual scheme to examine clients’ risk of violence to others and to initiate risk management without delay. This screening tool is not intended to quantify risk per se, but rather to bring awareness to the client’s general propensity to act aggressively toward others and highlight individual and contextual risk factors suitable for intervention. While it has not been subjected to peer evaluation, piloting, or standardization, the T-BAR is hoped to illustrate the concepts...
outlined in the project, heighten the reader’s awareness of the casual nexus underlying violent behavior, and prompt critical thinking about harm reduction. Ideas for additional work in the field and future research are offered.
Acknowledgments

Acknowledgment is owed to Dawn McBride for her time invested into supervising the completion of the current project. Both in and outside of the classroom her dedication is admired. Dawn’s personality and the skills that she brings forth are a meaningful compliment to the writer’s. With much gratitude, I offer my thanks.

Appreciation is also owed to Brad Hagen whose time and energy was not overlooked. Thank you for your consideration and worthwhile comments.

Finally, to Scott Powell, who would not want me to advertise his being incredibly computer savvy and able to troubleshoot virtually any software problems – oops. Thanks to you as well.
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Chapter 1: Introduction

Introduction

Everyone poses some level of risk of harm to themselves or others. When we drive a car, cook our dinner, or even play with our children, there is some degree of risk present. For many years risk assessment has been an important concept in health, behavioral and social sciences, and legal communities (Hayes, 1992). Law courts and corrections personnel rely on risk-related decisions about pretrial release, sentencing, and parole on a daily basis (Rice, 1997). Employers and school officials are increasingly being called upon to estimate the nature and degree of risk that individuals may pose to others (Brennan, 1999).

In mental health settings, clinicians have long been concerned with assessing the risk of harm that individuals may pose to themselves and others. Risk assessment, particularly the risk of violence and suicide, has historically been an important practice in mental health settings (Holdsworth, Collis, & Allott, 1999). Increased potential for risk to clinicians is a natural byproduct of the problems, symptoms, and diagnoses presented by those we serve.

Currently, even patients “estimated to be at high risk of violence may be discharged in a few weeks, or increasingly, in a few days, assuming that they are ever hospitalized in the first place” (Monahan et al., 2000, p. 13). Thus, potentially violent patients increasingly are being treated in community-based settings (Simon, 1997). As a result, increasing numbers of service providers are required to assess client risk and make decisions regarding the need for involuntary treatment, readiness for discharge, and appropriate interventions (Borum, 1996). Clinicians who work with these clients are
responsible to provide effective outpatient services while protecting public safety (Rice & Harris, 1997). Maintaining this balance requires routinely assessing for risk and, when necessary, focusing interventions on causal factors of violent behavior. Failing to acknowledge the risks inherent to providing mental health services leaves clinicians unprepared and the public unprotected.

As will become more clear, a lack of training is one variable leading to situations in which staff members are unable or unwilling to manage violence potential. This has culminated into an avoidance mentality among some clinicians and a lack of resources for those in need (Anderson, Bell, & Powell, 2004). Current shortcomings of commonly used risk assessment strategies, combined with the increasing demand to work with higher risk clients in community settings, provide the justification for the current project.

The following section provides background information relevant to risk assessment of violence against others including why assessing individuals for risk of violence is necessary, to whom risk assessment applies, and barriers that may deter proper risk assessments from being undergone. For interested readers, information to further contextualize subsequent chapters is attached as Appendix A.

**The Current Project**

This project is intended to convey the importance of considering the potential for interpersonal violence of clients and offer practical strategies to overcome barriers, which deter risk assessment. The writer aims to enhance readers’ awareness of indicators of violent behavior (risk factors), their ability to identify elevations of risk (risk screening),
and to provide an example of how to identify appropriate avenues to minimize client risk (risk management). Justification to adopt a risk screening mentality will be offered.

The project consists of two main elements: A document outlining concepts and considerations relevant to risk assessment and an applied resource designed to prompt the consideration of integrating a risk screening mentality into daily service-provision. These elements were developed in the spirit of minimizing harm, maximizing benefits, and establishing standards of excellence for mental health service providers (and others) in the local geographic area (and beyond). Each is described below.

Project Overview

The project first outlines the role of ethical governance in the mental health field. Historical consequences resulting from ineffective risk assessment are provided alongside a closer examination of the ethical responsibility of clinicians to assess for the risk of interpersonal violence. With these ethical underpinnings established, the process of violence risk assessment is outlined.

Important concepts are highlighted as the evolution of violence risk assessment over nearly half a century is described. A sample standardized instrument characteristic of each approach to risk assessment is described. The writer does not necessarily endorse or recommend any particular tool. The instruments included were selected based on their prevalence in the literature and established efficacy in assessing for risk.

The current state of violence risk assessment is described giving specific attention to the novel aspects of this most recent generation of risk assessment. A number of integral concepts embedded within this contemporary approach are extracted to form the argument that the ongoing consideration of risk, characterized by frequent snapshots of
acute, dynamic, causal risk factors, epitomizes current best practice risk assessments. Based upon this logic, an applied resource coined the T-BAR, which is described below, is included to provide a starting point upon which to consider risk of violence on an ongoing basis.

**T-BAR Overview**

It was intended that the research reviewed in the preparation of this project take on an applied quality, having some practical value to the reader (and the field in general). This application of research findings has taken shape to form a single page resource intended to prompt the ongoing consideration of clients’ risk of interpersonal violence. This sample screening tool, coined the T-BAR (Time for a Brief Assessment of Risk) is described in detail in Chapter 5 and attached as Appendix B.

It is intended that the T-BAR be meaningful in a variety of professional settings and with multiple applications. Clearly risk is not localized in the field of mental health, and the tool is expected to be appropriate for use in other settings such as medical clinics and academic institutions. It may be introduced while orienting new employees and/or student placements to agency expectations and policies and procedures. Academic institutions offering counselling psychology programs may include the T-BAR as a teaching tool to facilitate discussion about ethics, client risk, and to encourage critical thinking about risk by students. Finally, it is hoped that the T-BAR and the accompanying paper will provide the foundation for publication and conference proceedings where this scope and perspective on risk assessment might inspire best-practice initiatives. A more thorough description is contained in chapter five.
Summary

Aggressive and violent behavior has long been pervasive across time and setting. Clinicians stand the chance to encounter clients at risk of being violent on an ongoing basis. In light of current shortfalls in the practice of risk assessment coupled with the increasing demand upon mental health clinicians to identify and treat potentially violent individuals, a summary of relevant research and risk assessment strategies has been prepared. This will allow for the time-efficient acquisition of the knowledge and skills necessary to detect elevations in risk and initiate risk management. While formal training in violence risk assessment is recommended to supplemented the review of this project, it is hoped that the reader be increasingly willing and better able to assist individuals at risk of harming others at the conclusion of its review.

Conclusions

There has been a trend over the past decade of less frequent inpatient admissions and shorter duration hospital stays. These effects have been exacerbated by the recent economic downturn in North America. Mental health professionals in the community have been expected to provide services to an increasingly high-risk population. Along with this escalation in the presence of violence risk, incidences in which interpersonal violence was not appropriately considered continue to emerge.

Historical barriers and anticipated challenges in the practice of violence risk assessment must be identified and overcome in the interest of public safety and the integrity of the profession. Research examined in this review has indicated that using a screening approach to violence prevention might support clinicians (and others) in protecting the welfare of individuals directly receiving services and society as a whole. In
response findings have been integrated into the development of an applied resource to prompt frontline workers to consider clients’ risk of interpersonal violence and demonstrate one approach to risk management.
Chapter 2: Research Methodology

Introduction

This project argues that it is the responsibility of mental health professionals to protect their clients and members of the community from violence and that the tools required are available for those clinicians willing to do so. This assertion requires strong support from empirical studies and relevant literature. Consistent referencing of research findings and theoretical underpinnings will ensure that the inclusions are accurate. A description of the process undertaken to compile such information is included below.

The Research Process

In order to understand the ethical obligation of mental health service providers in risk assessment, the writer reviewed the standards and guidelines put forth by the Canadian Psychological Association, American Psychological Association, and Canadian Counseling Association. Archived as well as current stories in the media were reviewed to gain a better sense for the impact of violent behavior.

Academic journals provided additional information about the theory and principles that underlie risk assessment practices. Databases such as PsychINFO, PsycARTICLES, Web of Science, SAGE Full Text Collection, and the Psychology and Behavioral Sciences Collection were examined for pertinent information. Key search terms included various combinations of descriptors such as ethics, responsibility, violence, abuse, recidivism, offender, risk, assessment, and intervention. Multiple combinations were entered into the databases including: “ethical responsibility”, “ethical obligation”, “therapist”, “psychologist”, “risk assessment”, “community violence incidence”, “community violence offender”, “community violence victim”, “offender
assessment”, “victim assessment”, “sexual assault offender”, “domestic violence”, 
“intimate partner violence”, “weapon use”, “firearm”, “offense incidence”, “mentally ill 
offender”, “mental health patient”, “client”, “mental health professional”, “clinical risk 
assessment”, “indicators of risk”, “risk management”, “recidivism”, “violence”, and “risk 
assessment instruments.”

Additional research studies were located by perusing the reference sections of 
each article, which revealed both seminal and contemporary work related to violence risk 
assessment. A number of journal articles and books were reviewed for complementing 
and contrasting viewpoints regarding professional expectations, foundational constructs, 
current risk assessment practices, and ideas for future research.

Medical journal databases such as MEDLINE [via EBSCO], Health and Wellness 
Resource Center, and PUBMED were also investigated in order to gain insight into the 
medical and biological determinants of offending behavior. It was necessary to review 
medical journals due to the lack of attention in mental health and psychology related 
journals regarding barriers impeding the consideration of risk. Finding meager research 
available that examined the practical and psychological impediments to assessing a 
client's risk of violence, the writer reviewed several articles pertaining to physicians and 
extrapolated accordingly.

No one was interviewed, nor was any data collected during research with human 
subjects. The research methods were limited to reviewing literature. In preparing the 
manuscript, all copyright policies and writing standards as outlined by the University of 
Lethbridge were adhered to such as giving credit to all original authors via APA style
referencing and citation. In addition, all activities undertaken during the preparation of this project conform to the Canadian Code of Ethics for Psychologists.

Summary

This project has been undertaken to bridge the gap in violence risk assessment. An abundance of relevant research has been reviewed. This research has provided a rich understanding and a sound foundation for risk assessment. It has also brought awareness to gaps that exist and areas that are in need of future research. Some of these are described in the final section.

Conclusions

All summed, the research supports the need for ongoing risk assessment and the most recent research has provided evidence-based methods to follow through. What remains is for clinicians to enhance their awareness in each of these areas so that they include the ongoing consideration of risk in their daily practice. The research techniques described above have ideally allowed the writer to compile the information necessary to accomplish this.
Chapter 3: Literature Review of Ethics in Psychology

*Introduction*

This section begins with a general description of professional ethics and moves toward why ethical guidelines are necessary in the field of psychology. With this established, the role of ethics in psychology is more closely examined with specific reference to the *Canadian Code of Ethics* (Canadian Psychological Association, 2000), the code adopted by the Canadian Psychological Association (CPA) to govern the practice of psychology in Canada. Finally, the principles and standards contained within this code are applied to the practice of risk assessment in order to make clear that the code ethically requires clinicians to give consideration to their clients’ risk of harming others; a task accomplished with a risk screening mentality.

*Ethics in Psychology*

Each professional discipline with autonomous control is expected to govern with consideration given to the society in which it operates. This includes how its standards, practices, and eligibility requirements impact society, both positively and negatively (Canadian Psychological Association, 2000). This social contract is founded upon the trust that those functioning within the discipline will place the welfare of those served and the society before that of its’ members or the discipline itself (Canadian Psychological Association, 2000). Reinforcing the importance of ethical governance, notable author and chair of the CPA Committee on Ethics Supervision Guidelines, Dr. Jean Pettifor highlights the importance of ethical governance by writing, “with some exceptions, the existence of professional regulation reflects the level of development [of
that profession] in that country. A profession needs to establish an identity and credibility before there is something to be regulated” (Pettifor, 2007, p. 312).

The medical profession has pioneered ethical governance using operating guidelines to aid practitioners in effective and ethical treatment of patients (Johnston, Langton, Haynes & Mathieu, 1994). Numerous stakeholders have contributed to these guidelines over the past decade including the Agency for Health Care Policy and Research, which has developed an updated series of explicit guidelines as part of a systematic effort to enhance the quality, the appropriateness, and the effectiveness of health care services (Johnston et al., 1994). While ethical governance is well established, it continues to be a critical area and focus of ongoing development.

In the mental health field, the American Psychological Association (APA) has long had a steering committee making recommendations about practice guidelines in the United States. The APA code of ethics identifies aspirational goals to guide psychologists toward the highest ideals of psychology (American Psychological Association, 2002). Membership in the APA commits members and student affiliates to comply with the standards of the APA code of ethics and the rules and procedures used to enforce them. Lack of awareness or misunderstanding of an ethical standard is not in itself a defense to a charge of unethical conduct.

The Canadian Psychological Association (CPA) governs psychological practice in Canada. While a code existed through the 1950's and 60's, in the 70's the CPA produced a “made in Canada” code of ethics. The CPA is responsible to ensure that service providers convey pro-social attitudes and maximize benefits in their daily conduct (Canadian Psychological Association, 2000). To achieve this goal the Canadian Code of Ethics
(CCE) declares explicit principles, values, and standards; promotes them through education, peer modeling, and consultation; develops and implements methods to help psychologists monitor the ethics of their behaviour and attitudes; adjudicates complaints of unethical behaviour; and takes corrective action when warranted (Canadian Psychological Association, 2000, p. 1-4).

With only a few exceptions, developed nations around the world have professional regulations for the practice of psychology. The European Federation of Psychologists’ Associations (EFPA) for example, which includes 31 national psychology associations, has adopted several codes of ethics in recent years. There has been a natural gravitation toward mainstreaming ethical standards on both regional and global levels (Brock, 2007). For example, the five Nordic countries (Denmark, Finland, Iceland, Norway, and Sweden) adopted a unified code of ethics in 1988, which they revised in 1998 to be more consistent with EFPA’s meta-code (Pettifor, 2007). In light of this global, widespread attention to ethics in psychology, a closer examination of the code that governs ethical practice of psychology in Canada is provided below.

The Canadian Code of Ethics

Governing associations such as the APA, CPA and the Canadian Counseling Association (CCA) adopt codes of conduct to provide a common set of principles and standards upon which psychologists build their professional and scientific work. Ethical codes in psychology include, but are not limited to, the clinical, counseling, and school practice of psychology; research; teaching; supervision of trainees; public service; policy development; social intervention; development of assessment instruments; conducting
assessments; educational counseling; organizational consulting; forensic activities; program design and evaluation; and administration (American Psychological Association, 2002).

The CPA adopted the Canadian Code of Ethics (CCE) to govern professional practice of psychology in Canada. Input from practicing Canadian psychologists was used in its advent, setting the CCE apart from other codes such as that of the APA. The code is intended to be as non-intrusive as possible, interfering as little as possible with service delivery, while protecting the public from exploitation or harm.

The four principles contained in the CCE, described below, represent those ethical principles used most consistently by Canadian psychologists to guide service provision and resolve hypothetical ethical dilemmas (Canadian Psychological Association, 2000). To support the four pillars, values statements and ethical standards were derived from interdisciplinary and international ethics codes, provincial and specialty codes of conduct, and ethics literature (Canadian Psychological Association, 2000). These supporting statements provide aspirational guidelines for clinicians to aim for during daily conduct.

While all four principles need to be taken into account, the complexity of some ethical conflicts precludes a firm weighting of the principles. Said differently, there are circumstances in which these principles will conflict and it will not be possible to give each principle equal weight. As such, they have been ranked according to the consideration that each should generally be given when they conflict (Canadian Psychological Association, 2000). These anchoring principles, as described by the CPA, are outlined below.
**Principle I: Respect for the Dignity of Persons**

This principle, with its emphasis on moral rights, generally should be given the highest weight, except in circumstances in which there is a clear and imminent danger to the physical safety of any person. Respect and dignity of persons generally refers to the belief that people should be treated primarily as individuals or an end in themselves, not as an object or a means to an end (Canadian Psychological Association, 2000). As such, psychologists acknowledge that all people have a right to have their innate worth as human beings appreciated independent of individual characteristics or life context.

**Principle II: Responsible Caring**

This principle generally should be given the second highest weight. Responsible care requires competence in the clinician’s area(s) of practice and duties should be carried out only in ways that respect the dignity of persons. Psychologists must demonstrate an active concern for the welfare of their clients while ensuring that their activities will benefit members of society as well, or in the least, do no harm (Canadian Psychological Association, 2000).

**Principle III: Integrity in Relationships**

This principle generally should be given the third highest weight. Psychologists are expected to demonstrate the highest integrity in all of their relationships. The relationships formed by psychologists in the course of their work embody explicit and implicit mutual expectations of integrity. These expectations include accuracy and honesty, straightforwardness and openness, the maximization of objectivity and minimization of bias, and avoidance of conflicts of interest (Canadian Psychological...
Association, 2000). In some circumstances, values such as openness and straightforwardness may need to be subordinated to the values contained in principles one and two.

*Principle IV: Responsibility to Society*

This principle generally should be given the lowest weight of the four principles when it conflicts with one or more of them. Although it is necessary and important, adherence to this principle must be subject to, and guided by, the preceding three principles. When a person’s welfare appears to conflict with benefits to society, it is often possible to find ways of working for the benefit of society that do not violate respect and responsible caring for the person. However, if this is not possible, the dignity and well-being of a person should not be sacrificed to a vision of the greater good of society and greater weight must be given to respect and responsible caring for the person (Canadian Psychological Association, 2000).

This brief description of the principles that guide psychological service-provision in Canada highlights the ways in which ethical governance influences practice. Clearly, clinicians must give consideration to numerous ethical guidelines during the course of their daily activities. While these principles (and the underlying standards) have an intuitive fit, it is important that they be given unambiguous consideration and explicitly put into effect.

It is intended that the CCE has been established as key in guiding the activities of many professionals in the human service industry and highly pertinent to practice in psychology. An introduction to the CCE principles has ideally left the reader with a conceptualization of how these standards translate into practice. This foundation allows
for a meaningful discussion about the relevance of ethics, specifically the CCE, to risk assessment but first, it would seem prudent to briefly iterate why risk assessment is necessary and how it can impact the health and safety of every individual.

