

**UNDERSTANDING PAROLE RECOMMENDATIONS:  
THE CONTRIBUTION OF PAROLE OFFICERS**

by

Renée Gobeil

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### Abstract

Parole decisions have important implications in terms of public safety, fiscal resource management, and fair treatment of offenders, yet they are rarely studied. Even more infrequently studied are the relevant recommendations formulated by parole officers; this oversight is striking because final parole decisions are strongly associated with recommendations, even after accounting for the fact that they are made based on similar information. Three studies were conducted to begin to address this paucity of scholarly research regarding parole recommendations: (1) an exploratory examination of the association of three manipulated offender characteristics (criminal history, institutional adjustment, and gender) and of parole officer cognitive style and legal authoritarianism on the parole officers' simulated recommendations ( $n = 48$ ); (2) an examination of parole officers' perceptions of a one-day training intervention focused on risk assessment and the use of a structured professional judgment tool to assist in recommendation formulation ( $n = 461$ ); and, (3) an examination of the training's effectiveness as measured by the quality of the rationales for recommendation written by parole officers both prior to and after training participation ( $n = 131$ ). Overall, results very preliminarily suggest that there may be room for improvement in the manner in which parole officers reach, formulate, and document their recommendations. There was considerable variability across parole officers in the simulated recommendations made as well as the information consulted in reaching them. In addition, though the manipulated offender characteristics were associated with simulated recommendations, associations were not fully consistent with expectations, suggesting that parole recommendations may be influenced by factors other than those examined, perhaps in an idiosyncratic fashion that also varies across

parole officers. Finally, despite parole officers reporting finding the training interesting, informative, and useful, training did not result in improvements in their documented recommendations. Overall, recommendations were of modest quality and were not well rooted in empirically-supported information. If these findings are replicated, CSC may need to address, through training and policy changes, the manner in which its parole officers formulate recommendations, in order to bring about improvements that ensure these recommendations are reproducible, transparent, defensible, of high quality, and guided by evidence.

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**Table of Contents**

Abstract .....	ii
Acknowledgements .....	iv
Table of Contents .....	v
List of Tables .....	viii
List of Figures .....	x
List of Appendices .....	xi
Parole Decisions.....	1
Parole in Context.....	4
Operational Reality .....	6
The Role of Parole Officers in Parole Decision Making .....	8
Parole Officers' Responsibilities .....	10
Parole Officers' Recommendations .....	11
Making a Parole Decision .....	13
Decision Making Approaches.....	13
Factors Influencing Parole Decisions .....	15
Decision Making Theory .....	17
Guiding Parole Decisions: A Structured Framework .....	24
Framework Components .....	26
Evaluation of the Framework.....	30
Program of Research.....	36
Study 1: Exploratory Examination of Parole Officers' Parole Recommendations.....	38
Factors Influencing Parole Decisions .....	38
Study Overview .....	46
Hypotheses .....	47
Method .....	48

Understanding Parole Recommendations	vi
Participants.....	48
Procedure .....	50
Materials .....	51
Analytic Strategy .....	58
Results.....	60
Data Entry and Screening .....	60
Vignette-Level Analyses.....	64
Parole Officer-Level Analyses.....	75
Discussion .....	84
Study 2: Evaluation of Training in the Use of the Structured Release Decision Making Framework .....	94
Training.....	96
Training Evaluation .....	102
Study Overview .....	103
Method .....	103
Sample.....	103
Procedure .....	104
Materials .....	105
Analytic Strategy .....	106
Results.....	107
Data Entry and Screening .....	107
Wave 1: Training Pilot Group.....	109
Wave 2: Train-the-Trainers Group .....	114
Wave 3: National Implementation Group.....	124
Discussion .....	129
Study 3: Risk Relevance of Pre- and Post-Training Parole Recommendations .....	135
An Alternate Indicator of Parole Decision Quality.....	136

Study Overview .....	137
Hypotheses.....	138
Method .....	139
Sample.....	139
Procedure .....	139
Materials .....	141
Analytic Strategy .....	145
Results.....	146
Data Entry and Screening .....	146
Descriptives.....	148
Pre- to Post-Training Differences .....	151
The Role of Pre-Training Knowledge.....	154
Additional Analyses.....	156
Discussion.....	162
General Discussion .....	172
Summary of Findings.....	172
Parole Officers' Contributions to Parole Decision Making.....	175
The Role of Discretion.....	177
The Role of Evidence-Based Practice.....	180
Implications Specific to CSC and the PBC.....	182
Theoretical Implications .....	186
Limitations and Strengths .....	188
Future Directions .....	191
Conclusion .....	193
References.....	195
Appendices.....	232

### List of Tables

Table 1: Participants' Demographic and Employment Characteristics .....	50
Table 2: Percentage of Grant Recommendations by Manipulated Vignette Characteristics.....	69
Table 3: Generalized Estimating Equation of Recommendation on Manipulated Vignette Variables .....	70
Table 4: Mean Number of Information Domains Accessed by Manipulated Vignette Characteristics.....	73
Table 5: Generalized Estimating Equation of Release Recommendation on Information Domains Accessed .....	75
Table 6: Release Recommendation Variables by Demographic and Employment Characteristics.....	77
Table 7: Participants' Mean Cognitive Style and Legal Authoritarianism Questionnaire Scores.....	79
Table 8: Cognitive Style and Legal Authoritarianism Questionnaire Scores by Continuous Employment Characteristics.....	80
Table 9: Cognitive Style and Legal Authoritarianism Questionnaire Scores by Categorical Demographic and Employment Characteristics .....	82
Table 10: Multiple Regression of Recommendation Making Variables on Cognitive Style and Legal Authoritarianism Measures.....	84
Table 11: Wave 1 Trainees' Responses to Quantitative Evaluation Items .....	110
Table 12: Wave 1 Trainees' Qualitative Responses: Positive Themes .....	112
Table 13: Wave 1 Trainees' Qualitative Responses: Themes Regarding Areas to Change .....	113
Table 14: Wave 2 Trainees' Responses to Quantitative Evaluation Items .....	115
Table 15: Wave 2 Trainees' Qualitative Responses: Positive Themes .....	117
Table 16: Wave 2 Trainees' Qualitative Responses: Negative Themes.....	119
Table 17: Wave 2 Trainees' Qualitative Responses: Themes Regarding Areas to Change .....	121
Table 18: Wave 3 Trainees' Responses to Quantitative Evaluation Items on Training Program Materials.....	125

Table 19: Wave 3 Trainees' Responses to Quantitative Evaluation Items on the Training ..... 121

Table 20: Wave 3 Trainees' Responses to Evaluation Quantitative Items on Training Facilitator ..... 128

Table 21: Percentage of Recommendations of Each Type ..... 149

Table 22: Risk Communication and Conceptualization ..... 150

Table 23: Ratings of Risk Relevance Items ..... 152

Table 24: Correlations of Pre- and Post-Training Coded Measures with Pre-Training Knowledge Score ..... 155

Table 25: Correlations of Change on the Coded Measures with Pre-Training Knowledge Score ..... 156

Table 26: Coded Measures' Measures of Central Tendency, by Type of Assessment for Decision ..... 157

Table 27: Mean (SD) Risk Relevance Rating, by Parole Recommendation ..... 160

Table 28: Level of Support, by Assessment Type ..... 161

Table 29: Percentage Agreement with Recommendation, by Assessment Type ..... 162

**List of Figures**

Figure 1: Percentage of Vignettes for Which Release Was Recommended, by Vignette Category .....64

Figure 2: Percentage of Cases Wherein Each Additional Information Domain Was Accessed, by Vignette.....66

Figure 3: Mean Representativeness Rating, by Vignette.....67

Figure 4: Three-Way Interaction for the Percentages of Cases Where Grant Was Recommended.....71

Figure 5: Mean Percentage of Vignettes Wherein Information Domain Accessed.....76

**List of Appendices**

Appendix A. Informed Consent.....	232
Appendix B. Background Questionnaire .....	234
Appendix C. Case-Based Vignettes.....	235
Appendix D. Measures of Personality and Cognitive Style .....	260
Appendix E. Debriefing.....	265
Appendix F. Description of Data and Their Characteristics (Study 1).....	266
Appendix G. Correlations amongst Measures (Study 1).....	268
Appendix H. Evaluation Forms .....	270
Appendix I. Knowledge Questionnaire.....	275
Appendix J. Risk Relevance Coding Form.....	279
Appendix K. Derivation of Composite Categories for Study 3's <i>Supported</i> Question ..	283
Appendix L. Description of Data and Their Characteristics (Study 3).....	284

### **Parole Decisions**

As Gottfredson and Gottfredson (1988) noted nearly 25 years ago, “paroling decisions are highly visible, much discussed, and widely debated” (p. ix). Parole decisions receive extensive attention due to the seriousness of consequences associated with them. They involve the balancing of a number of often conflicting goals – protection of the public, reduction of crime and victimization, acknowledgement of offender rehabilitation, and equitable treatment for offenders – and when parole decisions are of poor quality, there can be serious ramifications in each of these areas. Offenders granted conditional release when they are not truly manageable in the community may become involved in further crime, potentially cause serious harm to others, be responsible for significant costs, and undermine public confidence in the criminal justice system. Conversely, offenders inappropriately denied parole may miss or be delayed in opportunities to be managed in the community where they could benefit from community support, employment prospects, and the opportunity to reintegrate into the community as law-abiding citizens. In addition to consequences for offenders, this results in the correctional system incurring significant supplementary costs, as the cost of an offender’s maintenance in an institution is about four times that of community accommodation (Public Safety Canada, 2011).