*Why Assess for Risk of Violence? An Ethical Imperative*

There has been increasing concern over law and order in western society and violence specifically has become a permanent fixture in the political scene. A relatively small number of violent incidents have received a disproportionate amount of media attention. This can influence the public’s perception of both mental health service users and providers, often portraying of mentally disordered persons as high-risk and clinicians as neglectful in protecting society. While these news reports are at times inaccurate, they can be used to highlight reasons why assessing clients for risk of violence is so important. These widespread and perhaps familiar stories are relied upon to structure the account below qualifying the need for risk assessment. Identifying information was not considered to add to the discussion and as such has been excluded.

*Protects Society*

It is not uncommon for the media to quote coworkers and neighbors describing an individual as, “a nice man, quiet and kept to himself most of the time” and then report by details of his role in a violent attack. Precluded from such reports is that the man had an extensive violent history, was currently grieving the loss of his partner and job, and had an ongoing fascination with death and mutilation. This stereotypical media story is included to draw attention to the lack of a proactive, educational attitude toward interpersonal violence. That is, might this tragedy have been prevented if individuals,
including clinicians and laypeople, were more aware of indicators that someone may be at high risk for violence?

Other reports have described situations involving sexual abuse. At times there may be multiple victims, appearing something like this: “At least ten youngsters fell victim to an unassuming middle school teacher over an eight-year period while teaching in a remote northern European town...” Horrific stories like this cause hypervigilance in parents and create unfounded worries about civil servants. Details such as the man’s previous suspensions for “unprofessional conduct”, general disregard for rules and authority, and the mandated counseling that he failed to attend are often precluded. It may be that education, in the spirit of preventing such tragic events, warrants more attention than statements about the offender’s “unassuming nature”.

Stories such as these that involve the violation of human rights, violent attacks, and homicides naturally prompt curiosity about how family, acquaintances, and service-providers may have become aware of the impending offense? A step further, how can individuals have prevented the incident? In the examples above it can only be speculated about the consideration given to risk assessment and the measures put in place to protect members of society, however it may be said with reasonable confidence, that a risk screening mentality may prevent similar incidents in the future. The protection of society is one of the reasons why risk assessment is necessary.

\textit{Protects Clients}

The media is flooded with stories detailing acts of violence dramatically impacting people’s lives. There is typically more than one victim in these stories and at times one may go unnoticed. Sometimes individuals cannot be held criminally
responsible for their actions. Situations involving violence may be undergirded by psychiatric conditions involving acute psychosis, uncontrollable rage, or other psychopathologies. Other situations may involve individuals exposed to intense emotion or threatening situations such as falling victim to or witnessing trauma. Individuals not being of sound mind and/or being unfit to stand trial due to psychopathology may not be found criminally responsible and, their actions are, in effect, beyond their control.

The following example is illustrative. A woman was released from an inpatient hospital psychiatric ward to attend her spouse’s funeral. At the conclusion of the service, prior to her readmission to the care facility, she committed homicide-suicide, taking the life of a woman alleged to be her husband’s girlfriend and then her own. Though undoubtedly still having her rights and freedoms limited after the incident, she may have been found not criminally responsible and in effect, a victim of her intensely emotional and unstable state. Might her volatility have been detected with a proper risk assessment? What measures were taken to protect this client from herself?

Risk is ever-present and in some cases, devastating outcomes cannot be avoided. Other times, signs of impending violence are present but go undetected. It would seem that in some situations the client’s needs are not met and they fall victim to their own psychopathology. Risk assessment is necessary to ensure that indicators of violence are identified and appropriate strategies are implemented to minimize aggressive behavior and protect vulnerable persons. To be sure, risk assessment protects clients from their own actions (Newhill, 2004).
Protects Clinicians

Indicated by multiple murders of mental health clinicians in North America, clinicians may be well advised to consider their own safety during service-provision. Reported by several newspapers (e.g., the New York Sun, http://www.nysun.com/new-york/insanity-defense-is-planned-in-case/74757/) and television networks (e.g., CBS, http://wcbstv.com/topstories/tarloff.trial.fit.2.660545.html), in 2008 a psychologist was stabbed to death in her office. The 39-year-old man charged with her murder had been in and out of psychiatric facilities since his early 20's. He would have warranted positive endorsements to multiple risk factors for violence when assessed, but nevertheless had the opportunity to complete the homicide. While the writer does not purport that this tragedy resulted from clinician negligence, attacks such as these highlight the need for ongoing screenings for the risk of violence to detect rises in risk levels, which surpass the individual’s threshold for interpersonal violence (Munsey, 2008) and reinforce that all clinicians must be well versed in violence risk assessment and management for their own personal safety.

Sullivan (2004) bolsters the writer’s claim that there exists a risk of violence to clinicians, reporting that more than 20% of firearm-owning psychologists sometimes carrying a concealed firearm on them for their protection. In fact, approximately 12% of these clinicians reported keeping a firearm in their office (Sullivan). Clearly a number of clinicians perceive the need to protect themselves and it would seem sensible that they possess the skills necessary to recognize and diffuse interpersonal violence.

The majority of clinicians are unwilling to tote a firearm however and, providing additional support for the presence of a threat to clinicians, multiple alternative strategies
for clinicians to protect themselves from violent behavior in the workplace have been published. For example, Munsey (2008) suggests safety measures such as organizing the office to allow the opportunity to exit with ease. Central to the current project, screening all clients for the risk of interpersonal violence is among the author’s recommendations (Munsey).

Additional to being physically compromised, failing to assess for risk may result in clinicians facing board investigations, and as a result, experiencing significant personal and professional distress (Thomas, 2005). While elevated stress levels may put additional strain on romantic relationships and family life, professionally, clinicians may become vulnerable to cognitive, emotional, and behavioral responses that compromise their clinical work (Nash, Tennant & Walton, 2004). In such cases, clinical performance may be limited by dynamics such as problematic counter transference and impaired objectivity (Nash et al.). Awareness of variables correlated with violence and the ability to assess for their presence can protect clinicians against these potentially career-ending effects.

Rogers (2006) reports that clients wishing to sue risk decision-makers are most likely to adopt the law of negligence. The most important requirement for the law of negligence is that the risk decision was one that no responsible body of professionals would have made (Rogers, 2006). Although the trial judge makes the decision, the decision is based on fact, not law. The judge has to decide what is professionally acceptable and consider the choices and actions of the clinician. Petrila (1995) recommends that mental health service providers consider adopting formal risk assessment protocols so that the risk assessment process is explicit and readily accessible.
Clear protocols may provide some protection from malpractice claims that allege that a practitioner has been negligent because the clinician can demonstrate that the risk assessment decision was made in accordance with agreed upon criteria (Petrila, 1995).

The potential physical harm that results from violence as well as the emotional impact of facing complaints and litigation resultant from negligence underscore the importance of being skilled in risk assessment. The availability of clear and current risk assessment protocols can reduce litigation, the resultant emotional strain, and protect clinicians’ physical safety. To be sure, risk assessment is important to the well being of clinicians.

Illustrated above, risk assessment can have a protective effect against potentially devastating consequences to clients, clinicians, and the society as a whole. While it is acknowledged that risk prediction remains an imperfect science and may not always prevent violence, the implication here is that the impending costs of neglecting to assess clients’ risk of violence provides sufficient grounds to justify risk assessment as an essential practice in psychological service-provision. While this is a critical conclusion, it must be noted that merely examining clients’ propensity for violent behavior falls short of working to minimize this risk, the overall goal of risk assessment. Nevertheless, with this prerequisite established, risk assessment is now more formally discussed with regards to ethical practice.

**Synthesis: Ethical Practice and Risk Assessment**

Risk is inherent in all psychological activities. Nearly half of all clinicians have close encounters with client-clinician violence at some time during their careers (American Psychological Association, 2000). Failing to screen for risk, results in
increased probability of these assaults taking place. Despite this rather obvious logic, situations have continued to emerge in which risk was not thoroughly examined or considered at all.

After receiving specific training in risk assessment, clinicians report being better able to competently assess for risk of violence, can better articulate the rationale for their risk assessments and risk management plans, and report more self-confidence to explore risk with their clients (McNiel et al., 2008). Even so, the total number of training hours received prior to graduation has historically been very low. In 1990 Guy, Brown, and Poelstra surveyed 750 psychologists and found that the total number of training hours spent on risk assessment ranged from 0 to 3.5. The sample had a median of zero hours of formal training in the assessment and management of client violence (Guy et al.).

Later on, in 1996, Corder and Whiteside found that only 23% of psychologists surveyed had received any training in protecting themselves from violence and 95% felt that their training had been inadequate for risk management. Schwartz and Park (1999) surveyed a national sample of 517 psychiatric residents and reported that a third of the respondents received no training in risk assessment. A notable pattern seems to emerge; historically, the vast majority of clinicians receive little or no formal training in violence risk assessment.

Despite the availability of studies emphasizing the importance of training in risk assessment (e.g., Allen & Tynan, 2000; American Psychological Association, 2000; Baird, 1999), shortfalls in risk assessment continue to be attributed to inconsistencies in education and training (Dexter-Mazza & Freeman, 2003). Tyron's (2001) study showed
that psychology students continue to feel unprepared to deal with potentially violent clients. Only 23% of the respondents felt prepared to manage the risk of violence (Tyron). In fact, of those students who had been in a graduate program for 5 years or longer, still only 30% reported feeling equipped to manage violence (Tyron).

Available academic literature has widely acknowledged that mental health professionals are expected to be able to assess risk competently and research suggests that training is key (Bingley, 1997). Governing associations such as the American Psychological Association (1992) hold clinicians accountable in this endeavor, requiring that psychologists “recognize the boundaries of their particular competencies and the limitations of their expertise...and provide only those services and use only those techniques for which they are qualified by education, training, or experience” (p. 1599). The CPA specifies that professionals engage only in those activities in which they have sufficient training (Canadian Psychological Association, 2000). It follows then, that without proficiency in risk assessment, clinicians cannot ethically provide mental health services.

In a similar vein, ethical standard II.39 (Canadian Psychological Association, 2000) stipulates that clinicians “do everything reasonably possible to stop or offset the consequences of actions by others when these actions are likely to cause serious physical harm or death” (p.19). The evolving body of knowledge regarding risk assessment has advanced sufficiently to allow professional consensus on some core issues and there exists clearly articulated, evidence-based guidelines for assessing and managing people at risk for violence. The conclusion can be drawn then, that mental health professionals are
expected to be proficient in applying what is currently known about risk assessment and, a step further, that they are obligated to seek out the training required to do so.

In the CCE, the principal *Respect and Dignity for All Persons* stipulates that a psychologist's greatest responsibility is to protect the welfare of those most vulnerable (Canadian Psychological Association, 2000). Individuals directly involved in psychological activities such as research participants, clients, and students are often in this position. Protecting people by reducing risk of harm requires considering the potential of others to act violently using the best methods available. Being that specific variables have been empirically demonstrated to correlate with violence, the argument is made that such variables must be considered in order to protect the welfare of people as stipulated above.

One final note is regarding accountability. Clinicians are not necessarily held accountable for the accuracy (or inaccuracy) of their decisions per se; rather, they are judged by whether the decision was *reasonably* made (Canadian Psychological Association, 2000). Realizing that there is room for margin of error in risk assessment, clinicians need not fear consequences stemming from an inaccurate determination of risk. The pivotal question is whether clinicians gathered the information typical of most clinicians, and upon consideration of that information, did they respond in a manor similar to most clinicians (Canadian Psychological Association, 2000)? As long as the process undergone in reaching the determination is in accordance with the principles described above, one need not excessively worry about the outcomes. It must be noted though, that the reciprocal also holds true; namely that the failure to obtain relevant
training and apply it consistently during service-provision will likely result in sanctions such as licensure revocation.

**Summary**

Mental health service-provision carries with it inherent risks to clients, members of society, and clinicians. It is the legal and ethical obligation of mental health clinicians to protect service users and the public by protecting against foreseen risk of harm. Ineffective or inconsistent risk assessment can have life-altering consequences including emotional and physical harm or death.

Risk of violence is inherent in the mental health field yet the majority of clinicians do not have training in risk assessment. *Respect and Dignity for All Persons* requires protecting service users (and others) by assessing and managing their risk to harm others. *Responsible Caring* demands competence in the areas in which clinicians practice. With best practice research available, a consensus regarding risk assessment is being formed and expectations are becoming increasingly clear. It has become apparent that neglecting to consider client risk warrants sanctioning by governing bodies in the clinician’s jurisdiction.

**Conclusions**

Mental health professionals are unlikely to incur sanctions for errors in judgment as long as they consider client risk in accordance with evidence-based practices in a manner not unlike their colleagues. It would seem that clinicians have nothing to lose and everything to gain by familiarizing themselves with current risk assessment and management practices.
Decisions regarding risk are required at all stages of mental health service-provision. Prioritizing treatment needs, selecting interventions, and the anticipated outcomes will partially depend upon the client’s level of risk. It is imperative that all mental health professionals have a clear understanding of risk assessment and be familiar with valid predictors of violence. In light of this, it seems sensible to provide a starting point from which the reader may advance to a basic level of competence. As such, a review of the risk assessment literature is presented including central concepts, noteworthy progressions, and current strategies in risk assessment.
Chapter 4: Literature Review of Risk Assessment

Introduction

Through the 1970s, 80s and into the 90s, clinicians have traditionally relied on clinical judgment to assess the risk of violence. That is, they considered the information available, and made a determination about risk based on their education and experience. Research on the ability of clinicians to accurately assess client risk has produced less than encouraging results. Leading clinical research indicated that mental health professionals were accurate “no more than one out of three times in predicting violent behavior” (Monahan, 1981, p. 49).

This subpar performance spurred researchers to focus on statistically derived variables to calculate a risk rating. The combining of static variables according to an explicit algorithm is known as the actuarial approach (Borum, 1996). This resulted in a polarized debate between the accuracy of clinical and actuarial approaches in predicting risk of violence. Structured professional judgment bridged the 20th and 21st centuries, amalgamating both clinical judgment and empirically derived variables to assess risk. Later still, another generation of instruments was proposed, characterized by a having a distinct focus of risk management as opposed to risk prediction.

These advances in risk assessment are characterized by first, second, third, and most recently, fourth generation categories (Ferguson, 2002). This section presents these approaches to risk assessment including what each approach entails, the associated benefits and limitations, and a sample standardized tool representative of each approach. All summed, this information is intended to provide the groundwork, including theory and practical strategies, necessary for clinicians to manage the risk of violence. With this
foundation in place, a sample risk-screening tool is proposed to facilitate the ongoing consideration of risk without delay. That is, the literature review below is hoped to both, explain the design and the inclusions of the T-BAR, and provide sufficient information to allow the reader to critically examine this sample tool.

**The Evolution of Risk assessment**

**The First Generation: Unstructured Clinical Judgment**

First generation (1G) risk assessments relied solely on unstructured clinical judgment. Clinicians made judgments about client risk based on their training, experience, and clinical impressions (Mills, 2005). One of the strengths of clinical risk appraisal lies in its flexibility and potential for violence prevention (Snowden, 1997). A clinician may interview an individual, assess for underlying factors contributing to the offending behavior, and work to facilitate change with relatively little investment of time and resources.

Sole reliance on unstructured clinical judgment to assess risk, however, is widely criticized. The reliance on a person to incorporate multiple pieces of information while overcoming human judgment errors has proven insurmountable and several weaknesses of using clinical judgment to assess risk have been identified. The first of two main problems is that the sole use of clinical judgment has been demonstrated to be inaccurate in predicting violence (Otto, 1992). Studies evaluating clinical judgment vary in their findings, however there is consensus that clinical judgment is only slightly above chance, and accuracy largely varies between clinicians (Lidtz, Mulvey & Gardener, 1993). Monahan (1981) published an influential review of 1G assessments in which he
concluded that the best rate of accuracy that could be achieved was in the order of (+.33) or being correct one out of three predictions. More recent findings have echoed these results (Grove & Meehl, 1996). Explanations for this low performance include risk formulations not always being based on accurate information, varying quality of data collection and interviewing methods, and the presence of clinician biases (Kemshall, 1996).

Second, clinical judgment lacks reliability and inter-rater agreement. Clinical judgment is inherently subjective with clinician beliefs and values creating a filter through which client risk is perceived. As these values and beliefs vary amongst clinicians so do their perceptions of client risk. The implicitness of the process used in developing risk formulations makes this shortfall of 1G assessments difficult to remedy. Said differently, the failure to make explicit the assessment process makes it difficult for others to question the decision (Monahan & Steadman, 1994). Implicit assessments prevent the evaluation of, and comparison between, methods used. This precludes research designed to identify best practices and dramatically slows advances in risk assessment. The inclusion of research findings characterizes the next generation of risk assessment.

The Second Generation: Actuarial Assessment

Making risk assessments explicit and incorporating research into the process was accomplished by the integration of variables statistically correlated with violence. Reliance on such variables to predict risk, termed the actuarial approach, characterizes the second generation (2G) of risk assessment. Actuarial or 2G methods are defined as the quantified, impartial, and systematic use of historical factors (Monahan, 1984). The
focus is on risk status, which refers to identifying individuals at higher risk of violence relative to the norm (Gardner, Lidz, Mulvey & Shaw, 1996b). As such, the focus is on variables that have been demonstrated to predict violence across different settings and individuals (Dolan & Doyle, 2000).

During this time instruments were created by combining risk variables empirically demonstrated to predict violence. To identify the most predictive variables, individuals were rated on each before release and then at follow-up to determine which combination best predicted violence later on (Monahan et al., 2001). Most instruments classify clients according to their likelihood of offending and often numerical scores are assigned based on the presence of risk factors correlated with violent behavior. Taking advantage of the empirically devised predictive validity (or weighting) of risk variables, a raw risk score can be calculated allowing for the classification of the individual (Fraser, Kirby & Smokowski, 2004). These algorithms, however, are imperfect and vary across standardized tools.

Since John Monahan's (1981) influential book on predicting violent behavior, there has been a great deal of research attempting to refine these rating schemes resulting in moderate improvement in the ability of clinicians to make these predictions (Webster, Harris, Rice, Cormier & Quinsey, 1994). However, the prediction of future violence is a difficult and complex task surrounded by controversy and even with the incorporation of refined 2G instruments, clinicians’ performance continued to receive criticism.

One fundamental problem stemmed from violent behavior within the general population being a low frequency event (Norko & Baranoski, 2008). In other words, the
base rate of offending is low. If the base rate for violence in a given population is very low, then the most accurate prediction is always that an individual will not be violent. Attempts to predict events in populations with low base rates often lead to an unacceptable level of false positives (Norko & Baranoski, 2008).

Another problem is that 2G assessments are limited to prediction and classification. Although actuarial decisions are considered to have greater predictive validity relative to clinical judgment alone (Mossman, 1994), the focus on unchangeable risk factors precludes the consideration of the client’s potential to change. That is, 2G approaches focus on static, historical variables and leave dynamic, contextual variables that lend themselves to clinical intervention largely untapped.

Despite this drawback, 2G assessment has dramatically improved upon the consistency of 1G risk assessment. The explicitness of listing criterion variables has allowed for the empirical comparison amongst the variables and between instruments, which has expedited the evolution of risk assessment practices (Borum, Otto & Golding, 1993). A number of improvements in predictive validity have stemmed from these empirical investigations.

Researchers have discovered that variables correlated with violence overlap with one another indicating that simply counting positive risk factors may result in overinterpretation. For example, a diagnosis of antisocial personality disorder technicallyjustifies endorsements of both “personality disorder” and “antisocial orientation”. This artificially inflates the number of positive ratings. Rice, Harris, and Quinsey (2002) argue that while actuarial instruments are useful to quantify risk, clinical judgment remains necessary in using this information to predict when a client is likely to offend.
Sample second generation tool: VRAG. One widely used actuarial violence prediction tool developed by Harris, Rice, and Quinsey (1993) is the Violent Risk Appraisal Guide (VRAG). This instrument contains a 12-item actuarial scale, which has been widely used to predict risk of violence within a specific period following the release of violent, mentally disordered offenders (Quinsey, Harris, Rice & Cormier, 1998). Developed at Penetanguishene Mental Health Centre, the tool uses the clinical record, particularly the psychosocial history component, as a basis for scoring as opposed to interview or questionnaires. The client’s score on the Psychopathy Checklist–Revised (Hare, 1991a), measuring the presence of psychopathic traits, is incorporated into the VRAG’s calculations of risk.

The VRAG was developed using a sample of people with an extensive prior history of violence, including at least one documented serious offense. Harris, Rice, and Quinsey (1993) anticipated that their results would “generalize both to mentally disordered offenders from other jurisdictions and to serious offenders in prison populations” (p. 331), but historically, any generalization of their findings to other populations were to be approached with caution. At the time of writing this review, the VRAG has been established as an effectual actuarial predictor of violence as well as of general recidivism (Andrews, Bonta & Wormith, 2006; Grann & Langstrom, 2007; Kroner & Mills, 2001; Mills, Kroner & Hemmati, 2007; Rice & Harris, 1995).

The Third Generation: Structured Professional Judgment

Integrating dynamic, malleable risk factors with clinical judgment (1G) and actuarial measures (2G) resulted in structured clinical judgment (Doyle & Dolan, 2002).
This approach utilizes actuarial factors to create a foundation upon which dynamic risk factors are incorporated by clinicians using their judgment. Third generation (3G) risk assessments then, include both normative data and individual risk factors. In other words, clinicians “go beyond evaluating baseline risk status, which focuses on inter-individual variability in risk, to assessing risk state, which focuses on intra-individual variability in violence potential” (Skeem & Mulvey, 2002, p. 118). Decisions regarding level of patient risk and the ensuring actions taken are ultimately based on clinical judgment (Doyle & Dolan 2002).

Webster, Douglas, Eaves, and Hart (1997a), the leading proponents of structured clinical judgment, advocate this approach as an effective blend of empirical knowledge and clinical expertise. Hart (1998) contends that, unlike strict actuarial measures, 3G tools allow for flexibility and professional discretion, while considering dynamic variables in the assessment of risk.

Tools based upon this model are used in multiple risk assessment domains including: violence (HCR-20; Webster, Douglas, Eaves & Hart, 1997b); domestic abuse (Spousal Assault Risk assessment Guide; SARA; Kropp, Hart, Webster & Eaves, 1999); and sexual offending (Sexual Violence Risk Scale; SVR-20; Boer, Hart, Kropp & Webster, 1997).

Sample third generation tool: HCR-20. Randy Borum (1996) has written that “the promise of this instrument lies in its foundation on a conceptual model or scheme for assessing dangerousness and risk; its basis in the empirical literature; its operationally defined coding system...[and] its practical use” (p. 950). The HCR-20 (Webster, Eaves, Douglas, & Wintrop, 1995) has 20 items scored on a 3-point scale (0 = contraindicates, 1
suggests, and 2 = clearly indicates), and the total score is the sum of all 20 items. In this model, the historical variables are accorded the greatest weight because they are actuarial factors that have empirically demonstrated importance in assessments of dangerousness and violence risk (Webster et al., 1997b).

The historical variables include previous violence, age at first violent offense, relationship stability, employment stability, alcohol or drug abuse, mental disorder, psychopathy (as measured by the Psychopathy Checklist-Revised), early maladjustment (at home and school), personality disorder, and prior release or detention failure. The variables are clearly defined so that data can easily be collected and compiled by a trained assistant and would not necessarily require clinician time for the comprehensive record review (Webster, Douglas, Eaves, & Hart, 1997a). It is expected that these historical variables would be retrospectively coded primarily from medical, psychological, and legal files and records.

The next category consists of data collection of five clinical variables: insight, attitude, symptomatology, stability, and treatability (Webster et al., 1997b). In a clinical evaluation, data on current mental status would be evaluated and rated by a qualified mental health clinician, using interviews, progress notes, psychological assessments, and other similar sources. The final grouping of factors in the HCR-20 includes five risk variables: plan feasibility, access, support and supervision, compliance, and stress (Webster et al., 1997b). Each of these "pertain to existing circumstances in the community or to future situations that the individual may encounter upon release” (Webster et al., 1995, p. 60). Like the historical variables, these data can be coded
primarily from other assessments, such as social work, presentencing, or prerelease parole reports.

Webster's team has investigated the psychometric properties of the HCR-20. In a retrospective study of 72 incarcerated individuals, significant correlations were found among the HCR-20 and scores on the VRAG (Harris et al., 1993), the Psychopathy Checklist-Revised (Hare, 1991a), and the number of previous charges for violent offenses (Douglas, Webster, Eaves, Wintrup & Hart as cited in Borum, 1996). It also appears likely that the items can be reliably coded (Douglas et al., 1996) with an interrater reliability of .82 (Douglas & Webster, 1999), which is among the highest in that category.

Other strengths of this 3G instrument are its foundation in a conceptual model for assessing risk and its being rooted in the empirical literature. The HCR-20's operationally defined coding system allows for increased reliability and it is practical to use, as evidenced in its brevity and allowance for time-consuming data collection to be done by relatively less credentialed people. The field continues to await new data on this instrument as well as other newly emergent instruments that it may inspire.

While structured professional judgment remains widely used in correctional, psychiatric, and community settings, at the time of writing additional empirically derived considerations are available for consideration. These considerations are rooted in risk management and involve frequently measuring the state of risk factors identified as being both, causal (directly linked to increasing the risk of violence) and changeable (transient variables potentially amenable to intervention). These two characteristics, described below, constitute the heart of fourth generation approaches and provide the foundation for the screening approach advocated for in Chapter 5 and illustrated in Appendix B.
Additional to assessing for the presence of risk factors, one key task in contemporary risk assessment is to determine their propensity for change. Fourth generation (4G) risk assessment tools are designed to inform treatment planning, in addition to their role in classifying risk (Andrews et al., 2006). In doing so they combine static and dynamic risk factors with clinical judgment to inform action plans for risk management (Groth-Marnat, 2003). This strategy is preserved within the T-BAR, which includes a risk management scheme that isolates the risk factors most appropriate for intervention.

In their review, Dutton and Kropp (2000) made a critical point when they emphasized that the true goal of the assessor has become to “prevent violence, not predict it” (p. 179). With the goal of reducing harm, clinicians are especially interested in identifying dynamic variables that provide suitable targets for intervention (Heilbrun, Nezu, Keeney, Chung & Wasserman, 1998). Similarly, Andrews and Bonta (2003) encourage clinicians to identify dynamic risk factors that “when changed, are directly associated with changes in the probability of recidivism” (p. 261). Such causal dynamic variables might include pro-criminal attitudes, anger and hostility, and poor family supervision.

Causal dynamic variables are more effective in reducing recidivism than treatment targets associated with client well being such as anxiety, depression, and low self-esteem (Andrews & Bonta, 2003). The identification of causal variables is characterized by the second step of the flowchart in the T-BAR, which requires the user
to isolate the dynamic variables that most directly relate to the control behavior (i.e.,
violece). This process is explained further in Chapter 5.

The relationship between risk factors and offending can be obscure, making it
difficult to discern causality. Risk variables may be directly related to violence, mediated
by a third variable, or altogether caused by another variable (Hanson & Harris, 2000). For
example, if disinhibition resulting from alcohol use were causally related to violence
potential, monitoring and reducing a patient's drinking would reduce the likelihood of
violence. However, drinking may be only a proxy variable or risk marker (Kraemer et al.,
1997) for involvement with a peer group that repeatedly engages in antisocial and violent
behavior (Skeem & Mulvey, 2002). In this case, potential for violence would remain
unchanged, even if drinking was reduced, and changing the peer group association would
be the appropriate target for monitoring and intervention.

Investigating the temporal proximity of the risk factor to the offending behavior
may be a “rule of thumb” helpful to narrow the list of potential target risk factors
(Dvoskin & Heilbrun, 2001). The factors that emerge or intensify immediately prior to
offending are likely to be sensible initial targets. One of the field's next challenges is to
examine dynamic risk factors through empirical investigation and determine the
propensity for change of each. The creation of a short list of variables most susceptible to
intervention will ensure the efficient and effective investment of time and resources. In
turn, this will provide a venue for empirical research evaluating methods (e.g., behavioral
versus cognitive) used during interventions (Dvoskin & Heilbrun, 2001).

Hanson and Harris (2000) analyze causal dynamic risk factors further to
distinguish stable from acute ones. Stable dynamic factors such as traits of impulsivity or
hostility are malleable in time, but may be less likely to change in a short period. In contrast, acute dynamic factors like substance abuse or employment are more transient and, in theory, are more conducive to change (Hanson & Harris, 2000). The identification of acute causal variables is a pivotal step in the T-BAR (Appendix B) allowing the user to identify targets for initial risk management strategies. While acute causal factors hold much promise for violence reduction, they also by nature, are constantly changing and require frequent snap-shots to be assessed most accurately.

To set a valid schedule for assessing and monitoring a client’s risk state, a clinician must gain a sense for the speed at which causal dynamic risk factors change. A schedule of monitoring that does not consider rate of change may overlook rapid fluxes in risk state, and result in inappropriate or poorly timed interventions (Hanson & Harris, 2000). Unfortunately, to date, there is limited systematic data on the speed at which risk factors change over time in specific samples. As a result, this distinction between acute and stable dynamic risk factors, while making intuitive sense, remains somewhat hypothetical.

Contemporary approaches to risk assessment continue to build in their potential to inform best-practice service delivery. At least modest gains can be expected to continue in predictive validity as research clarifies the weighting deserved of specific variables and clarifies the effect of each on violent behaviour. By conducting follow-up after treatment termination, outcomes can be linked to intake assessments of risk, need, strengths, service delivery, and intermediate outcomes and studies of acute causal risk factors may soon establish on a normative basis, the degree of change or improvement that can be
expected. As such, approaches to client violence that integrate assessment, treatment planning, and service-delivery while allowing for measuring intermediate outcomes, from intake through to case closure and follow-up, are most desirable. Instruments that embody these principles will have both clinical utility and be conducive to research, advancing our understanding of violent behavior. An example of a currently used standardized 4G instrument is described below.

Sample fourth generation tool: LS/CMI. The Level of Service/Case Management Inventory (Andrews, Bonta, & Wormith, 2004) was designed to be a “comprehensive measure of risk and need factors, as well as a fully functional case management tool” (Andrews et al., 2004, p. 1) with the overall goal of minimizing risk. This is achieved through a process that aggregates actuarial indicators, criminogenic need measures, and a range of clinical-based assessments (Maurutto & Hannah-Moffat, 2006). Combining risk assessment with risk management in a single system, the LS/CMI gives clinicians encountering risk the necessary tools to work with clients in a single application.

The LS/CMI is somewhat based upon its predecessor the LSI-R (Andrews & Bonta, 1995), though the original 54 LSI-R items have been refined into 43 items. The LS/CMI has been enhanced however, to include client strengths that the assessor may indicate as protective factors and 10 additional sections focused on areas such as mitigating and aggravating factors, assessing responsivity, and one section to document administrative override (allowing for valuable clinical judgments to be incorporated) (Andrews et al., 2004).

Extensive normative data is supplied in the manual, particularly for Section 1 (General Risk/Need Factors). The normative sample is based on data from both men and
women in community (n=135) and institution-based (n=791) settings across North America (Andrews et al., 2004). Young offender data is also available in the user manual. Another unique and beneficial quality is the inclusion of qualitative data for use in override decisions (when the clinician asserts a conclusion that contradicts that offered by the tool’s algorithm) and case management planning.

The overall mean and predictive validity of the LS/CMI equals or exceeds all other overall mean validity estimates for general recidivism (Andrews et al., 2006). In the first prospective validation study of the LS/CMI, the correlation with violent recidivism of the enhanced assessment of personality pattern and history of aggression was +.42 (Girard & Wormith, 2004). Subsequent studies have rated the LS/CMI predictive validity at +.41 for general recidivism and +.29 for violence (Andrews et al., 2004). As such, this 4G tool has validity in predicting violence as well as informing management and deterring future offending. Please refer to the LS/CMI brochure available at https://ecom.mhs.com/(21e30x55okgafo55n5xm0iae)/TechBrochures/LSCMI_Tech_Brochure.pdf for additional statistics of the LS/CMI with diverse samples such as male sex offenders and batterers including both psychiatrically involved and unexceptional cases.

Further setting this instrument apart, is the expectation that regardless of race or sex, the predictive validity will remain intact in a variety of contexts. In fact, Rettinger’s study demonstrated substantial correlations between the LS/CMI’s General Risk/Need subscale and reoffending in a large sample of female offenders of varying race and ethnicities in Ontario (Verbrugge, Nunes, Johnson, & Taylor, 2002). Promising, but such few studies is less than confirmatory. Additional primary studies will support or refute
the efficacy of the LS/CMI in risk assessment and management and allow for informative meta-analyses.

**Summary**

The assessment and management of risk is a critical issue, not just for psychologists in forensic settings, but also for all practicing clinicians. The accuracy of predictions of violent behavior has long been subject to scrutiny. Risk management that means more than detaining people requires the ability to anticipate dangerous situations and prevent the circumstances from reoccurring. Actuarial schemes fail to detect most cases in which someone acts violently for the first time because the most powerful predictor in actuarial schemes is past behavior.

The variables included in currently used tools often cover multiple domains including historical, contextual, clinical, and individual variables and are empirically evidenced to correlate with violence. These instruments have considerable overlap in their inclusions. This content overlap is one contributing factor to the lack of statistical differences amongst the instruments. Current research supports actuarial instrument-generated scores being of great value when supplemented by the judgments and case planning efforts of a clinician.

Fourth generation assessments that link preliminary assessments with risk management and subsequent treatment initiatives hold great promise. Acute (transient), dynamic (changeable), and causal (directly relating to the index behavior) variables form a sensible starting point for intervention. Isolating these factors is the primary goal of the risk management scheme incorporated into the sample screening device attached as Appendix B.
This inability of specific standardized instruments consistently to outperform others does not make for strong support in any particular direction. The lack of significant differences amongst the tools reviewed in this study is echoed by meta-analyses, which compare the properties of assessment instruments (Gendreau, Little, & Goggin, 1996). Although there are not large differences between instruments in the prediction of violence, this does not imply that there are no differences between them. As described above, there are differences in the theoretical underpinnings of risk formulation schemes that can differentially shed additional light on the sources of risk, treatment needs, and outcome measurement. As we continue to improve 4G risk assessment it is these qualitative differences that may identify those most appropriate for best-practice service delivery.

Conclusions

Preventing harm is a fundamental ethical responsibility of mental health clinicians. At minimum, this implicates identifying indicators of risk, creating a risk formulation, and initiating the risk management process. It is important to acknowledge that risk is dynamic. Levels of risk change and responsible risk assessment must integrate the use of empirically evidenced assessment tools with clinical judgment to create an evolving conceptualization of risk state. Limiting the period of time in which the assessment remains valid will also increase the specificity and accuracy of the risk formulation.

Developments in risk assessment partially hinge on mainstreaming research and clinical practices. Optimally, the effective practical application of advances in research
will continue to increase alongside active information sharing and effective communication amongst researchers and service-providers. In a common vein, streamlining services may allow all service-providers including psychologists, counselors, correctional workers, law enforcement officers, medical professionals, and the like, to have a common language, a shared knowledge base, and, most importantly, a unified front in service-delivery. The use of a common screening device such as the T-BAR, with its broad utility, is one small step toward this goal by creating a common language and visual conceptualization to talk about risk.

Despite a long-standing controversy about the ability of mental health professionals to predict offending behavior, the courts continue to rely on them for advice on these issues. In many cases, the courts have imposed on them a legal duty to take action when they know, or should know, that a patient poses a risk of serious danger to others. Unless the risk of harm to self and others ceases to exist, clinicians will continue to be requested to make formulations of risk using the best methods available.

Among other areas, practice-based research will investigate how actuarial and clinical approaches can best be combined. Practice-based research concentrating on behavioral variables may be able to offer greater predictive accuracy to clinicians. Although it is likely that risk will vary according to the circumstances in which a prediction is required, by describing risk factors and the associated causality, epidemiological methods have the potential to clarify the causal nexus behind offending behavior.

While these endeavors hold great promise for violence reduction, when they will crystallize and take the form of concrete, useable strategies is unknown. In the mean time
the same undergirding philosophies and established tactics may still be harnessed in order to protect society from violent behavior. The literature reviewed above funnels to reveal one line of attack with great face validity. This screening approach is now described in greater detail below, together with the hypothetical means (i.e., the T-BAR) to accomplish the goal of identifying elevated risk of violence and responding accordingly.
Chapter 5: The T-BAR (Towards the Ongoing Consideration of Risk)

Introduction

In chapter 3 it was argued that mental health clinicians are increasingly working with potentially violent clients and that they are ethically obligated to be aware of indications that clients may be at risk of acting violently. Chapter 4 detailed considerable progress in risk assessment techniques and strategies over the past two decades. It seems as though valid and reliable assessment tools, such as the LS/CMI (Andrews et al., 2004) described above, are currently available. All summed, this may erroneously lead the reader to believe that every client contact must begin with a thorough 4G assessment.