Given these consequences, it is surprising that the extensive debate and discussion referred to by Gottfredson and Gottfredson (1988) occur mainly in the popular media. While it is common for news coverage to include questioning of the merits of parole systems or to call attention to paroled offenders who re-offend, the academic literature has traditionally failed to keep pace. In recent years, there has begun to be a resurgence

in academic and political interest in the area (e.g., Campbell, 2008; Caplan, 2010a, 2010b; Burke, 2010a, 2010b; Hannah-Moffat, Maurutto, & Turnbull, 2009; Lindsey & Miller, 2011), yet overall, parole continues to receive limited attention within the correctional and criminal justice fields. This discrepancy is particularly striking given that a great deal of research has been conducted on the closely related topic of risk assessment (e.g., Andrews & Bonta, 1995; Campbell, French, & Gendreau, 2009; Hanson & Morton-Bourgon, 2009; Hare, 2003). A significant body of literature contributes to understanding the offender characteristics related to re-offending, but a comparatively insignificant amount is available on one of the major contributors to having an opportunity to re-offend – the conditional release decision. Of the limited literature that does exist, moreover, much was conducted several decades ago.

If research on parole board members' decision making represents a gap in our understanding, that focused on the contribution of correctional staff – and particularly parole officers – to parole decision making embodies a chasm. This lack is even more striking given that parole officers' recommendations play an important and unique role in the release decision making process (Carroll & Burke, 1990; Carroll, Wiener, Coates, Galegher, & Alibrio, 1982). Despite this important link, the number of studies conducted specifically on the influence of parole officers and other institutional staff members on conditional release decisions can almost be counted in the single digits. It is for this reason that a series of studies were conducted that focused on parole officers' contribution to conditional release decision making. The studies' objectives were to provide baseline information on the factors that influence parole officers' release recommendations, to evaluate parole officers' perceptions of training in the area, and to

determine if training led to improvements in conditional release recommendations.

Given the limited state of knowledge on the contribution of parole officers to parole decision-making, however, the context for this study relied mainly on research conducted with parole board members and other forensic decision makers.

### Parole in Context

Given that the term *parole* has had a number of meanings in different contexts, an operational definition is necessary to guide the present discussion. In this work, parole refers to discretionary conditional release, whereby an offender may be released to the community after having served a portion of his or her sentence. Factors guiding discretionary conditional release decisions vary by jurisdiction, but typically include public safety, legislative considerations, and the offender's criminal history and institutional adjustment. Though the term parole is sometimes also used to refer to mandatory release, where offenders are released after serving a set portion of their sentence, this type of release is not considered in the present document. Mandatory release is compulsory and by definition precludes a conditional release decision making process.

Historically, parole emerged from the use of "tickets of leave" in the mid-nineteenth century in the English penal system (Gottfredson & Gottfredson, 1988). These tickets were used as part of a gradual reduction of custodial control and supervision from strict incarceration to community reintegration, and represented the final step in this process prior to the granting of a conditional pardon and restoration of liberty. In 1899, tickets of leave began to be used in Canada (NPB, 2005). Sixty years later, in 1959, the *Parole Act* was enacted, and Canada's National Parole Board (NPB) – which was renamed the Parole Board of Canada (PBC) in 2010 – was created. The *Parole Act* had two fundamental impacts: it removed control of parole decisions from the penal system, shifting it to an independent agency, and it officially espoused the concept

of rehabilitation. With the creation of the NPB, the rate of parole release increased considerably.

At its inception, the Board comprised five members who were responsible for conditional release decisions for all federally-sentenced offenders, as well as for provincially-sentenced offenders under their jurisdiction (Vantour, 1985). The board members rendered decisions based solely on reviews of the offenders' files, and no reasons for their decisions were provided. Further, no review or appeal procedures were available to offenders who were dissatisfied with the decision they received.

Within 15 years, however, a number of reports critiquing the parole process in Canada were released (e.g., Department of the Solicitor General, 1973; Law Reform Commission of Canada, 1975; Standing Senate Committee on Legal and Constitutional Affairs, 1974). Collectively, the authors of these reports argued that the existing parole process was based on unclear criteria, and that offenders' rights were not being respected throughout the parole process. More specifically, they contended that an offender had the right to be granted a hearing where he or she could appear and be heard; to be represented by an attorney during this process; to be made aware, in writing, of the reasons for the parole decision; and, to have recourse to a review or an appeal process.

As a result of these critiques, the PBC's policies and procedures gradually evolved. The Board now conducts hearings in many cases, provides written reasons for decisions, and offers appeal procedures. Since 1992, the Board has been guided in reaching parole decisions by the *Corrections and Conditional Release Act* (1992), which mandates the Board to "contribute to the maintenance of a just, peaceful and safe society by means of decisions on the timing and conditions of release that will best facilitate the rehabilitation

of offenders and their reintegration into the community as law-abiding citizens” (section 100). Moreover, the PBC’s core values dictate that, in order to ensure that offenders are treated fairly, the Board must decide conditional release applications as liberally as possible, while still protecting the public and effectively managing risk (NPB, 2003). Clearly, these multiple goals may sometimes conflict.

### **Operational Reality**

In addition to making decisions regarding the initial granting of conditional release, the Board also considers applications for the continuation or broadening of conditional release and makes decisions regarding whether to revoke the conditional release of offenders whose parole has been suspended. The decision making process is made difficult by the fact that little guidance is provided to board members in reaching parole decisions. Not only must they make a variety of different types of decision, but, for instance, the PBC’s Policy Manual provides an extensive list of case aspects to be considered in approaching a release decision, but offers no guidelines on how to assimilate the various factors (PBC, 2011a). To further complicate matters, some of the listed factors (e.g., the offender’s attitude during incarceration, the offender’s social history) are quite broad and vulnerable to subjective interpretation. Given these difficulties, it is not surprising that research demonstrates considerable inter-individual variability in both parole decisions reached (Conley & Zimmerman, 1982; Gobeil, 2006; Gobeil & Serin, 2009) and in the extent to which adequate explanations for these decisions are provided by board members (Hannah-Moffat, 2005). Such variability is consistent with findings from other forensic decision making research. For instance, researchers have determined that individuals making decisions to discharge offenders

found not criminally responsible on account of mental disorder also vary considerably in the decisions they reach, even when presented with identical information (Callahan & Silver, 1998).

Parole board members have also been found to vary in the approaches they take to reach decisions, including their use of file information and the way in which they organize and weigh information (Wilkins & Gottfredson, 1973). Board members differ in their self-reported perceptions of the relevance of different information categories (Carroll & Burke, 1990), as well as in their perceptions of the *relative* relevance of various information, as demonstrated by rankings of the importance of different types of file information (Gottfredson & Ballard, 1966; Hoffman, 1972; Kinnevy & Caplan, 2008; Rogers & Hayner, 1968; Sacks, 1977; Scott, 1974) and in the factors most linked to their parole decisions, as demonstrated by the associations between file information and parole decision (Conley & Zimmerman, 1982).

### **The Role of Parole Officers in Parole Decision Making**

It is notable that research on parole decision making has largely ignored existing evidence that one of the factors consistently associated with release decisions is others' documented suggestions. In examining bail decisions among judges in the United Kingdom, Dhimi (2003) found a strong tendency to base decisions on file information such as police and prosecution recommendations. Similarly, Ebbesen and Konečni (1981), in researching American judges' sentencing decisions, found that in almost 90% of over 1,000 cases, the judge's decision was most strongly linked to the probation officer's recommendation (of 350 candidate predictors). Others have also found strong correlations between judges' sentencing decisions and probation recommendations (American Institute of Justice, 1981, cited in Petersilia, 1997; Leiber, 2011; Leifker, 2009; Norman & Wadman, 2000)

Turning to parole, researchers have found that institutional staff's recommendations were the strongest predictors of one parole board's final parole decisions (Carroll, Galegher, & Wiener, 1982). Indeed, high rates of concordance between institutional staff's recommendations and final parole board decisions have been recorded both in Canada (ranging from 66% to 89%; Hanby, Sowden, & Serin, 2008; NPB, 1996, cited in Samra-Grewal, Pfeifer, & Ogloff, 2000; Zinger, 2012) and in the U.S. (ranging from 80% to 84%; Pogrebin, Poole, & Regoli, 1986; Proctor, 1999). According to PBC data published in Zinger (2012), concordance is stronger for cases resulting in a decision to deny parole. Amongst the 1,169 cases from fiscal year 2009-10 where staff recommendations and PBC decisions were discrepant (representing 14.2% of the total of 8,231 cases), those where institutional staff recommended that parole be

granted but the PBC denied it were more than five times as common as cases where institutional staff recommended that parole be denied but it was granted. Even after applying a corrective factor to account for the fact that there were more grant decisions overall (and therefore more opportunities to be discrepant on those decisions), those where the PBC decision was more conservative than institutional staff's recommendation were still 3.3 times more numerous than those where it was more liberal.

While it could be argued that high rates of concordance are unsurprising given that institutional staff and board members are both criminal justice professionals presented with the same information, research suggests that the agreement represents something more. Metchik (1988) demonstrated that board members' decisions to deny or grant parole are strongly statistically associated with institutional parole officers' recommendations. Others have also found that the predictive value of institutional staff members' recommendations remained significant even after statistically controlling for the effect of information to which both these staff and parole board members have access (Carroll et al, 1982). In addition, Holland, Holt, and Brewer (1978) found that even when institutional staff members and parole board members have access to the same information, they rely on different aspects of the information to support their parole recommendations and decisions. Further, Carroll and Burke (1990) found that when institutional staff members' recommendations and official decision making guidelines suggest different outcomes, parole board members usually decide in accordance with the institutional staff member, especially when the recommendation is negative.