In this section the impracticality of doing so is highlighted. A screening approach is introduced as an alternative, followed by some of its potential benefits. A preliminary draft of a resource to facilitate screening for violence risk is described in order to more clearly illustrate the approach. This sample, titled the T-BAR, is included to maximize the chances that readers seriously consider regular risk screenings as part of service delivery. Please note that the T-BAR has not yet been piloted or subjected to empirical review.

Clarifying the Problem

Depending on the client and the context of the meeting, the depth of risk assessment and the tools selected will vary. Interviews with some clients may last 3 or 4 hours whereas others need only last 30 or 40 minutes. It is ethical practice to undergo assessment activities only to the extent that the benefits are likely to outweigh the potential costs (Canadian Psychological Association, 2000, p. 17). It would not be necessary or appropriate to administer every client the LS/CMI (Andrews et al., 2004).
Risk assessment protocols may vary among agencies with some requiring risk assessments at regular intervals while others assessing risk based on the individual circumstances of each client. Examples of such situations include: intake/discharge; significant life changes such as job loss, the death of a loved one, or relationship status; changes in medication; or changes in the client’s personal mood, affect, or behavioral patterns (Vergez, 2006).

The various contexts that require some degree of risk assessment are great in number. Some situations are clear-cut such as during acute symptoms of psychosis or after recent acts of violence while others may be less obvious such as alongside a medication review. Client-specific schedules add further complexity. Clients presenting with suicidal ideation will often be checked at specific time intervals. Tracking the schedules of multiple clients can be a daunting task and confused when intervals themselves are regularly reviewed and subjected to change. The multitude of scenarios potentially requiring a risk assessment leaves considerable room for human error.

The availability of standardized tools to structure the assessments may also be a problem. In a 2005 study, clinicians perceived formal, standardized tools to be inaccessible and considered formal testing least often (Elbogen, Huss, Tomkins & Scalora, 2005). In fact, the mental health clinicians (N = 135) from four different facilities reported that, despite widely published limitations, they relied upon clinical judgment most often when assessing risk. The participants indicated that data such as current symptoms and mental health diagnoses were most readily available and hence most frequently considered (Elbogen et al.).
Inferred from the barriers and limitations above, a need emerges to conduct semi-structured, brief risk assessments that combine enough sensitivity to detect individual variations with the specificity to represent the multitude of risk indicators present in the population. This would require an accessible tool that does not require impractical time and resources to use. A foundation of empirically supported variables with room for clinical judgment would be an asset. A closer look at a risk screening mentality is justified.

**A Screening Mentality**

Arguably, all persons in contact with service users have a responsibility to protect their clients and members of society by being aware of indicators of risk and ensuring that high-risk individuals get subsequent attention. Fear of being criticized for risk-related decisions can be reduced and an unreasonable investment of time and resources toward this end is not necessary. The issue may benefit from being normalized and it made known that risk exists and occasional negative outcomes are unavoidable. The focus needs to be on a transparent process of active decision-making, flaunted and concrete. This would ensure that clinicians have met their ethical obligation, having not performed unlike others in the profession, while catalyzing risk assessment and management practices.

In light of the research emphasizing dynamic risk factors and continual fluctuations in risk, increasingly frequent snapshots of client risk may be beneficial. At first glance, considering risk on an ongoing basis may appear daunting. However, varying the scope and depth of such investigations according to individual and contextual factors, may in the end make for a more efficient process. The mentality of risk screening might
ensure that undetected risk elevations are an anomaly, while lengthy assessments are kept at a minimum.

In addition to accurate and relevant risk assessments, risk screening lends itself to effective and efficient treatment planning. Considering risk on an ongoing basis will provide frequent snapshot evaluations of dynamic risk factors. Changes in risk factors can be discerned and appropriate interventions adopted or altered accordingly. Screening also lends itself to other ethical practices such as specifying finite time periods and conditions covered by the assessment and providing accountability.

The writer advocates that the ongoing consideration of risk be introduced as a mentality, rather than an activity, introduced to employees in mental health and related settings. This mentality acknowledges that risk is inherent to mental health service-provision. Defining best practice screening practices delineates clinicians’ actions and decision-making processes to be sound. The strengths of this approach, while perceived to be great in number, are only likely to be realized to the extent that it is adhered to. With this in mind a starting point is proposed.

*Time for a Brief Assessment of Risk (T-BAR)*

*Introduction*

There is great variation in the circumstances that require determinations about risk and a consensus regarding best practices continues to evade us. The occasional necessity to make critical decisions with urgency, may limit the practicality of the some strategies. A dichotomy emerges balancing accurate, evidence-based procedures with efficiency, usability, and availability. A succinct, empirically supported screening tool that is useful
across multiple settings and client types may be helpful in bridging this gap. To be widely adopted, the use of this resource would have to overcome the actual and perceived barriers (such as the finite resources of service providers and the fear associated with risk) of clinicians.

The T-BAR was developed by the writer to provide a rudimentary tool that may accomplish these goals. The approach is evidence-based in development and relatively parsimonious, minimizing the potential for human error. While being time and resource sensitive, this approach lends itself to the ongoing consideration of client risk, the ethical and professional responsibility of all mental health service providers. Simply put, because it is established that clinicians need to assess client risk of violence and many do so using merely judgment, the T-BAR was developed to smoothly integrate empirically based variables into practice. Again, it is a preliminary draft of a sample tool. The writer recognizes that the T-BAR would require piloting and stringent evaluation of its reliability, validity, and other constructs to ensure its utility as a risk screening tool prior to considering it for application in a professional setting.

**Description**

The T-BAR is a single-page reference sheet, which presents indicators of risk supported in the literature and common to some of the most valid and reliable risk assessment instruments currently used in the field of counselling psychology. The risk factors are presented in accordance with the level of empirical and professional support they receive. These factors are presented in a clear, user-friendly format, allowing for quick reference before, during, and/or after client contact. More specifically, the variables are represented in a format, which allows for ratings of “present & maladaptive” or
“present & protective”, which is presumably familiar to many potential users. Of course, when the variable is irrelevant to the subject it may be left blank or, as recommended by the writer a line be put through to make explicit this impertinence.

The risk variables have been classified into three categories: static/historical, individual/clinical, and contextual. While all three sections are used in the screening, there are advantages in having the variables separated. It is a more user-friendly representation conducive to memorization. This scheme also allows for the consideration of each domain of variables in isolation to help with conceptualizing the causes of behavior. It is recommended that the user maximize objectivity by considering the actuarial-based factors (labeled “static”) separate from those necessitating a determination (labeled “dynamic”). Please note that the static/historical variables refer to the past and should be classified as risk factors or having a protective influence based on the client’s history. For example, “family problems” must be considered separately from “family/significant other” as the former refers to the client’s past whereas the latter refers to the client’s current life circumstances.

This screening tool is not intended to quantify risk per se, but rather to alert the clinician to red flags potentially indicative of a propensity for violence. It is intended that the “user” consider the list of variables and indicate whether the factors have a risk-elevating effect or a risk-mitigating effect. Note that the sheer number of endorsed risk-increasing items does not necessarily correspond with an elevated risk potential. Any single factor may conceivably be a “critical” risk or protective factor depending on the
subject and consideration of all factors collectively is advised. More specific guidelines on using the T-BAR will be provided next.

**Procedural Guidelines**

First the user reviews the variables listed on the T-BAR. Based on available information, the user indicates the influence of each variable on the client by circling the appropriate symbol; “-“ for increasing the client’s risk and “+” if the variable is protective and decreases the client’s risk. The user will note that the criterion variables are represented in either black or grey lettering. This was done to differentiate the variables with less than conclusive support as influencing violence (grey), while including these variables, which are likely applicable to some clients. No marking indicates no effect or not applicable. Most accurate ratings will stem from multiple data points including file information, interview data, collateral contacts and other available information.

Having completed rating all variables, the user will be left with an impression regarding the subject's propensity for violence, as well as initial hypotheses regarding the underlying causal nexus of the client’s behavior. Again, it is encouraged that the user compartmentalizes impressions of static variables separate from those resultant from individual and contextual variables. In doing an impression of risk based solely on objective, static variables emerges, separate from the influence of more subjective dynamic variables.

Part two of the T-BAR (represented on the backside of the sheet) requires the user to follow a flowchart, completing a series of five steps. Step 1 has the user transfer the *dynamic* variables marked “-“ as increasing risk to the reverse side of the sheet.
Congruent with Chapter 4, step 2 is to transfer those dynamic risk factors deemed to be most causal of the control event into the allotted spaces. In doing so, variables directly impacting violent behavior are isolated.

With the intention of identifying which of the causal, dynamic variables are most appropriate for intervention, those that appear most acute, transient, and malleable are carried forward in step 3. By doing so, the user is left with up to three risk factors that both, directly motivate violent behavior, and are appropriate targets for risk management.

Step 4 requires the user to list suitable strategies to minimize risk. Wherever possible, evidence-based interventions should be included. Step 5 asks that the perceived level of risk, client variables chosen for preliminary intervention, and the intended strategies to minimize risk of violence be consulted about with the user’s supervisor or knowledgeable colleague(s). As with any screening tool, alongside consultation, elevations in risk should be met with the application of a relevant risk assessment tool with sound psychometric properties, such as those described in Chapter 4.

*Words of Caution*

The T-BAR was developed in order to illustrate how the concepts in this paper may be applied to risk assessment and encourage the ongoing consideration of risk. It has not been subjected to peer evaluation examining its’ utility as a screening instrument and should not be used in a professional setting until its properties have been established. That said, the project is anticipated to stimulate critical thinking and facilitate awareness about risk for individuals working in relevant human service disciplines. More ideally, it will prompt constructive changes in clinicians’ risk assessment and management
practices. Alongside these sought after positive outcomes, some cautions must be considered.

First, the T-BAR has not been normed on any research samples. Nor has it been subject to peer evaluation or piloting. As a result, its utility and validity in managing risk is completely unknown. Second, while the T-BAR is intended to facilitate critical discussion, support the consideration of empirically valid risk factors, and encourage risk management, it is not designed to quantify risk or generate a specific risk formulation. Users that desire a numerical score or cut off may be dissatisfied.

Finally, please note that the T-BAR is a preliminary idea largely designed to spark curiosity and awareness. Other limitations are expected resultant from piloting and peer evaluation. Should any questions or indications of elevated risk emerge, it is recommended that the T-BAR user consult with others and use appropriate standardized instruments such as those reviewed in this project. In the event that colleagues are unavailable, another valuable problem-solving tool, the Canadian Code of Ethics (Canadian Psychological Association, 2000), attached as Appendix C, is recommended to resolve dilemmas.

Summary

After information was presented regarding the ethical obligation of clinicians to be active in identifying risk and current practices in risk assessment, this section introduced a screening approach as an alternative. The T-BAR was introduced alongside some anticipated benefits and cautions. It was argued that the ongoing consideration of risk, with the use of a screening tool such as the T-BAR, would be superior over judgment alone to detect risk of violence.
By relying exclusively on clinical judgment, clinicians ignore the abundance of available research and are acting irresponsibly. Once more, risk is dynamic and clinicians can learn from this when assessments are recurring. Risk predictions are of diminishing quality over time, necessitating finite time-periods and conditions over which they remain valid. Acute causal variables are the most suitable primary intervention targets for reducing violence. These variables, and their malleability, are subject to change. Without accurately tracking the ebb and flow of these critical factors, risk-management activities may be inefficiently focused. Finally, quality control measures are inherent in an explicit, collective screening mentality. This, as an example, can provide a safety net in the event that risk related decisions are questioned.

**Conclusions**

The T-BAR provides a starting point upon which to consider screening for violence. Principles contained in current risk assessment literature, such as considering both static and dynamic variables, have been preserved in the T-BAR. Although representative of a philosophy undergirded by research and clinical literature, it is merely a draft representation of a conceptualization of risk assessment. It is primarily included to illustrate concepts and provoke discussion. It is expected that this screening resource will be revised over time based on newly acquired knowledge, peer evaluations, and critical thinking.
Chapter 6: Synopsis

Introduction

While it remains necessary to justify the inclusions, this chapter permits the writer to include comments of a more subjective nature. Strengths and limitations of the project and the T-BAR specifically are offered. These limitations have given rise to areas in need of improvement in the area of risk assessment. Following these ideas for future work, recommendations for future research are included. Final thoughts included a brief summary and some conclusions.

Strengths

Self-proclaimed strengths of the project stem from both the content and how it is presented. The paper offers a rather comprehensive review of risk assessment including who does it to whom, what it is, where it occurs, when it is needed, why it is necessary, and how it is done. Content areas showing strength will be mentioned followed by attention being brought to the project structure itself.

First, providing an ethical backdrop upon which to describe risk assessment is a perspective not often opted for. In Chapter 3, it becomes clear that ethical service-provision requires competent risk assessment. Making specific reference to the Canadian Code of Ethics both emphasized the importance of risk assessment, and demonstrated exactly how the code holds clinicians accountable. It is anticipated that this context be valuable to beginner clinicians as well as some of those more experienced.

A second strength of the project is the description of the evolution of risk assessment in Chapter 4. Familiarity with the foundational concepts and philosophies is necessary in order to fully appreciate the importance of the varying approaches to risk
assessment. For example, both actuarial tools and clinical judgment have their place; often best is when they are integrated.

In a similar vein, the empirical review of risk factors in Appendix D may be valuable to make clear the complexity of each variable and the, at times, intense interaction among them. This is of great importance when using clinical judgment to discern risk management strategies because some factors, when in the presence of certain others, has its symptoms magnified. For example, Psychotic symptoms are greatly exacerbated by both substance abuse and medication noncompliance.

It is acknowledged that indicators of risk vary across people and situations and as such, the inclusions needed to be extensive enough to account for this. Conversely, too refined of a list could have been restrictive. As a rule, only those free from substantial disagreement were included. The potentially limiting nature of the stringent criteria used to justify inclusion in the paper was balanced out with the T-BAR. To enhance the utility (and likely the overall validity) of the screening tool variables with slightly blemished support are included in the T-BAR under the proviso that they are only “moderately supported”. These differing conceptualizations of risk enhanced the overall project.

Finally, it is hoped that the project as a whole had appeal with readers of different persuasions. The project content was presented to accommodate varying levels of interest by including supplementary information as appendices. It was also intended that the word use incorporate terminology from the field without inundating the reader with unnecessary jargon. Again, it is hoped that a common ground is provided upon which discussion and collaboration between people at varying backgrounds can occur.
Limitations

It is noted that for the most part the research studies cited do not address variation between males and females. This example is illustrative. The literature shows that, on average, girls have higher levels of co-occurring problems and mental health disorders than boys have, and in particular are more likely to have suffered extensive trauma histories than have their male counterparts (Gavazzi, 2006; Gavazzi, Yarcheck, & Chesney-Lind, 2006). Statistically, the presence of multiple problems should not be problematic from a risk assessment predictive validity standpoint; indeed, statistical measures of predictive validity are maximized when variation in risk is high. However, predictive validity suffers if, in fact, female-dominant risk factors are excluded from the T-BAR. Research studies, articles, and projects that merely leave out gender differences do little to address potential disparities.

In a similar vein, little mention is made of culture and ethnicity in the discussions and research. Not enough is known about the differences that may exist in cross-cultural manifestations of risk or treatment responses. Might belonging to such a group influence your level of risk? In some cases, research has found that cultural variables such as race and ethnicity are protective in nature. For example, for both African Americans and Hispanics but not for Caucasians, living in an institution or with a foster family predicts later violence and chronic offending. Unfortunately, such affiliations are not given considerable thought in the literature nor does the writer investigate ethnicity, race, or other macro-level influences such as religion during the development of the T-BAR.

The literature review would look dramatically different if it addressed the risk of violence for children and adolescents, in addition to the adult population. Regrettably, a
comprehensive examination of risk for each of these age demographics is complex and avoided by most scholars. At present, completely separate bodies of literature address these groups. A replication done on children and/or adolescents would be informative.

The T-BAR contains no means to quantify the level of risk posed by the subject. While it was a conscious choice to leave this aspect of risk formulation aside, it potentially limits the applicability of the resource. While multiple algorithms inundated preliminary drafts of the T-BAR, in the end, the inclusion was found to be a detriment to its usability. Nonetheless, such an inclusion may be what is sought after by some readers and is a noted limitation.

Another limitation of the T-BAR is its inability to guide clinicians beyond the identification of acute, causal variables to intervene upon. That is, the T-BAR is not helpful in identifying or selecting best-practice interventions. Similarly, sample questions demonstrated to elicit the information required to complete the T-BAR may be helpful to some users. While the T-BAR may be efficacious as a screening device, it clearly falls short of being a comprehensive 4G guide to assessment and case planning.

Finally, while positive impact out of the strengths of the project is anticipated, it is clearly limited in scope. Intimate partner violence is a form of violent behavior, however there is not mention of this in the project. Further, other types of risk that clients pose to themselves and others are equally important to violent offending. Sexual offending or suicide, for example, warrants no less attention. Alongside other future work to be done, replications of the current project could be done for these other risk domains.
Future Work in Risk Assessment

The limitations above identify numerous areas for additional work. While some of these limitations rely upon advances in future research, others can be resolved with continued dedication to the project at hand. For example, broadening the scope of the current project to include risk in other domains such as sexual offending and intimate partner violence would seem beneficial. Expanding the project to include semi-structured interviews to facilitate the screening process may also be of value.

When the Canadian Psychological Association develops guidelines for treating mental health issues, panels of experts from diverse disciplines and experienced clinicians are invited to provide input. Drafts of the proposed guidelines are subjected to peer review and are circulated among practitioners to gauge their conceptual and operational utility. In contrast, this project was developed independently. A logical next step toward its improvement would be to subject the project, particularly the T-BAR, to the constructive criticism of a focus group. Its introduction to service providers for piloting also would seem beneficial. It is with this practical application that the aforementioned limitations as well as unforeseen shortfalls can be examined and overcome.

Future work in area of risk assessment may focus on supervision. Following through on the education attained in graduate school by way of practicing and applying newly learned concepts is of primary importance. The quality supervision of novice clinicians is imperative to ensure ethical, competent practice and catalyze enhanced confidence working with potentially poignant topics such as violence. Some experienced clinicians also stand to benefit from supervising others and discussing past, present, and
newly emerging practices. Risk assessment will undoubtedly be a common professional development topic well into the future.

The ethical responsibility of clinicians to be well versed in risk assessment and management, implicates parties at the agency level. Policy and procedure manuals should have inclusions addressing ethical and legal practices pertaining to risk. Specific procedures for maintaining a level of performance that exceeds that required by governing bodies such as the CPA should be explicitly documented in these manuals. More specifically, improvements might include: outlining expectations during orientation, continued focus on identifying operational shortfalls in addressing risk, and regular professional development opportunities. While these endeavors stand to improve the practice of risk assessment, additional advances rely on future research.

Recommendations for Future Research in Risk Assessment

Over the last few decades great empirical strides have been made in identifying risk factors for violence and developing structured risk assessment tools. The ability of clinicians to identify individuals at risk has never been better. Recognizing that clinicians typically assess risk in order to intervene, the field has made a dramatic conceptual shift from a purely predictive perspective on risk assessment to a violence management perspective. In light of these considerable changes, empirical support of risk assessment strategies may be lagging behind practice.

To move forward on this task, clinicians have a responsibility to work alongside researchers. Potentially profitable directions for risk research might include: treatment outcome studies, investigating the causal nexus underlying violent behavior, and
examining the diverse ways in which clients communicate risk. Each of these is given consideration below.

Researchers have yet to identify which risk factors for violence are most conducive to treatment and how to best monitor changes in risk level. Although the development of novel 4G tools that incorporate refined algorithms and sophisticated risk prevention schemes may reap benefits, without empirically evaluating their properties and impact on risk, we cannot be sure of the effects they are having. Multiple factors have contributed to a flood of tools such as the revenue potential and respective jurisdictions wanting their “own” unique tool. The reality that some major institutions are using invalidated tools must be remedied through quality research studies.

Explaining the interplay among risk factors and identifying the individual characteristics and social contexts that mitigate or exacerbate these interactions might substantially improve our ability to diminish risk. For example, empirical examination of the association between violence and substance use among persons with severe mental illness continues to fall short. It remains unclear whether violence stems from the effects of lowered inhibition, the exacerbation of symptoms, from participation in a social milieu where violence is common, or some combination. Should the latter commonly be the case; what is the weighting of each and what might influence these differential weightings?

Secondly, what are the moderating effects of individual variables such as race, ethnicity, age, and gender? These demographic variables (and others) may interact with dynamic, contextual variables in differing ways. What are the most relevant indices of risk for exclusively females? What are the protective factors inherent to culture? One
potentially fruitful way to identify protective factors in culturally diverse sample groups may be to identify criminal as well as non-criminal groups within each cultural or racial group with known risk factors and tease out the presence of potential protective factors in each of the groups.

Another line of inquiry examining the underpinnings of violent behavior is clarifying the influence of temporal proximity of certain risk factors to the control event. The causal implications of psychotic symptoms occurring before and after a violent act are surely different, but methodologies have not always distinguished the two. Studies might closer examine the influence of psychotic symptoms on violence and conversely of violence upon psychotic symptoms.

Some researchers have postulated that environmental factors such as living conditions (e.g. homelessness and financial problems) function as antecedents, that is, conditions with a more distal relationship to the control behavior. Individual factors such as stress level, sleep disturbance, and hyper-emotionality seem to have a greater capacity to serve as triggers of violence, that is, factors more proximal to the control behavior. Given this hypothesis, questions must be answered concerning the amount of influence each has, the duration of time such factors must exert themselves before a threshold for violence is reached, what is the heterogeneity of both antecedents and triggers respectively, and might risk factors function as both distal as well as proximal factors?

Finally, the manor with which clients communicate risk to clinicians (and others) needs to be further examined. Communication strategies may be direct or indirect and
difficult to reliably discern. The relationship between clients’ risk communication and violent behavior remains unclear.

Summary

The synopsis included more subjective comments relative to the more formal chapters that preceded it. Asserted strengths of the project were volunteered including the variable formats and styles in which the content was presented. Limitations stemming from both gaps in existing research and shortfalls of the project itself brought attention to areas in need of improvement in both risk assessment in general and the T-BAR specifically. It is hoped that this project spur additional ideas for reducing violence and prompt similar endeavors in other risk domains.

Alongside ideas for future work, recommendations for future research were included focused on enhancing treatment outcomes, understanding the causal nexus that underlies violent behavior, and discovering the diverse ways in which clients communicate risk. These endeavors represent the tip of the iceberg with infinite possibilities for those interested in behavioral science and being a leader in the movement toward a more peaceful way of being.

Conclusions

Methodologies vary greatly, making contrast and comparison difficult and, in certain cases, inadvisable. Future studies may benefit from increasingly streamlined research efforts. A general consensus amongst researchers regarding outcome measures, data analysis techniques, and operational definitions of variables might be more conducive to advances in the field. Incorporating agreed upon models would provide a common scheme for examining and disseminating findings and help to build a more
integrated understanding of how cultural, community, familial, and individual levels of influence impact violent behavior.

The aforementioned opportunities for work in the field and future research point toward multidisciplinary collaboration. Integrating research findings and effective practices from multiple theoretical and practical schools may allow for progress toward increasingly evidence-based, comprehensive strategies and tools to manage violence. Liken to a meta-analysis, an inclusive collection of techniques established to detect and diminish violence from multiple human service fields would be informative. This would merge varying perspectives, advancing progress toward a comprehensive movement to reduce violence. Creating a collective consciousness and streamlining efforts to minimize violence will maximize the health and safety of all. This of course, is a large-scale representation of this project.


patient outcome: A critical appraisal of research. *Diagnosis and Treatment*, 120(2), 135-142.


(Eds.) Comprehensive Care of Schizophrenia. (pp. 27-35). Martin Dunitz: London.


Appendix A

Assessing for Risk of Violence: Background Information

Aggressive displays have been observed as a natural phenomenon in the majority of the creatures inhabiting the earth. Human beings are not exempt. Competition and aggressive behavior date back to the origin of our species (Lorenz & Huxley, 2002). Aggression has taken various forms in contemporary North American societies from participation in contact sports and bloody street riots to Internet bullying and corporate boardroom battles. Just as expressions of aggression have evolved through the passing of centuries and differ across geographic location, manifestations differ amongst generations.

Aggressive displays during development are expected. Particularly during the developmental period of adolescence, aggression and violence emerge frequently and in varying forms (Tremblay, Nagin, Seguin, Zoccolillo, & Philip, 2004). The majority of aggressive youth eventually mature and develop appropriate ways to express their emotions and solve problems. Other individuals may continue to act out violently, encounter conflict with the legal system, and pose a danger to others around them. Young people with persistent harmful and destructive behavior may labeled as having a behavior disorder such as Conduct Disorder (CD) or Oppositional Defiant Disorder (ODD) (American Psychiatric Association, 2000). Not only do externalizing disorders such as these identify a population at greater risk of violence, they also coincide with greater comorbidity with substance abuse, internalizing disorders, and personality disorders (narcissistic) relative to the norm (Salekin, Leistico, Neumann, DiCicco, & Duros, 2004).
Later in adulthood, individuals demonstrating persistent patterns of violent behavior may be diagnosed as having Antisocial Personality Disorder (American Psychiatric Association, 2000). According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR) these individuals demonstrate a pervasive pattern of disregard for, and violation of, the rights of others (American Psychiatric Association, 2000). Clinicians such as forensic psychologists incur the task of deciding ways in which the rights and freedoms of these individuals may be limited such as through incarceration and supervision orders. A thorough risk assessment is required to inform these life-altering decisions.

That being said, the majority of clients have no more potential for violence than does the general population. However, by virtue of the acute stressors, chronic problems and mental health diagnoses evident within the population as a whole, risk of violence is elevated. It is this elevated propensity for risk and hugely heterogeneous nature of those accessing services (including high risk persons) that warrants the ongoing consideration of risk.

Administering of a comprehensive battery of standardized instruments to each individual, makes little sense and would be extremely impractical. An alternative is for mental health clinicians to consider risk on an ongoing basis using a screening tool. With the indication of elevated risk potential, relevant standardized tools may be supplemented. This approach, while making practical sense, requires that all mental health clinicians be competent to screen for risk and willing to do so.

This does not seem to be the case. Inconsistency in frequency, quality, and approaches to risk assessment demand an examination of barriers. Studies examining
why clinicians avoid risk assessment have found that they find standardized instruments too costly (Gardner, Lidz, Mulvey & Shaw, 1996a). Some instruments cost upwards of two thousand dollars to purchase with other fees built in as they are repeatedly used. Gardner and colleagues (1996a) found that clinicians consider standardized instruments to be impractical because of the lengthy time to administer and the overall complexity of the instruments. This complexity precludes some frontline workers from being qualified to use some tools and the level of education and training required to use some instruments present additional challenges (Monahan et al., 2000). Some clinicians have been skeptical of approaching clients in the systematic, business-like manner that some instruments are charged with (Grubin, 1997). Finally, because most available instruments have been standardized in North America, questions have been raised regarding their utility with ethnic and cultural minorities (Cooke & Mitchie, 1999).

While these concerns highlight barriers deserving of attention, they do not preclude the consideration of risk during service-provision. As will become clear after a review of the current project, the failure to assess for risk of violence due to barriers such as limited time, energy, and availability of training provide clear grounds for ethical violations. It may be that the ongoing screening for risk of violence benefit mental health service providers, those receiving services, and society as a whole.
Appendix B

The T-BAR (Time for a Brief Assessment of Risk)

**T-BAR (Time for a Brief Assessment of Risk)**

The T-BAR is a screening tool to facilitate the ongoing consideration of client risk of violence and initiate risk management. Below are variables correlated with violence...those lighter/grey have less support than those bold/black. Consider as many sources of information available and indicate the influence of each on the client (+) risk factor and (-) protective. If not applicable or of little influence do not mark anything. Dynamic risk factors (D) may be transferred to the backside in order to discern appropriate risk management targets.

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<td>+</td>
</tr>
<tr>
<td>- Past Crime:</td>
<td>age onset, # incidents, severity, variety</td>
<td>+</td>
</tr>
<tr>
<td>- Family Problems:</td>
<td>parenting, parental conflict, FLU, substance abuse/crime</td>
<td>+</td>
</tr>
<tr>
<td>- Treatment / Supervision:</td>
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</tr>
<tr>
<td>- Gender:</td>
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<tr>
<td>- Age:</td>
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<td>+</td>
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<td>+</td>
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<td>- Cognitive / Neuro Impairment:</td>
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<th></th>
<th></th>
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<td>+</td>
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<tr>
<td>- Antisocial / Pro-crim. attitude:</td>
<td>stimulus-seeking, aggressive, endorse crime/wisecracks</td>
<td>+</td>
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<td>- Negative Affect:</td>
<td>angry, hostile, pessimistic, suspicious, NOT happy</td>
<td>+</td>
</tr>
<tr>
<td>- Impulsiveness / Risk Taking:</td>
<td>act before thinking, reactionary, live in the present</td>
<td>+</td>
</tr>
<tr>
<td>- Substance Abuse:</td>
<td>maladaptive use of drugs and/or alcohol</td>
<td>+</td>
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<tr>
<td>- TCO Symptoms:</td>
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<td>+</td>
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<td>- Family / Significant Other:</td>
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<td>+</td>
</tr>
<tr>
<td>- Associates / Community:</td>
<td>friends, peer group, school, neighborhood, location</td>
<td>+</td>
</tr>
<tr>
<td>- Stable Living Arrangements:</td>
<td>basic needs, sustain, housing, homelessness, poverty</td>
<td>+</td>
</tr>
<tr>
<td>- Acute Stressors / Destabilizers:</td>
<td>death, loss, dramatic change, SA &amp; injury</td>
<td>+</td>
</tr>
<tr>
<td>- Employment / School:</td>
<td>performance, satisfaction, dedication</td>
<td>+</td>
</tr>
<tr>
<td>- Future Goals / Planning:</td>
<td>realistic, concrete, attainable means, future-orient.</td>
<td>+</td>
</tr>
<tr>
<td>- Daily Routine / Quality of Life:</td>
<td>structure, responsibility, pro-ass, active, leisure</td>
<td>+</td>
</tr>
</tbody>
</table>

**LIMITATIONS:** The T-BAR is NOT intended to facilitate quantifying a numerical risk rating. Instead the impact (+ and -) of the variables above should be considered by the user in order to gain a general sense for aggravating and mitigating factors of violence. **CAUTIONS:** The T-BAR has not been validated by empirical review and results should be interpreted with caution. Consultation with supervisors and trusted colleagues is recommended particularly in the event that risk of violence is detected during screening.
**T-BAR** Time for a Brief Assessment of Risk

The T-BAR is a screening tool to facilitate the ongoing consideration of risk and initiate risk management. To identify appropriate intervention targets to reduce risk follow steps 1 through 5. Begin by transferring up to 10 (+) risk factors from the reverse side into the spaces provided (STEP 1). Transfer those most causal of violent/aggressive behavior (STEP 2), then those most short-lived/transient and amenable to change (STEP 3). Space is provided to document strategies (STEP 4) for up to 3 promising targets (A, B, C). Always consult with your supervisor or trusted colleagues (STEP 5).

**LIMITATIONS:** The T-BAR is NOT intended to facilitate quantifying a numerical risk rating. Instead a general sense of risk will be gained by the user. The 5-step scheme above may be used to identify risk factors upon which to focus initial interventions.

**CAUTIONS:** The T-BAR has not been validated by empirical review and results should be interpreted with caution. Consultation with supervisors and trusted colleagues is recommended particularly in the event that risk of violence is detected during screening.
Appendix C

Ethical Decision-Making Process

In some situations the ethical decision-making process might happen rather swiftly and an easy resolution of the issue may be readily available. This is likely to be true of issues for which clear-cut guidelines exist and for which there governing ethical principles do not conflict. Conversely, some ethical issues (particularly those in which ethical principles conflict) are not easily resolved. These situations have the potential to become emotionally draining and might require more time-consuming deliberation.

The following steps characterize the Canadian Psychological Association’s (2000) approach to ethical decision-making:

1. Identification of the individuals and groups potentially affected by the decision.
2. Identification of ethically relevant issues and practices, including the interests, rights, and any relevant characteristics of the individuals and groups involved and of the system or circumstances in which the ethical problem arose.
3. Consideration of how personal biases, stresses, or self-interest might influence the development of or choice between courses of action.
5. Analysis of likely short-term, ongoing, and long-term risks and benefits of each course of action on the individual(s)/group(s) involved or likely to be affected (e.g., client, client’s family or employees, employing institution, students, research participants, colleagues, the discipline, society, self).
6. Choice of course of action after conscientious application of existing principles, values, and standards.
7. Action, with a commitment to assume responsibility for the consequences of the action.

8. Evaluation of the results of the course of action.

9. Assumption of responsibility for consequences of action, including correction of negative consequences, if any, or re-engaging in the decision-making process if the ethical issue is not resolved.

10. Appropriate action, as warranted and feasible, to prevent future occurrences of the dilemma (e.g., communication and problem solving with colleagues; changes in procedures and practices).

Psychologists engaged in time-consuming deliberation are encouraged and expected to consult with parties affected by the ethical problem when appropriate and with colleagues and/or advisory bodies when such persons can add knowledge or objectivity to the decision-making process (Canadian Psychological Association, 2000). Although the decision for action remains with the individual psychologist, the seeking and consideration of such assistance characterizes this ethical approach to ethical decision-making.
Appendix D

Literature Review of Empirically Supported Risk Factors

Introduction

In the early 1990's, a large-scale research study called the MacArthur Risk Assessment Study (Monahan et al., 2001) critically examined situational and environmental variables thought to influence aggression. This large-scale, multi-site, longitudinal study included approximately 1,000 people admitted to civil psychiatric hospitals (Steadman et al., 1994). The project sought to identify the risk factors, both static and dynamic, most predictive of offending behavior. The results provided a consensus regarding the predictive validity of risk variables (Estroff & Zimmer, 1994; Estroff, Zimmer, Lachicotte & Benoit, 1994; Goldstein, 1994).

The researchers examined a wide range of risk factors categorized into four domains. The first domain was “dispositional” and included demographic, personality, and cognitive variables. The second was “historical”, which included social history, prior hospitalization and treatment compliance, and history of crime and violence. The third was “contextual” and included variables such as perceived stress, social support, and means for violence. The fourth depicted “clinical” factors such as diagnosis, symptom patterns, functioning, and substance abuse. The findings have assisted clinicians in making increasingly accurate, evidence-based predictions of risk (Robbins, Monahan & Silver, 2003; Skeem, Monahan & Mulvey, 2002).

While there exists overlap among studies such as the MacArthur Risk Assessment Study and other meta-analytic reviews, lists of valid predictive variables continue to vary. Andrews, Bonta, and Wormith (2006) have recently provided an alternative account of
risk variables. Attached as Appendix E, the researchers identified a “central eight” variables and within them, the “big four.” Although this presentation of risk variables is among the most current and has great face validity, sound empirical support, and explicit theoretical underpinnings, it would not be completely impartial to accept it at this time. As a result, the most promising risk factors must largely be culled from existing scientific literature.

It was established in Chapter 4 that combining actuarial variables with clinical judgment is preferable to either approach in isolation when assessing risk. Static variables such as demographic information have been demonstrated to predict if an individual or population may engage in specified behaviors. Dynamic variables, on the other hand, have been substantiated to indicate when offending may be more likely to occur. As such, both static and dynamic risk factors that have been established as correlated with violence must be considered during a risk assessment. The variables detailed below constitute a collection of the risk factors that most reliably and validly predict violence. More specifically they include:

- Age
- Sex/Gender
- History of Violence
- Psychopathy
- Antisocial Behavior
- Negative Affect
- Impulsivity
- Psychosis
While there is likely much interplay amongst some of them, they are presented in isolation in order to flesh relevant details. These details include an operational definition of each variable and the empirical evidence that supports them as being predictive or violence. For each variable, the supporting research findings are described chronologically according to sample. First studies with samples of psychiatric inpatient and incarcerated persons are cited and then community-based studies.