**Parole Officers' Responsibilities**

Parole officers within the Correctional Service of Canada (CSC) have as their main responsibilities the assessment of offenders' risk and the management of offenders' correctional plans throughout their sentence, both during incarceration and when under community supervision. While CSC employs both institutional and community parole officers, their roles are not as clearly delineated as those titles would suggest; both types of parole officers may have the opportunity to work with an offender during his or her incarceration (e.g., community parole officers usually begin the intake process) and his or her community supervision (e.g., community parole officers and institutional parole officers consult one another in formulating recommendations regarding release and suspension) .

By fulfilling their duties, collectively known as *case management*, parole officers contribute directly to CSC's mission of ensuring the protection of the public and facilitating the reintegration of offenders. Parole officers identify the dynamic criminogenic needs of offenders, develop correctional plans to address these needs, and assist offenders in their completion of these plans. Parole officers also make recommendations regarding offender transfers, temporary absences, and, most importantly in this context, conditional release. In reaching these recommendations, they work collaboratively with other members of a case management team, including the offender him- or herself, the correctional officer or primary worker, their community or institutional counterpart, program officers, the psychologist, the Aboriginal Elder, if applicable, and any other relevant persons.

Though parole officers work together with the remainder of the case management team to formulate parole recommendations, it is ultimately their responsibility to write an *Assessment for Decision* summarizing relevant information from the offender's file and formulating a recommendation regarding release or suspension. The parole officer must also ensure that the offender file is complete and up-to-date, that all documentation required by the PBC has been provided within appropriate timelines, and that a summary of all file information is produced (CSC, 2009). The assessment for decision, the summary report, and all other file information, is shared with the PBC.

Studies focused on concordance rates between institutional staff recommendations and PBC decisions typically use assessments for decisions written by parole officers as the measures of the staff recommendation. Other than concordance research, however, other examinations of these assessments are nearly non-existent. One author has argued that assessments submitted to the PBC by parole officers tend to be too long and to lack a critical analysis of file information (Taylor, 1998). This argument, however, was based on largely anecdotal evidence, and is likely not reflective of all parole officers' written documentation. Nonetheless, it is clear that parole officers' assessments for decision have enjoyed even less research attention than have parole decisions themselves.

### **Parole Officers' Recommendations**

As mentioned, there are often high rates of concordance between parole officers' recommendations and PBC decisions. Nonetheless, there are important differences in the way in which recommendations and decisions are reached. First, parole officers benefit from having had many more interactions with the offender throughout his or her sentence than do board members in the one parole hearing typically held. While there is evidence

that parole board members are influenced by interviews conducted as part of the parole hearing, sometimes in such a way as to *increase* decisional errors (Ruback & Hopper, 1986), the greater frequency with which parole officers are in contact with offenders means they are probably considerably less likely to make the same error. Parole officers have a greater baseline knowledge of the offender, and are able to weigh file information and interview results against the behaviour which they witness day-to-day. While their assessments for decision should represent the additional knowledge gained in this context, it is likely difficult to reflect this wealth of subtle knowledge in a concise and complete manner. In this manner, parole officers may have an advantage in terms of being able to weigh a more comprehensive body of information in reaching a recommendation.

Conversely, however, PBC members receive greater training in terms of decision making per se. Parole officers' training tends to focus on issues related to case management and risk assessment, while PBC members receive training in using a decision making framework and in formulating and documenting decisions. In order to further increase parole officers' ability to formulate strong parole recommendations, then, and also to address the concerns outlined by Taylor (1998; above), it was considered advantageous to expand training on parole decision making to parole officers.

## **Making a Parole Decision**

### **Decision Making Approaches**

Inter- and intra-individual variability in decision making strategies, together with the effects of decision makers' previous experience and of context, can clearly lead to inconsistency in decisions rendered. Not surprisingly, research demonstrates just this – when individuals reach decisions without structured guidance, the decisions tend to be subjective, inconsistent, and irreproducible (Grove, Zald, Lebow, Snitz, & Nelson, 2000). It is important to acknowledge, however, that clinical (or unstructured) decision making allows for the consideration of case-specific factors, and can therefore be appropriate when considering unique or atypical cases (see Hart, Michie, & Cooke, 2007a, 2007b; Hart & Michie, 2008).

Nonetheless, given its weaknesses, alternatives to the clinical approach to decision making have been developed. These alternatives involve more guidance, and come in two forms. Actuarial decision making tools are strictly numerical, and involve calculating an indication of risk or likelihood based on objective and quantifiable factors. Structured professional judgment combines actuarial and clinical judgment by focusing the decision maker's attention on empirically-supported factors, but does not provide scores associated with these factors. Moreover, structured professional judgment encourages the appropriate consideration of unique case-specific factors which cannot be captured by actuarial measures.