**Empirically Supported Risk Factors**

**Age**

Defining age in research studies is often done in relative terms, describing findings for groups below the mean or median age versus those above. Statistics on national trends on crime or violence typically report findings in terms of clusters such as 14 years and below, ages 15 through 19, and 19 to 24 years of age. Avoiding rigid and debatable cutoffs and being mindful of the variables eventual application in a screening context, the current paper focuses on the general relationship between chronological and developmental age and risk violence.

Adolescence is a time when the risk of antisocial behavior including physical violence peaks (Moffitt, 1993). Researchers examining the elevated risk potential
amongst adolescents and young adults have suggested that characteristics of psychopathy may exist during adolescence as a byproduct of normal development (Salekin, 2008). Inherent of being a developmental phenomenon, variables such as egocentricity are time limited. As such, they are more likely than not to dissipate during early adulthood as individuals mature.

Anderson and colleagues (2004) have explicitly declared age to be a considerable risk factor for violence and criminal behaviour in the general population. Age is inversely related to violence (Anderson et al., 2004). That is, the risk of violence is higher for younger persons (Anderson et al., 2004). These findings generalize onto special populations such as correctional and psychiatric samples (e.g., Swanson, Swartz, & Van Dorn, 2006).

Crocker and colleagues (2005) recruited participants from seven community mental health centers in the United States. Each participant had co-occurring diagnosis of mental illness (schizophrenia, schizoaffective, or bipolar disorder) and substance abuse disorder. Multiple age-related variables were found related to violent offending including current age of the participant, age at first psychiatric hospitalization, and age at onset of alcohol abuse (Crocker et al., 2005).

Charles, Reynolds, and Gatz (2001) conducted a large-scale, longitudinal study including nearly 3000 community residents to assess how violent tendencies change over time. They found levels of negative affect to gradually decline over the life span, reinforcing past findings in favor of the inverse relationship of age with violence (Swanson, Holzer, Ganju, & Jono, 1990; Link, Andrews, & Cullen, 1992). Multiple
meta-analytic studies examining violence, have made the point that risk of violence decreases with age (e.g., Andrews et al., 2006; Bonta, Law & Hanson, 1998).

**Sex/Gender**

The contribution to the variance in the overall rate of violence by age and gender is greater than that of all mental health variables (Link et al., 1992). While there is inconsistency in the literature regarding gender and violence, the general consensus is that males act out violently more than females (Link et al.). Disagreements stem from diverse research settings and sample characteristics. In community samples or outpatient settings, sex is consistently found to be a risk factor for violence, while this effect is less intense with increasingly complex and disturbed samples. More specifically, amongst individuals diagnosed as having relatively more severe mental illness or psychopathy, such as those restricted to inpatient settings and high security prisons, males and females act out violently at a similar rate.

Research conducted in inpatient settings has found a significantly higher proportion of men acting out violently (Benjaminsen, Gotzsche-Larsen, Norrie, Harder, & Luxhoi, 1996). Some disagreement stems from research on psychiatric samples intensely experiencing clinical symptoms. It seems that in these cases, the severity of the symptoms supersedes gender differences (Anderson et al., 2004; Lidz, Mulvey, & Gardner, 1993; McNiel & Binder 1994). Anderson and colleagues were clear in recommending that those working with psychiatric patients should not consider biological sex to be a basic demographic risk factor for violence.

While it does not seem unreasonable that the influence of psychotic symptoms override the gender differences, Flood (2006) cautions that the measures of violence used
in research may impact results. More intense measures such as assault with a deadly weapon, assault causing bodily harm, and attempted or completed homicide influence the results, with these relatively severe actions being significantly more endorsed for males than females (Flood, 2006).

Research with community samples has demonstrated gender differences in risk and violence. Giancola (2002) examined the effects of alcohol on gender differences and violence. It was repeatedly found that alcohol increases aggression for men high in aggressiveness and irritability, but not women with the same characteristics. Gender also interacts with dispositional aggression in the prediction of threatening someone after drinking alcohol (Smucker Barnwell, Borders, & Earleywine, 2006). Men with higher dispositional aggression are more likely to threaten someone after drinking heavily; the effect was considerably less with females.

The location of the incident may influence risk of violence because males are more likely to be violent against strangers (Flood, 2006). As such, males are largely represented in reports of violent acts in public places while violent females commonly act out inside their homes (Flood). In theory then, the comorbid presence of substance abuse and negative affect may constitute more of a red flag for males than females.

All summed, historical and recent community-based studies indicate that the probability and impact of violent behavior is generally greater for males than females (Belknap & Holsinger, 2006; Buchanan, 2008; Link et al., 1992; Swanson et al. 1990). Otto (2000) summarized the take-home message, writing that in the general population,
males are more prone to violence than females, and the violence is more severe and more likely to cause harm.

*History of Violence*

In the present review, history of violence includes aggressive and violent behaviors demonstrated up until the time of meeting with the client. Examples include: frequency of injury to victims, number of prior arrests and convictions for violent offenses, past use of weapons, and rule infractions for fighting. While operational definitions of violence used in research vary, an individual’s history of violence as defined here will now be demonstrated as a robust indicator of future violence.

Tardiff, Marzuk, and Leon (1997) studied psychiatric patients and found that individuals violent in the week prior to admission were nearly ten times more likely to be violent in the two weeks after discharge. Davis, Smith, and Nickles (1998) reported history of violence to significantly predict reoffending among 1133 randomly selected incarcerated individuals. More recently Wormith, Olver, Stevenson, and Girard (2007) studied a sample of adult male offenders and concluded that past offenses were the most predictive variable of future violence. Similarly, a statistically significant correlation between historical and future violence was reported by several studies using criminal samples (Gordon & Moriarty, 2003; Hirshel & Hutchinson, 2003; Wooldredge & Thistlewaite, 2002).

In the general population, the findings are similar. A meta-analysis conducted by Gendreau et al., (1996), which included 131 research studies on violence, found past criminal convictions of varying types to be a significant and potent predictor of general recidivism. Similarly, the more violence that an individual is directly or indirectly
involved with, the greater the likelihood of future violence (Barberee et al., 2001; Bonta, Law, & Hanson, 1998; Cottle, Lee, & Heilbrun, 2001; Lipsey & Derzon, 1998).

Specifically, the severity of violence has been found to significantly predict violent recidivism (Taylor, Davis, & Maxwell, 2001). In addition, the number of prior convictions has been consistently found to predict reoffending amongst persons of varying ages and offense types (Barberee, Seto, Langton, & Peacock, 2001). Meta-analyses consistently have found past violence to be significantly correlated with future violent offending (Bonta et al., 1998; Harris & Rice, 1997; Wormith et al., 2007). The old adage that “the best indicator of the future is the past” is certainly true in regards to violent behavior and it is a noteworthy implication when screening for violence (Andrews et al., 2006).

Psychopathy

Henderson’s Psychopathic States (1939) set the stage for future exploration of psychopathy by confining attention to only the most extreme forms of psychopathic abnormality and emphasizing the antisocial nature of the condition. Later authors such as Cleckley (1964), and McCord and McCord (1964) further narrowed the category to aggressive psychopaths and established core criteria for the disorder based upon antisocial behaviour. Varying accounts of psychopathy have been proposed over the years (American Psychiatric Association, 2000; Blackburn, 1975).

Robert Hare is credited with the most widely used construct of psychopathy, which is characterized by a combination of traits from antisocial personality disorder and narcissistic personality disorder (American Psychiatric Association, 2000). According to
Hare (1991a), psychopathy can be represented as a cluster of personality traits that coincide with socially deviant behaviors. Most recently, Hare and colleagues (2007) use a four-factor representation to describe psychopathy; Interpersonal Manipulation, Criminal Tendencies, Erratic Lifestyle, and Callous Affect.

Researchers using the construct of “psychopathy” to examine violent, antisocial persons assess for variables such as: deception, manipulation, irresponsibility, impulsivity, stimulation-seeking, poor behavioral controls, shallow affect, a lack of empathy, guilt, or remorse, a range of unethical and antisocial behaviors, and a lack of enduring attachments to people, principles, or goals (Hare & Neumann, 2006; Neumann, Hare, & Newman, 2007; Vitacco, Caldwell, Rybroek, & Van Gabel, 2007). Perhaps the most distinguishable feature of psychopathy appears to be a high propensity for violence and a disregard for law enforcement, which explains why a high number of those suffering with the disorder encounter the legal system.

When used in accordance to the manual, the PCL-R (Hare, 1991a) provides a “valid and reliable measure” (p. 141) to identify psychopathic traits in clients (Hemphill, 2006). A testament to its utility to predict violence, psychopathy as measured by the PCL-R is one of the strongest factors of other instruments such as the VRAG (Quinsey et al., 1998) and the HCR-20 (Webster et al., 1997) in predicting violence (Harris, Rice, & Cormier, 2002). The PCL-R uses a semistructured interview and a thorough chart review to arrive at a total psychopathy score. The PCL-R is scored according to an affective-interpersonal factor (characterized by lack of empathy, deceitfulness, lack of remorse, and failure to accept responsibility) and a socially deviant factor (characterized by lack of
realistic goals, irresponsibility, impulsivity, juvenile delinquency, and poor behavioral controls).

Salekin, Rogers, and Sewell (1995) echoed previous findings (Harris et al., 1991; Rice, Harris, & Quinsey, 1990) in their meta-analytic review of 18 studies, reporting that psychopathy was highly predictive of violent recidivism (r = .79). Research examining the violent offences of psychopathic compared to non-psychopathic offenders has revealed some distinctions. In a longitudinal study of male violent offenders Hare, McPherson, and Forth (1988) found that those assessed as having psychopathy, engaged in an inordinate amount of violence and aggressive behaviour compared with non-psychopathic offenders. Williamson, Hare, and Wong (1987) found that criminals with psychopathy tended to have revenge or retribution as the motive. The conclusion that psychopathy is an important predictor of both general and violent recidivism is straightforward.

Clearly, research studies and meta-analytic reviews consistently indicate that psychopathy is one of the strongest risk factors for assessing violence across a number of populations. This relationship has been demonstrated in a variety of settings with varying populations including psychiatric, correctional, and community-based samples (Barbaree, et al., 2001; Bovasso, Alterman, Cacciola, & Rutherford, 2002; Grann, et al., 1999; Guy, Edens, Anthony, & Douglas, 2005; Hemphill & Hare, 2004: Lesitico, Salekin, DeCoster, & Rogers, 2008). Detection of psychopathic traits via screening with the T-BAR (or other means) should prompt consultation with a supervisor or trusted colleague and the application of an appropriate standardized instrument such as the PCL-R.
Antisocial Behavior

Research studies generally use the DSM-IV-TR criteria of antisocial personality disorder (APD), describing APD as an enduring pattern of inner experience and behaviour that deviates markedly from the expectations of the individual’s culture; is pervasive and inflexible; has an onset in adolescence or early adulthood; is stable over time; and leads to distress or impairment (American Psychiatric Association, 2000). This criteria is less stringent that of psychopathy. That is, the majority of persons with psychopathy will fit the criteria for the more broad disorder of APD, however those diagnoses as having APD will not necessarily demonstrate the more severe diagnosis of psychopathy (Hare, 1991b). More specifically, the percentage of incarcerated criminals that would meet the criteria of having APD is approximately 85%, however, when assessed for psychopathy, only about 20% of these same criminals would qualify (Hare, 1991b). Other studies loosely echo these findings with results ranging from 50-80% of male inmates qualify for a diagnosis of APD, and about one third meeting the criteria for psychopathy (Widiger & Corbitt, 1995).

In the present review, the heading Antisocial Behavior is intended to represent a pattern of behavior that lies along a continuum of intensity and severity. While the DSM-IV-TR diagnosis of APD surely represents a red flag for violence, for screening purposes, evaluating for overlay with set criteria may not be as practical. As such, individuals warranting the positive endorsement of this variable may fit the DSM-IV-TR criteria and/or demonstrate variations of being highly adventurous, oriented toward pleasure seeking, having low self-control, and being restlessly aggressive (Andrews et al., 2006).
In a sample of psychiatric inpatients Soliman and Reza (2001) found that APD was associated with a high risk of inpatient violence. In addition to increased inpatient violence, upon being granted outpatient status, nearly 60% of individuals with APD recidivated as compared to a rate of 35% for those without the diagnosis (Swanson et al., 2006). Most recent research continues to support these rates of recidivism. A sample of 363 inpatients committed due to “insanity” were tracked after being conditionally released and it was found that nearly half of those diagnosed as having APD engaged in violent behavior leading to revocation (Vitacco, Van Rybroek, Erickson, Rogstad, & Tripp, 2008). This was more than three times the rate of those without the diagnosis.

Offender-based research continuously finds antisocial attitudes among the strongest predictors of future violence and incarceration (Friedman, Melnick, Jiang, & Hamilton, 2008; Wormith, Olver, Stevenson, & Girard, 2007). More specifically, APD is believed a risk for predatory aggression defined as violent acts that are “planned, purposeful and goal directed” (Scott & Resnick, 2006, p. 599).

A recent review of the literature on dynamic risk conducted by Douglas and Skeem (2005) suggested several promising dynamic risk factors. Of these, antisocial and criminal attitudes were among those identified as most predictive of violence. While antisocial attitudes may indeed change with age, Reid (2001) warns that they do so in complex ways and rarely cease altogether. Antisocial traits are persistent and criminal behavior of some kind often continues through adulthood (Reid, 2001). As a result, while age deserves consideration, it may be that it warrants less weight with individuals affected by APD.
Negative Affect

Negative affect may be defined as “a general dimension of subjective distress and nonpleasurable engagement that subsumes a variety of aversive mood states, including anger, contempt, disgust, guilt, fear, and nervousness, with low [negative affect] being a state of calmness and serenity” (Watson, Clark & Tellegen, 1988, p. 1063). Anger has also been conceptualized as consisting of suspicion, rumination, hostile attitude, intensity, somatic tension, irritability, impulsive and aggressive reactions, and physical confrontations (Novaco, 1994). All summed it can be said that while negative affect largely refers to pessimistic, downbeat feelings, cognitive and behavioral manifestations are also evident. In its simplest form negative affect describes an angry, hostile person as opposed to a happy, positive one.

Negative affect significantly predicts violence in inpatient populations including psychiatric and incarcerated samples (Appelbaum et al., 2000; Gardner et al., 1996b; Monahan et al., 2001; Novaco, 1994; Skeem, Miller, Mulvey, Tiemann, & Monahan, 2005). The related, though arguably more trait-based, construct of antagonism is also a relatively strong predictor of violence among psychiatric patients (Skeem et al., 2004) and of antisocial behavior among offenders (Miller & Lynam, 2003). Menzies and Webster (1995) specifically found that the anger-related construct of hostility was a strong predictor of future inpatient violence as well as community violence in a sample of 655 mentally disordered criminal offenders.

Though less prevalent, studies finding negative affect correlated with violent behavior among community-based samples are also available. Douglas and Skeem’s (2005) meta-analysis suggested that negative affect was amongst the seven variables
touted as most significant in predicting and managing violence. Negative affect can also give rise to other risk factors more amenable to observation. For instance, persistent anger could lead to familial or relationship problems, lack of personal support, employment problems, or stress, all of which are capable of increasing the odds of violence occurring (Douglas & Webster, 1999). Negative mood might be a consequence of, or proxy for, other risk factors as well such as substance use, major mental illness, family discord, and antisocial personality disorder or psychopathy.

**Impulsivity**

Impulsivity is listed as a symptom of several DSM-IV-TR (American Psychiatric Association, 2000) mental disorders including those highly correlated with violence such as attention deficit hyperactivity disorder, conduct disorder, and antisocial personality disorder (American Psychiatric Association, 2000). Impulsive aggression, as conceptualized by Barratt (1994), includes a lack of adequate self-control that is necessary to refrain from acting with a hair-trigger temper. Barratt has also argued that impulsive aggression is conceptually related to anger and hostility in that, as with anger, impulsiveness clearly acts as a disinhibitor and results in violent behavior. Impulsivity may lead one to respond more readily to provocation or frustration.

In the present review, impulsivity is depicted as a dispositional characteristic with three dimensions; motor or behavioral impulsiveness, cognitive or attentional impulsiveness, and nonplanning or lack of concern for the future. Impulsivity then, is the inability to keep composed when under internal or external pressure to act with the essential feature being the lack of control over affect, behavior, and/or cognition.
Clinical studies routinely find evidence linking impulsivity and aggression (Appelbaum et al., 2000). In a study of more than 800 psychiatric patients, impulsiveness was significantly associated with future violent behavior (Monahan et al., 2001) as well as self-reported violent thoughts (Grisso, Davis, Vesselinov, Appelbaum & Monahan, 2000). Lifestyle impulsivity, conceptualized by a lack of future goals and planning, also distinguished recidivistic from nonrecidivistic violent offenders (Prentky, Knight, Lee & Cerce, 1995). Douglas and Skeem (2005) included impulsiveness in their description as one of seven most promising dynamic risk factors.

Developmental research has linked deficits in self-control to aggressive behavior. Murphy and Eisenberg (1997) showed that children with dispositionally poor self-regulation (as rated by teachers) had more angry conflicts with others and acted out more hostile responses to anger in a role-playing scenario with puppets, as compared to other children. Krueger, Caspi, Moffitt, White, and Stouthamer-Loeber (1996) showed that poor self-control was associated with aggressive and delinquent behavior among preadolescent and early adolescent boys. Other research has shown that young children who exhibited a reduced capacity for exerting self-control were less able to control their anger (Kochanska, Murray, & Harlan, 2000). Tangney, Baumeister, and Boone (2004) found that individuals low in self-control reported responding to anger-evoking situations with significantly greater outward aggression compared to people high in self-control. Caspi’s (2000) conclusion that individual differences in self-control can predict rates of behavioral problems during development as well as criminality over longer periods of time is representative.
Although impulsiveness is often regarded as a dispositional characteristic, impulsive behavior has been shown to ebb and flow over time with individuals. There is evidence that the Barrett Impulsiveness Scale (Barratt, 1994) taps some changeable states of impulsiveness among psychiatric patients (Swann, Anderson, Dougherty & Moeller, 2001). Impulsiveness is often targeted in risk of community-based violence reduction programs (Webster & Jackson, 1997). Corruble, Damy, and Guelfi (1999) found that 50 depressed patients’ impulsivity scores significantly decreased during a 4-week period of treatment. It is clear that impulsivity is a significant contributor to violent behavior and its propensity for change makes it of particular interest to persons involved in risk management.

Psychosis

Early research on mental illness and violence focused on schizophrenia. Multiple studies have found people with schizophrenia more likely than others to behave violently (Arseneault, Moffitt, Caspi, Taylor, & Silva, 2000; Eronen, Hakola, & Tiihonen, 1996; Wallace, Mullen & Burgess, 1998; Swanson, 1994). Benjaminsen, and colleagues (1996) reported that patients diagnosed with schizophrenia are four times more likely to be convicted of violent crime.

The majority of contemporary research focuses on active psychosis characterized by persecutory delusions and command hallucinations and therefore, these two variables will be focused on here. In fact, the diagnosis of schizophrenia, is now being found to be inversely related to violent recidivism (Lidz et al., 1993; Monahan et al., 2001; Quinsey et al., 1998).
In an influential research report, Link and Stueve (1994) use the concept of ‘threat/control-override’ (TCO) symptoms to characterize the psychotic symptoms that most often precede violence. A definition of TCO might involve: (1) the belief that others are controlling how one moves or thinks against one’s will; (2) the belief that others are plotting against one, or trying to hurt or poison one; and (3) the belief that others can insert thoughts directly into one’s mind, or steal thoughts out of one’s mind (Link & Stueve). TCO symptoms more simply are delusional beliefs that someone is seeking to do one harm (threat) or that outside forces are controlling one's mind (control override). It has been found most accurate to take periodic snapshots of these specific, active symptoms to predict violence (Link, Andrews, & Cullen, 1992; Silver, 2006).

Psychiatric patients who reported one or more of the TCO symptoms were more than twice as likely to engage in violence in one year as were those reporting any other psychotic symptoms (16.1% compared to 6.1%) (Link & Stueve, 1994). Similarly, 56% of those with current TCO symptoms had a history of some violence since age 18, compared with only 29% of those reporting only non-TCO symptoms. These results regarding TCO symptoms have been similar in numerous other studies (Beck, 2004; Bjorkly & Havik, 2003; Nijiman & Palmstierna, 2002). Despite historical disagreement about the impact of psychotic symptoms on violence, consensus has been reached that TCO-like symptoms increase the risk of violence (Bowers, Nijman, Palmstierna, & Crowhurst, 2002; Nordstrom, Pereira, Sarsam, Bhui, & Paton, 2006; Teasdale, Silver, & Monahan, 2006).

Offender samples have also demonstrated TCO-like symptoms such as persecutory delusions to be associated with increased levels of violence (Link & Stueve,
Persecutory delusions, characterized by the misperception of hostile intent on the part of others (Monahan et al., 2001; Scott & Resnick, 2006), has also been found correlated with command hallucinations to commit violence (Monahan et al., 2001) and hallucinations that gave rise to negative emotions such as anger (Cheung, Schweitzer, Crowley, & Tuckwell, 1997), which lead to aggressive behavior. This provides additional support for the correlation of psychosis and violence.

Most recently, Friedman, Melnick, Jiang, and Hamilton (2008) studied a population of inmates participating in a substance abuse treatment program. Again, they found that thought insertion/control ideation was associated with increased risk for violent or disruptive behavior while in prison. Nordstrom and colleagues (2006) add that half of homicide-related court-ordered assessments detect paranoid ideation in the accused.

Such vast support of the correlation between TCO-like symptoms and violence beg questions about their treatability. Studies such as that led by Dr. Jennifer Skeem (2005) indicate that psychotic symptoms are dynamic, and therefore have the potential to change. The intensive longitudinal study by Skeem and colleagues focused on high-risk emergency room patients and was among the first attempts to disentangle the complex relation between psychiatric symptoms and violence over time. At a six month follow-up, the high-risk patients, characterized by great levels of hostility, were most likely to be involved in serious violence (Skeem et al.). However, during a given week within that period, it was the individuals with greater general psychological distress, hostility, and other symptoms of psychosis at that particular time that were engaging in serious
violence. The results both indicate an ebb and flow in violence-related symptoms and that it is crucial to attend to the temporal relation between mental disorder and violence.

Among those receiving psychiatric treatment, violent behavior is three times more likely than among people who have never received psychiatric treatment (Link, et al., 1992). Pharmaceutical, psychosocial, and cognitive behavioral treatment studies have indexed decreases in positive symptoms as a function of treatment (Waddington & Morgan, 2001; Cramer et al., 2001). It makes intuitive sense that acute factors may reemerge upon treatment termination, or at the conclusion of a supervisory period and as such it is relevant to the screening process to note that violence might occur because of the absence of certain protective factors in addition to the presence of co-occurring risk factors (Arango, Barba, Gonzalez-Salvador, & Ordonez, 1999).

*Pro-Criminal Attitudes*

Although there is not a perfect correspondence between attitudes and behavior, it is clear that attitudes and related constructs tend to facilitate attitude-congruent behaviors (Olson & Maio, 2003). For instance, not surprisingly, men who are violent toward their romantic partners are more likely to hold attitudes that support the use of violence toward women (Saunders, 1992). As such, if a person believes that violent behavior is a viable option to use in order to accrue some type of gain (e.g. money, power, respect, sex, or revenge), that person is in theory more likely to use violence than a person who does not believe violence is a reasonable behavioral strategy to use.

Procriminal attitudes have been referred to as one of the “big four” criminogenic risk factors for offenders (Andrews & Bonta, 2003) along with criminal history, antisocial personality, and social support for crime. The variable “procriminal attitudes”
encompasses attitudes, values, beliefs, and rationalizations supportive of crime; cognitive emotional states of anger, resentment, and defiance; and criminal identity (as opposed to reformed or anticriminal) (Andrews et al., 2006)

Bandura, Barbaranelli, Caprara, and Pastorelli (1996) assessed antisocial attitudes rating respondents on items that may justify, excuse, or minimize damage caused by the offender’s crime. Prominent items include the law does not help average people (+.32), minor offenses such as drug use don’t hurt anyone (+.24), and things stolen from rich people won’t be missed (+.36). Violent thoughts, fantasies, and attitudes have also been shown to predict violence in the MacArthur sample of psychiatric patients (Grisso, Davis, Vesselinov, Appelbaum, Monahan, 2000). While there is no consensus on the specific attitudes (such as minimizing the damage of offenses or increased tolerance of law violations) that are most predictive of violence, for the last decade antisocial attitudes in general has emerged in meta-analytic studies as a major risk factor for violence (Andrews et al., 2006; Gendreau et al., 1996).

Harris and colleagues (1993) found a significant relationship between procriminal attitudes and violent behavior in a sample of 618 mentally disordered offenders and forensic patients. Approximately half of violent recidivists evidenced procriminal attitudes versus about a quarter of non-recidivists (Harris et al., 1993). The Current Criminal Thinking (CCT) scale of Walters’ (1995) Psychological Inventory of Criminal Thinking Styles (PICTS), measures current criminal attitudes and behaviors (Walters, Trgovac, Rychlec, DiFazio & Olson, 2002). In one study, offenders who failed to show improvements on the CCT were also more likely to have disciplinary infractions (Walters
et al., 2002). This indicates that persistent pro-criminal orientation is associated with recidivism.

A large and complex literature on persuasion and attitude change demonstrates the potential malleability of attitudes (Petty, Wheeler & Tormala, 2003). Specific to predicting violence, there is some evidence that pro-criminal attitudes can change over time, becoming more or less cynical and pessimistic. The CCT scale of the PICTS (Walters, 1995) is used to predict prison adjustment and treatment outcomes. Data has revealed significant decreases in pro-criminal attitudes during follow-up of various group treatments in several samples (Walters et al., 2002). Again, we are left with a variable, not only empirically supported to predict violence, but a target potentially effective to reduce risk.

Substance Abuse

Supported by meta-analyses, drug and alcohol abuse has consistently emerged as a significant risk factor for general criminal and violent behavior (Andrews et al., 2006; Gendreau et al., 1996; Golding, 1999). Substance abuse refers to a pattern of using alcohol and/or drugs to deal with problems or make life better, when in actuality the use of substances is detrimental to the user. Alcohol use is correlated to multiple kinds of aggressive acts, including verbal confrontations and threats, marital and family violence, child abuse, and homicide (Leonard, Quigley, & Collins, 2003; Miller, Wilsnack, & Cunradi, 2000; Parker, 1995; Testa & Livingston, 2000; Wells, Graham, & West, 2000).

Among individuals with severe mental illness, over 50% of those granted outpatient status that had drug and/or alcohol problems were unable to manage their behavior compared to about 30% of patients that used only occasionally or not at all
(Swanson et al., 2000). Vitacco and colleagues (2008) found that the presence of a substance-abuse diagnosis was significantly related to revocation of a conditional release in a psychiatric sample. Nearly half of conditional sentences granted were ultimately revoked (Vitacco et al., 2000).

Swanson and colleagues (2002) studied a sample of 802 American psychiatric patients across four states. The patients, all with severe mental health problems, provided complete data on violent behavior, victimization, demographic and clinical variables. It was found that the patients at greatest risk of violence had concurrent substance abuse problems (Swanson et al., 2002). In fact, substance abuse by mentally disordered people may double their lifetime risk of violence and the earlier in the individual’s lifespan, the greater the risk (http://www.forensicpsychiatry.ca).

Offender samples mimic the dramatic impact of substance abuse upon psychiatric samples. Arboleda-Florez (1998), describe results from a study of a stratified random sample of 1,200 admissions to the Calgary Remand Centre. Individuals were examined within the first 24 hours of detention by one of four senior forensic psychiatrists. Almost half of the men (47.3%) and 35.7% of women met diagnostic criteria for substance abuse disorder. Possession or use of controlled substances or other contraband in prison continues to have a strong association with violent and disruptive behavior (Wallace, Mullen, & Burgess, 2004).

Large community-based studies have indicated that mental disorders are particularly likely to increase the risk of violence when they co-occur with substance abuse disorders (Steadman et al., 2001). Based on epidemiological surveys of 10,000
people living in the community, it is accepted that the use of alcohol and drugs is strongly associated with violence among both mentally disordered (Monahan et al., 2001) and non-mentally disordered individuals (Lipsey, Wilson, Cohen & Derzon, 1997). In fact, substance abuse has been linked to violence at ratios of 20:1 for men and 32:1 for women (Hodgins, 1992).

Community-based research by Barnwell and colleagues (2006) found that alcohol use demonstrated main effects in the prediction of saying something mean, threatening to hurt someone and slapping or hitting another person. The quantity of alcohol that an individual typically consumed per occasion also predicted both saying something mean and threatening to hurt someone (Barnwell et al.). As the average amount of alcohol consumed increased, so did fighting and breaking things.

Relevant for screening purposes, substance use appears to function as a dynamic risk factor with the ingestion of alcohol predicting proximal violence more reliably than a history of a substance use as a static risk factor (Douglas & Skeem, 2005; Fals-Stewart, 2003). Even among heavy users, substance abuse both, waxes and wanes over lengthy periods, and ebbs and flows relatively rapidly. As a result, the impact of substance abuse (e.g. employment problems and/or relationship instability) may change more slowly than does actual usage. In addition, alcohol and drug use has been found predictive of violence over short periods such as two or three days after use (Mulvey, 2005).

Drug and alcohol use is a popular avenue for change when clients have addictions. The influence of substance abuse may be proximal or distal to the control behavior and as a result, assessing temporality may be informative. Based on the literature, it would seem
that substance abuse may be one of the primary factors to assess when screening for violent tendencies.

*Family and Significant Other*

Past and present family dynamics contribute to risk differently and each warrant specific attention. The “family” aspect to this variable includes past and present family dynamics including childhood experiences, the level of perceived support from family, and parental modeling of violent behavior. In this context “significant other” refers to the client’s spouse, girlfriend, or common law partner. The variable is intended to target the stability of such significant relationships as well as relationship dynamics including communication, problem solving, and coping strategies. All summed, this variable may be used to reflect the dynamics and quality of parents, dependants, siblings, extended family, and intimate partner.

Specific factors to be aware of have been highlighted by a fourth-generation risk assessment system called the Correctional Offender Management Profiling for Alternative Sanctions (Brennan, Dieterich, & Ehret, 2009). “Family criminality” is one of the risk variables and strongly supported to predict violence in the author’s review of meta-analytic reviews of violence (Brennan et al., 2009). The COMPAS scale of family criminality includes items assessing the criminality and drug use of mother, father, and siblings. The highest loading items include parent ever jailed (.55), parent has had drug problems (.43), and mother ever arrested (.40) (Brennan et al.).

Bartels, Drake, Wallach, and Freeman (1991) reported that violence was associated with difficulties in several areas of social functioning related to an absence of support by
family and significant others. In this psychiatric sample, reports of deviant behaviours by fathers and mothers, such as excessive alcohol and drug use, were also strongly associated with increased rates of post-discharge violence (Bartels et al., 1991). Swanson and colleagues (2002) found that a lack of spouse or significant other increases the chances of individuals with severe mental illness to offend violently by nearly 50%. These findings emphasize the protective nature of having support from family members and an intimate partner.

Among those incarcerated, individuals who displayed excessive violence had less perceived social support from meaningful persons (Gutierrez-Lobos, Schmid-Siegal, Bankier & Walter, 2001). In a recent study, family and marital problems were among the variables most predictive of violent recidivism among offenders (Wormith, Olver, Stevenson, & Girard, 2007). In fact, family and marital problems was the only dynamic risk factor that consistently predicted both general and violent recidivism (Wormith et al., 2007). From a risk-management perspective, this justified family support as a worthwhile consideration.

Community based samples have also demonstrated that a critical consideration is whether those significant to the client, such as family and spouse, are active supports or relatively complacent to the client’s situation. Klassen and O’Connor (1989) found that lack of support from family members (feeling let down or dissatisfied with family, high levels of arguments with family) predicted violence. More recently, Estroff and Zimmer (1994) reported that individuals who felt threatened by, or perceived hostility among friends and relatives, were more likely to threaten violence toward others. Low levels of
sense of belonging and relatively little social support have also been reported to predict partner violence (Rankin, Saunders & Williams, 2000; Magdol et al., 1997).

Child abuse is another family dynamic that impacts the risk of violence. Adults abused as children had higher PCL-R scores than did a matched nonabused comparison sample in a study by Weiler and Widom (1996). More recent research also suggests a significant relationship between physical abuse and violent crime (Hamilton, Falshaw, & Browne, 2002; Neller, Denney, Pietz, & Thomlinson, 2005; Widom, 1998). Specifically, physical abuse occurring before age 16 significantly increased the risk of violence (Swanson et al., 2002).

Monahan and colleagues (2001) assessed over one thousand acute civil patients at three mental health facilities in different American states and found that childhood physical abuse was associated with post-discharge violence. Sexual abuse was also found significantly associated with violence (Bergen, Martin, Richardson, Allison, & Roeger (2004). More specifically, research has shown that risk can increase up to nearly 10 times for sexually abused boys and threefold for sexually abused girls compared to nonabused children (Bergen, Martin, Richardson, Allison, & Roeger (2004).

While on the surface this may appear to be too large a variable for screening purposes. However, keeping the validity of the T-BAR risk factors at a premium, the inclusions here represent one of the strongest predictors of violence. Taking the time to flesh out past and present patterns of family dynamics and problems is substantiated to be worthwhile.
Associates and Community

This variable refers to associations with others who are involved in drugs and criminal activity as well as the relative isolation from pro-social persons. That is, within the client’s social network there lays immediate social support for crime. Associations that increased risk of violence include having friends who have been arrested and have been gang members (Andrews et al., 2006). Meta-analytic and primary research has shown that having antisocial associates is a major risk factor for recidivism (Gendreau et al., 1996; Prinstein, Boergers, & Spirito, 2001).

This variable also includes more distal levels of crime, gang presence, and drug activity in the person’s community. Living in a high-crime neighborhood is an established correlate of both early conduct problems and violent behavior in adulthood (Esbensen & Huizinga, 1993; Estroff & Zimmer, 1994; Sampson, 2004). People who routinely witness or experience violent events in their surrounding communities over an extended period of time are at greater risk of acting violently themselves (Swanson et al., 2002).

Children exposed to community violence tend to exhibit a variety of other emotional and behavioral difficulties, which may indirectly lead to violence (Flannery, Wester, & Singer, 2004; Schwartz, Gorman, Toblin, & Abou-ezzedidine, 2003). As such this variable also includes social immersion, with isolation at one end of a continuum and abundant social supports at the other. This may include information indicating self-reported loneliness, absence of friends, feeling left out of things, or the lack of a close or best friend.
Swanson et al. (2002) had 802 psychiatric patients provide personal data on violent behavior, victimization, and demographic and clinical variables. The authors deemed those subjected to ongoing exposure to adverse social environments characterized by everyday violence to be at greatest risk of violence (Swanson et al., 2002). Independent of where they came from, violent offenders released from custody showed varying rates of recidivism depending on where they were released. Members of the sample that were released into communities with stronger social supports had lower rates of recidivism (Solomon, Johnson, Travis, & McBride, 2004).

In addition to the negative effects of having criminal associates and being exposed to community violence described above, there are positive influences that warrant consideration (Estroff, Zimmer, Lachicotte, & Benoit, 1994). The inverse condition of having positive influences and living in the presence of social supports may be worthwhile to identify while screening for violence. In a similar vein, the interplay between the client’s associations at micro, meso, and macro levels with other variables may shed additional insight for both risk-formulation and management.

*Treatment and Supervision Noncompliance*

It has been well demonstrated that treatment with high-risk clients can be effective in reducing violence (Andrews & Bonta, 2007). As such, public safety increases when individuals identified to be high risk enroll in and complete evidence-based treatment. Public safety similarly increases when high-risk individuals comply with supervision requirements and court-ordered restrictions imposed to limit high-risk situations (Stalans, Yarnold, Seng, Olson, & Repp, 2004; Swanson, Swartz, Elbogen,
Wagner, & Burns, 2003). In this paper “treatment and supervision noncompliance” refers specifically to: the formulation of a therapeutic alliance, medication noncompliance, treatment participation and completion, and complying with sentencing and release conditions. Each of these is briefly described below.

Therapeutic Alliance

The strength of the therapeutic alliance has been demonstrated to be indicative of the quality of treatment outcomes (Rogers, 1950, 1978; Hogue, Dauber, Stambaugh, Cecero, & Liddle, 2006; Krupnick et al., 2006), and hence risk of recidivism. The quality of the therapeutic alliance may change over time, a phenomenon known as “rupture and repair” (Kivlighan & Shaughnessy, 2000). Low points in the therapeutic alliance typify points at which clients are at especially high risk to drop out of treatment (Kivlighan & Shaughnessy). The frequency and amplitude of rupture and repair patterns may offer information about the quality and strength of the treatment alliance and in turn inform risk-formulation (Douglas & Skeem, 2005).