Two very large-scale meta-analyses have conclusively demonstrated that actuarial decision making approaches are more accurate than are clinical methods in virtually every context considered, including parole (Ægisdóttir et al., 2006; Grove & Meehl,

1996). Actuarial approaches have also been demonstrated to be more consistent, more transparent, and more defensible (Austin, 1983; Grove et al., 2000; Zinger, 2004). Given these findings, decision makers in various fields have shifted their focus away from clinical decision making and toward actuarial decision making methods (e.g., Miller & Thompson, 1975; Partin et al., 1997; Quinsey, Harris, Rice, & Cormier, 1998).

That said, when well-constructed, structured professional judgment approaches can combine the best features of clinical and actuarial measures. Though their role relative to actuarial measures has been somewhat controversial (see Heibrun, Douglas, & Yasuhara, 2009), arguments for the increased use of this type of approach have begun to appear (e.g., Falzer, 2011). Similar to actuarial approaches, structured professional judgment approaches are more transparent and defensible than clinical approaches, result in increased consistency (de Vogel, de Ruiter, Hildebrand, Bos, & van de Ven, 2004; Lodewikjs, Doreleijers, & de Ruiter, 2008), and have the benefit of allowing for the incorporation of case-specific factors, including offender typology (e.g., sex offender, domestic violence offender). Moreover, the structured professional judgment approach is in keeping with the fact that professional judgment has been found, in some cases, to add incremental predictive ability over consideration of static and dynamic risk factors (De Vogel & De Ruiter, 2006; Douglas, Ogloff, & Hart, 2003; van den Brink, Hooijschuur, van Os, Savenije, & Wiersma, 2010).

A number of instruments common in the correctional context use a structured professional judgment approach, including the HCR-20 (Webster, Douglas, Eaves, & Hart, 1997). Recently, researchers contrasted the predictive accuracy of this measure when used as intended (that is, as a structured professional judgment) and when used in

an actuarial fashion (i.e., aggregating items to yield a score), and found the structured professional judgment approach to be more predictive (Pedersen, Rasmussen, & Elsass, 2010). Indeed, other risk assessment researchers have found similar results (e.g., with respect to the SARA, Kropp & Hart, 2000), and a meta-analytic review found that, at worst, the two approaches are approximately equally predictive (Guy, 2010).

Historically, Canada's PBC, together with many other jurisdictions' paroling authorities, has used clinical approaches in making conditional release decisions. Considering the issues just outlined, it is clear that using this approach to parole decision making can exacerbate the difficulties already inherent to this task by virtue of its multiple goals. To further complicate matters, research on offender and decision maker factors associated with decisional outcomes is limited and far from systematic.

### **Factors Influencing Parole Decisions**

In considering the factors that influence parole decisions, it is important to reiterate that three types of such decisions exist and that the predictors of each may vary. Specifically, in Canada, parole board members are called upon to make initial decisions to grant or deny conditional release to offenders, to extend or expand the conditional release of offenders already granted an initial release to the community, and to revoke or reinstate the conditional release of offenders whose parole has been suspended by CSC. Given the differences amongst these types of decisions, it is likely that the influential factors for each overlap but are not identical. Most research in this area has been focused on decisions regarding the initial granting of conditional release (e.g., Caplan, 2007; Feder, 1994; Huebner & Bynum, 2006). There is very limited research focused on the factors which may influence decisions resulting from parole suspensions (Kerbs, Jones,

& Jolley, 2009; Murphy & Turner, 2009). It is important to keep in mind that there may be variation in which factors are influential when considering other conditional release decision making contexts.

Further, research on the factors influencing parole decision making has been conducted only intermittently through the years, but began in the 1960s (e.g., Gottfredson & Ballard, 1966), is enjoying a resurgence (e.g., Huebner & Bynum, 2006; Kerbs, et al, 2009; Morgan & Smith, 2005; Silverstein, 2006), and is therefore beginning to accumulate. Drawing conclusions from this research is nonetheless difficult because of the variety of research techniques used and factors studied. The inclusion of different factors across studies makes it difficult to assess the combined influence of various factors. It also means that certain important factors very likely have yet to be identified and included in research, such that their impacts have remained unexamined. The variety of different research techniques used in studies in this area, in turn, adds its own complications. Holland and colleagues (1978) have demonstrated that there are important differences between the information board members *think* they use in reaching a decision and that which they actually *do* use, and therefore research approaches may contribute to discrepancies. It has been argued that it is important for researchers “to distinguish among (a) what legal decision makers privately think they do, (b) what they publicly say they do, and (c) what they actually do” (Konečni & Ebbesen, 1984, p. 6). In other words, considering results derived from different methodologies may yield different results. Jointly considering studies based on self-report and on other methodologies may therefore introduce problems; nonetheless, the small number of studies available render this option unavoidable.

A final challenge arises from the fact that parole research has been conducted in a variety of jurisdictions and countries. Parole varies importantly across jurisdictions in many ways, such as the relevant policy and legislation, political climate, scope of parole decision makers' authority, and information available to decision makers. All of these factors could influence research findings, and therefore the extent to which findings from other jurisdictions are relevant to the Canadian context is unclear. Again, however, the limited body of research in the domain renders aggregation across jurisdictions necessary.