Medication Noncompliance

Medication noncompliance has been shown to predict future violence in psychiatric samples (Monahan et al., 2001) and patients’ return to psychiatric hospitals (Haywood et al., 1995). Bartels and colleagues (1991) found that patients with severe mental illness who behaved violently were noncompliant with medication and treatment in general. More recent research has established that approximately one third of some samples were noncompliant with medication on at least one occasion over five years (Svedberg, Mesterton, & Cullberg, 2001). Given the correlation of medication
noncompliance with violence, and the frequency that it occurs, is a notable concern among mental health professionals.

_Treatment Participation and Completion_

Completing recommended treatment programming lowers recidivism rates. Hollin (2006) found that violent offenders that drop out of treatment are also at increased risk of violent recidivism compared to those that finish. This was found to be true of offenders at any risk level. Noncompleters recidivated at rates of 83%, while future violence of offenders that did complete the prescribed treatment occurred 61% of the time (Wormith & Olver, 2002). This difference was particularly high for offenders considered to be high-risk.

O’Neill, Lidz, and Heilbrun (2003) examined treatment compliance in 64 males with substance abuse problems in a partial hospitalization program. The researchers reported a significant negative correlation between risk formulations and the quality of program participation and attendance. Criminal recidivism the year after program completion showed also a significant negative correlation with treatment participation and attendance (O’Neill et al.).

Falkenbach, Poythress, and Heide (2003) studied the relation between psychopathic features and treatment program compliance and outcomes in a sample of 69 adolescents in a court diversion program. Psychopathic traits were assessed using the Antisocial Process Screening Device (Frick & Hare, 2001) and a modified version of the Child Psychopathy Scale (Lynam, 1997). They found significant correlations with program noncompliance and rearrest at 1 year and the total scores for both measures.
These results are echoed by illustrated by Burt’s study (as cited in Wormith & Olver, 2002) in which high- and moderate-risk offenders, as identified by the Psychopathy Checklist–Revised (Hare, 1991a), who were referred and admitted to a violent offender treatment program spent about 30% less time in treatment than low-risk offenders who began the same program.

Closer examination of the relationship between treatment participation and noncompliance with violence has revealed specific characteristics to be watchful for. Client factors that may put increase the chances of an offender having issues in treatment, thereby increasing the risk of future violence, include: client motivation (Girard, 1999), denial (Hunter & Figueredo, 1999), psychopathic traits (Ogloff, Wong, & Greenwood, 1990), unemployment (Browne, Foreman, & Middleton, 1998), substance abuse (Browne et al., 1998), antisocial attitudes (Gendreau et al., 1996), and intelligence (Gendreau et al., 1996).

**Supervision Noncompliance**

Compliance with supervision is also correlated with violent behavior. Compared to inpatients released with three months outpatient commitment, a significantly lower incidence of violent behaviour occurred in subjects with greater than six months outpatient commitment (Swanson et al., 2000). Lowest risk of violence was associated with extended outpatient commitment combined with regular outpatient services, adherence to prescribed medications and no substance misuse (Swanson et al., 2000). The combination of substance abuse and medication noncompliance is not uncommon, and is significantly correlated with violence among patients subject to outpatient commitment (Swartz et al., 1998).
Outpatient commitment may significantly reduce risk of violent behaviour in persons with severe mental illness, in part by improving adherence to medications while diminishing substance misuse (Swanson et al., 2000). Olfson and colleagues (2000) suggested that medication noncompliance be impacted by a strong and prolonged treatment alliance. Taken together, these findings illustrate the interconnectedness of certain risk factors and urge an examination of the exacerbating and mitigating effects among variables.

Treatment and supervision compliance is far from mutually exclusive from other variables. For example, in addition to being at greater risk of violence, noncompleters also have lower educational attainment and a less stable and substantial employment background (Wormith & Olver, 2002). These findings prompt curiosity about “risk and responsivity” (i.e., matching treatment style and intensity with level of risk and client characteristics). Was the treatment too advanced for some participants? Risk management possibilities also emerge. Might assisting the client in securing stable employment and/or providing education support progress in treatment? The consideration of the causal nexus encourages such speculation. In addition, by considering the client’s propensity for violence in a comprehensive fashion, risk factors will emerge as both dynamic and causal, identifying primary targets for risk management.

*Financial Problems and Stability of Living*

Financial problems have shown modest predictive power in meta-analytic studies (Gendreau et al., 1996) and decades of research have shown reliable associations between poverty and high crime rates (Sampson & Morenoff, 2006). Levels of personal distress
resulting from transience and instability of daily living have also emerged as risk factors with modest predictive validity for violent recidivism (Gendreau et al.). Taken together, these findings form the present item. “Financial problems and stability of living” then, refers to worry about financial survival, problems paying bills, not enough money to get by, and transience.

In a sample of involuntarily hospitalized patients granted involuntary outpatient commitment for 12 months, Swanson and colleagues (2002) found that those in the sample without stable living arrangements were twice as likely to have their outpatient status revoked. An extensive retrospective study by Zamble and Quinsey (1997) investigated risk factors that lead to recidivism among offenders released from prison. The researchers specifically looked at the thirty days prior to reoffending and were able to identify problem areas that precipitated their relapse into violent crime. Among the variables demonstrating significant differences between groups of recidivist and nonrecidivist offenders were both employment and financial problems. These findings are echoed by more recent research by Weist, Acosta, and Youngstrom (2001). They showed a powerful effect of stressful life events with increased probability of multiple forms of violence. More specifically, life stress was the only variable in the study that significantly predicted violent behavior, including domestic and extra-familial violence (Weist et al.).

Research with community-based samples also supports financial problems and life instability to be correlated with violence. Past epidemiological studies have revealed a significant correlation between violence and low socioeconomic status and low educational level (Link et al., 1992: Swanson et al., 1990). A study aimed at assessing
ecological variables found an odds ratio of 2.7 for patients living in neighborhoods of poverty (Silver, Mulvey, & Monahan, 1999). Swanson and colleagues (2002) assert that homelessness is highly correlated by virtue of its may connectivity with a number of specific contextual risk factors associated with violence, such as fighting as a means of survival in dangerous congregate shelters or on the streets in high-crime urban areas. Also, fighting may lead to eviction from housing (Swanson et al., 2002). Economic stress has also been found to contribute to elevated risk for children and youth’s witnessing and victimization by violence (Crouch, Hanson, Saunders, Kilpatrick, & Resnick, 2000).

The relationships between financial strain, life instability, and violence are among the most convoluted and interconnected of the variables with an abundance of practical and theoretical explanations available. Theoretically, transience and homelessness may weaken social ties and have been associated with family breakup, social exclusion, and stressful life events (Marris, 1987). As such, poverty is a key factor in both social control theory (weakening or attenuating social bonds) and strain theory (poverty, personal stress, marginalization) (Cullen & Agnew, 2003). Additional accounts have financial problems playing roles in. Far from asserting that poor people are violent, statistical correlations between money problems and the accompanying stressors and uncertainty that follow should not be ignored. Clearly, considering these variables may have implications for both risk assessment and management.

Employment and School

Low levels of performance and little satisfaction in school or work puts people at greater risk of criminal activity including violent behavior (Andrews et al., 2006). This
variable encompasses levels of educational and vocational success such as job skills, current unemployment, low wages, and employment history as well as overall performance and level of satisfaction relevant to work or school. In addition to being a regular inclusion in standardized risk assessment tools, employment and school-related problems are supported by research to predict violence. Below are some examples.

Menzies and Webster (1995) found, in a sample of mentally disordered offenders, that unemployment at time of arrest was one of four variables from a larger set of factors that predicted violence. Harris et al. (1993) found that men who recidivated violently were employed less than 50% the duration of the rest of the sample. A prospective study that examined a number of risk variables during an offender sample’s re-entry into the community by Brown, St. Amand, and Zamble (2009) found that dynamic variables outperformed static variables in predicting conditional release failure. Among the strongest and most robust predictors of violent recidivism was employment. In fact, incarcerated individuals released into the community with employment problems demonstrated a 30% greater chance of violent recidivism than those securing stable employment (Kim, Yoo, & McCarty, 2008)

While this variable is relatively easy to assess in clients, its’ relationship with violent behavior is less straightforward. It is generally accepted that in accordance with strain theory (Cohen, 1955), people with lower social capital have fewer life chances and more restricted opportunities than do those with greater capital. Similarly, job loss and dropping out of school may lower economic and social opportunities, whereas completing job skills training or obtaining a GED may increase these chances. Given that capital can be gained and lost and occupational status may change, these variables are
Persons with diagnoses such as substance abuse, severe mental illness, or personality disorder will be generally less suited to mainstream employment opportunities. While it is difficult to hold a job for any length of time, the lack of employment puts them at greater risk of crime including violence. Much of this relationship can be represented within a negative feedback cycle in which the outcomes predispose the individual to subsequent undesirable situations. Of course, the converse is also true and facilitating individuals at risk of violence to secure stable employment can result in numerous positive effects.

**Limitations**

It must be noted that it is not completely clear what the most promising risk factors are. There are several reasons for this. First, research studies have differed in the variables measured, so patterns within published findings are not readily apparent. Second, existing studies have examined violent recidivism in varying depths and scopes. For example, some studies focus on specialized forms of violence such as sexual violence or exclusively violent acts causing bodily harm and these types of aggressive behavior have different predictive variables. Third, many studies have not used “gold-standard” measures of risk factors, but rather items or scales that appear in the risk assessment instruments used. Finally, research samples differ by location and research question(s), making comparison challenging and at times unhelpful.

Such variations within the literature give rise to differing results, which sometimes contradict each other. One illustration of this can be found in the criteria
contained within available standardized tools, as there is variation in the criteria used to assess for risk. The HCR-20 (Webster, Eaves, Douglas, & Wintrop, 1995) and the VRAG (Harris, Rice, & Quinsey, 1993), reviewed in Chapter 4 for example, contain different variables and combine them to formulate a risk formulation in dissimilar ways. Specifically, the VRAG assesses the client’s marital status, injuries sustained by the victim, and whether the client is married whereas the HCR-20 does not. Similarly, the HCR-20 asks the user to examine more subjective variable such as the clients’ attitudes, future plans, and degree of insight into their behavior, whereas the VRAG does not.

Again, we are left to conclude that using empirically derived variables to assess for risk is in alignment with best-practice conduct but it is equally important to use clinical judgment to critically evaluate how such variables work to mitigate or increase risk for each individual. While the variables considered in an assessment is of utmost importance, the interactions amongst risk variables may also be a valuable consideration. While beyond the scope of this review, the following example is illustrative.

In contrast to many stereotypes, the literature examining mental illness as a static risk factor in the community suggests most mentally ill persons are not significantly more violent than the general population (Monahan et al., 2005). They are, however, at higher risk of substance use disorders (Torrey et al., 2008). Taken together with the finding that substance abuse in combination with certain psychiatric symptoms (such as TCO symptoms) increase the risk of violent behavior dramatically (Scott & Resnick, 2006; Swanson et al., 2006) these risk factors, particularly when present together, warrant considerable attention.
Summary

Variables considered by researchers and clinicians during studies, service-provision, and risk assessment tool development vary noticeably. These disparities are the focus of much debate. While research efforts attempt to “catch up” and provide the empirical evidence necessary gain resolution in this regard, the writer recommends that clinicians be attentive to numerous historical, contextual, and individual variables (and the interplay between them) currently supported by the literature as meaningful to risk assessment and management. Specifically, familiarity with the following risk variables will equip clinicians to identify persons at risk to harm others:

- Age
- Sex/Gender
- History of Violence
- Psychopathy
- Antisocial Behavior
- Negative Affect
- Impulsivity
- Psychosis
- Pro-criminal Attitudes
- Substance Abuse
- Family and Significant Other
- Associates and Community
- Treatment and Supervision Noncompliance
- Financial Problems and Stability of Living
- Employment and School
Conclusions

Researchers have argued that the superior accuracy of actuarial approaches in risk assessment demands that it be used over approaches using clinical judgment (Almvik, Woods, & Rasmussen, 2000; Douglas & Webster 1999; Glover, Nicholson, Hemmati, Bernfeld, & Quinsey, 2002; Harris, Rice, & Camilleri, 2004; Hilton, Harris, & Rice, 2006). Actuarial measures, based largely on historical data and enduring character traits, are indeed effective and reliable indicators of life-long risk. Actuarial risk variables, however, do not address the clinical influences that may be influencing behavior or effective management of risk through treatment and, in general, fail to capture individual risk trajectories that may substantially deviate from the risk profile.

Thus, although these models have the advantage of superior statistical accuracy, they may be of limited use to clinicians conducting daily assessments and making decisions regarding committing and releasing clients (Dvoskin & Heilbrun, 2001). It may be said then, that actuarial assessments describe the "risk climate," in contrast to the clinician who deals with daily "risk weather." To sum, it is necessary to consider both static and dynamic variables, including those detailed above, while assessing risk of violence in order to balance risk prediction with risk prevention.
Appendix E

The “Central 8” Beginning with the “Big 4” (Andrews, Bonta, & Wormith, 2006)

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>History of antisocial behavior</td>
<td>Early and continuing involvement in a number and variety of antisocial acts in a variety of settings</td>
</tr>
<tr>
<td>Antisocial personality pattern</td>
<td>Adventurous pleasure seeking, weak self-control, restlessly aggressive</td>
</tr>
<tr>
<td>Antisocial cognition</td>
<td>Attitudes, values, beliefs, and rationalizations supportive of crime; cognitive emotional stages of anger, resentment, and defiance; criminal versus anticriminal identity</td>
</tr>
<tr>
<td>Antisocial associates</td>
<td>Close association with criminal others and relative isolation from anticriminal others; immediate social support for crime</td>
</tr>
<tr>
<td>Family and/or marital</td>
<td>Two key elements are nurturance and/or caring &amp; monitoring and/or supervision</td>
</tr>
<tr>
<td>School and/or work</td>
<td>Low levels of performance and satisfactions in school and/or work</td>
</tr>
<tr>
<td>Leisure and/or work</td>
<td>Low levels of involvement and satisfactions in anticriminal leisure pursuits</td>
</tr>
<tr>
<td>Substance abuse</td>
<td>Substance abuse</td>
</tr>
</tbody>
</table>

Relatively minor risk and/or need factors include the following: personal and/or emotional distress, major mental disorder, physical health issues, fear of official punishment, physical conditioning, low IQ, social class of origin, seriousness of current offense, other factors unrelated to offending. (Andrews, Bonta, and Wormith, 2006).
Appendix F

Glossary of Terms

The following definitions have been operationally constructed by the writer to avoid potential confusion resulting from references people, behaviors, situations, and the like using multiple different terms. The following definitions are largely based on information retrieved from the World Wide Web from en.wikipedia.org, a free, online encyclopedia.

**Antisocial: (Against society)** is often used in colloquial speech to mean unfriendly or not sociable (asocial), expressing **antisociality**. In more scientific use, **antisocial** refers more specifically to a person who is harmful or hostile to others, or to society in general.

**Best practice:** An idea that asserts that there is a technique, method, process, activity, incentive, or reward that is more effective at delivering a particular outcome than any other technique, method, process, and so forth. The idea is that with proper processes, checks, and testing, a desired outcome can be delivered with fewer problems and unforeseen complications.

**Client:** A generic term used by the writer throughout this project to refer to a patient, resident, or other form of service-user receiving psychological services.
Clinician: A generic term used by the writer throughout this project to refer to individual’s qualified to provide psychological services including counsellors, psychologists, psychiatrists, psychiatric nurses, etc.

Control/index event/behavior: The client’s high-risk behavior being referred to, anticipated, or in question. For example, while conducting examining human behavior, researchers may be focused on the effect of manipulating a variable on a specific behavior such as the effect of substance abuse treatment on violent recidivism. In this case, violent behavior would be the control behavior. While assessing the risk of an offender, it will be important to know the behavior that resulted in criminal charges i.e., the index offense or control event.

Diagnosis: The identification of a mental illness or health problem by means of its signs and symptoms. This involves ruling out other illnesses and causal factors for the symptoms.

Discharge: The formal end of an episode of care. Types of discharge include inpatient discharge, day-case discharge, day-patient discharge, outpatient discharge, and discharge from the care of allied health professionals.

Evidence-based: The process of systematically finding, appraising, and using research findings as the basis for clinical decisions. Evidence-based practices involve the
conscientious, explicit and judicious use of current best practice procedures in making
decisions about the care of clients.

**Impulsivity:** A type of human behavior characterized by the inclination of an individual
to act on impulse rather than thought. Although part of the normal behavior, impulsivity
also plays a role in many mental illnesses.

**Outcome:** The end result of a system, process or care, treatment and/or rehabilitation.

**Risk:** The chance of something happening that will have an impact upon objectives. It is
measured in terms of consequences and likelihood. The likelihood, high or low, that
somebody or something will be harmed by an unwanted event or incident, multiplied by
the severity of the potential harm.

**Risk assessment:** The process of determining what can happen, why and how. The
process of risk analysis and risk evaluation, which is used to determine risk management
priorities by evaluating and comparing the level of risk against organizational standards,
predetermined target risk levels or other criteria. A systematic use of available
information to determine how often specified events may occur and the magnitude of
their likely consequences.

**Risk formulation:** The systematic calculation and communication of the level of risk
posed by an individual. Following a risk assessment, a clinician may develop and
disseminate a risk formulation to inform others of a client’s potential or likeliness (i.e., low, moderate, or high for example) to behave a certain way (e.g., violently).

**Risk management**: The systematic application of management policies and procedures to the task of identifying, analyzing, assessing, treating, monitoring, and communicating risk. It is an iterative process consisting of steps that when undertaken lessen risk. In the context of the current project, risk management refers to minimizing the chance that the client will act out violently.

**Risk prediction**: The assigning of probability to a person's behavior and indexing the likelihood of that person engaging in a specific risk behavior. Typically risk prediction stems from the consideration of variables empirically supported as correlated with violent behavior.

**Treatment plan**: The plan detailing timelines and responsibilities for the implementation of agreed therapeutic interventions including those that ameliorate risk.

**Violence**: The expression of physical force against another person. It is taking action against another person and imposing one's will with disregard for the rights of the target.