What is clear, regardless of methodology and jurisdiction, is that a variety of factors have been found to influence parole decisions. These factors include both ones which exhibit strong associations with recidivism, and are therefore appropriately influential, and those whose link to recidivism is weak or non-existent. Moreover, some of the factors are offender-level factors (e.g., criminal history and institutional adjustment) and some are specific to decision makers (e.g., experience, personality factors). Though the factors most strongly linked to parole decision making will be reviewed shortly, what is important to understand presently is that not only is there considerable inter-individual variability in the factors which influence parole decisions, but that not all of the factors typically considered in these decisions have been shown to be associated with post-release outcome.

### **Decision Making Theory**

In addition to external factors, parole decisions are also influenced by situational factors and previous experience of decision makers. To more fully understand these factors requires a brief review of relevant theory, although theories specific to parole decision making – and forensic decision making more broadly – are limited. In fact, in

the related area of sentencing, it has been argued that “relatively little theory has been advanced that can provide specific hypotheses” (Engen & Steen, 2000, p. 1363); indeed, both in sentencing and in parole decision making, most previous research has been empirical rather than theoretical.

**Forensic decision making theories.** Despite this gap, there are two theories used in forensic decision making that may be of utility in understanding the way that parole recommendations are reached. First, in her research on prosecutorial decision making, Albonetti (1987) has posited that decisions regarding whether to prosecute offenders are motivated by an avoidance of uncertainty, such that prosecutors proceed conservatively or not at all if uncertain of their ability to obtain a conviction. As such, the presence of factors that might decrease the prosecutor’s perceived likelihood of reaching a conviction – such as a witness with limited credibility or an alleged perpetrator who fails to meet cultural stereotypes regarding those who commit the type of crime in question – was associated with lower rates of prosecution (Albonetti & Hepburn, 1996). This theory has been supported by Ulmer and colleagues (2007) who found that prosecutors often trade severity for certainty of punishment in their decisions regarding whether to prosecute.

Though this theory has not been explicitly applied to parole decision making, it is easy to see how it could be: In reaching parole decisions, the presence of any doubt regarding an offender’s manageability in the community might lead to a decision to deny parole, so as to minimize the likelihood of parole failures. Indeed, this may be a mechanism explaining why, when parole board members’ decisions differ from recommendations made by parole officers, they are typically more conservative (e.g., Zinger, 2012).

Secondly, Steffensmeier, Ulmer, and Kramer (1998) proposed a theory to explain judges' sentencing decisions. In their "focal concerns" theory, they argued that judges focus primarily or exclusively on three primary concerns in reaching decisions: the offenders' blameworthiness and harm caused to the victim, protection of the community, and practical implications of the decision. Steffensmeier and colleagues (1998) found partial support for their theory in their examination of judicial sentencing, but also determined that the theory was not sufficient to fully explain their findings. Similarly, Hadwiger (2008) found that while focal concerns theory was helpful in explaining sentencing decisions for offenders sentenced to custody, it was considerably less able to explain those of community-sentenced offenders.

Since its proposition, focal concerns theory has also been examined in other areas. When they applied the theory to prosecutorial charging decisions, Spohn and Holleran (2001) found that the three focal concerns posited as important for judicial decision makers required modification in order to be appropriately applied to prosecutors. In addition, focal concerns theory has been employed in a few parole decision making studies. Huebner and Bynum (2006) were the first to use this approach in parole, citing a tendency for parole decision makers to see themselves as "resentencers" (p. 964) as their rationale for doing so. Though they found at least partial support for the role of the first two concerns, their study did not include an assessment of the third concern, practical implications of the decision, and its applicability therefore remained untested. In an examination of parole revocation decisions, Lin, Grattet, and Petersilia (2010) found that some of the factors derived from focal concerns theory were relevant in explaining revocations, but that additional factors were more strongly associated with decisions.

All in all, though it appears that focal concerns theory does contribute to explaining decisions made in a number of forensic situations, it is insufficient, on its own, to do so. Moreover, the focal concerns approach has been criticized as being insufficiently developed, using the same measures to represent different constructs, and being based almost entirely on data derived from a single jurisdiction (Hartley, Maddan, & Spohn, 2007). As such, it requires further refinement and testing prior to concluding that it can appropriately contribute to understanding parole decision making.

**Decision making under uncertainty and heuristics.** Given the lack of a comprehensive theory specific to parole decision making, it became necessary to turn to the general decision making literature. A considerable body of literature has evolved regarding decision making under conditions of uncertainty – that is, when the likelihood of a specific outcome is unknown – which can fruitfully be applied to the present context. There are two complementary theories within this area. First, and more traditionally, it has been suggested that when the likelihood of an outcome is unknown, decision makers try to estimate that likelihood and make rational decisions based on the estimate (e.g., Ellsberg, 1961; Gilboa & Schmeider, 1989; Hey, Lotito, & Maffioletti, 2010). Second, there are theorists and researchers who prefer to focus on non-probabilistic approaches to decision making under conditions of uncertainty (e.g., Kahneman, 2002; Tversky & Kahneman, 1974), wherein decision makers are thought not to attempt to estimate likelihood. Instead, they consciously or unconsciously base their decisions on intuitive rules or rationales which, relative to more exhaustive decision making approaches, minimize cognitive effort. These rules, commonly known as heuristics, have been shown

to be used across a variety of situations (e.g., Gigerenzer & Selton, 2001; Gigerenzer, Todd, & The ABC Research Group, 1999).

Tversky and Kahenman (1974) wrote what is perhaps the seminal work in this domain, but there has been a virtual explosion of research interest in the area since that time. A variety of heuristics have been posited, and their roles have been studied in a vast number of situations. Some of the most commonly researched heuristics are the anchoring, story-telling, contrast, and availability heuristics.

The anchoring heuristic involves unconsciously rooting a decision in an initial prompt (Tversky & Kahneman, 1974). The classic example is one wherein a question is asked which includes a numeric anchor. When the numeric anchor is relatively low, responses also tend to be low; conversely, when the anchor is high, responses tend to be high. It is argued that though individuals recognize that the prompted value is arbitrary, they unconsciously use it to anchor their response and fail to adjust sufficiently. In one remarkable study, the anchoring effect was found to influence simulated sentencing decisions amongst judges and prosecutors even when the anchored cue literally resulted from a throw of the dice by the decision maker him- or herself (Englich, Mussweiler, & Strack, 2006). Moreover, participants' experience and levels of knowledge did not temper this effect.

The next heuristic, story-telling, was originally developed in the context of juror decision making (Pennington & Hastie, 1991; 1992). These researchers found that jurors constructed scenarios or stories to organize the information they were considering; information not fitting into the story tended to be discounted or assigned relatively little weight. It has been argued that this heuristic is problematic both because of this tendency

to discount information and also because if new information emerges, decision makers tend not to use it to challenge their constructed narrative (Helsloot & Groenendaal, 2011). In practice, this means that the first story to emerge as fitting preliminary information tends not to be contested.

The next two heuristics are both related to information to which decision makers have previously been exposed. The first, the contrast heuristic, occurs when decision makers first encounter a particular case and then compare subsequently encountered cases to the first – in other words, the first case becomes a baseline against which others are contrasted. This effect of this heuristic has been demonstrated in juror decision making (e.g., Nagao & Davis, 1980; Pepitone & DiNubile, 1976). In these studies, jurors who had previously been exposed to a case involving a serious crime judged subsequent cases less seriously than did those whose previous exposure had been to a case involving a relatively minor crime.

Finally, the availability heuristic may be one of the most commonly studied heuristics. This heuristic, also originally proposed by Tversky and Kahneman (1973), posits that decision makers use ease of recollection as a proxy for likelihood. When faced with a situation, decision makers may use the ease with which they can recollect a similar previous case's outcome as a proxy for the probability of the outcome in question. They may then apply similar decision making approaches, and/or make the same decisions. Use of the availability heuristic has been reported amongst forensic scientists (e.g., Helsloot & Groenendaal, 2011) and in the selection of offence dispositions (Stalans, 1993). It is easy to imagine how this heuristic could apply in parole decision making: If a previous case, similar to the one under consideration, resulted in a highly sensational and

publicized failure, this case may be easier to recall than other cases with unproblematic outcomes. As a result, the decision maker may over-estimate the likelihood of failure in the present case.

These examples of decision heuristics make clear that there can be numerous extra-legal influences on parole decision making. Indeed, numerous other heuristics have also been found to play a role in forensic decision making (e.g., Dhami, 2003; Fong, Lurigio, & Stalans, 1990; Gobeil & Serin, 2009). Overall, heuristics almost always simplify the decision making process. However, while they can allow for decisions to be reached more rapidly, they do not always – or even consistently – increase decisional accuracy (e.g., Fong et al., 1990). Indeed, in their original work in the area, Tversky and Kahneman (1974) characterized heuristics as “quite useful but sometimes ... [leading] to severe and systematic errors” (p. 1124).

Both research on heuristics and the limited theories specific to forensic decision making demonstrate that there can be considerable extraneous and unrecognized influence on decision making. Taken together with case factors and factors specific to decision makers, these theories demonstrate the existence of yet more possible influencing factors – indeed, ones that are often both unconscious and not rooted in evidence – on decisions. The ubiquitous nature of such possible influences underscores the importance of high quality, empirically-supported decision making, a process that should be enhanced by standardized training, opportunities for oversight and mentoring, and policies regarding the manner in which decisions are reached.

### **Guiding Parole Decisions: A Structured Framework**

The Structured Release Decision Making Framework (Serin, 2004)<sup>1</sup> was conceived as a way to aid parole board members in minimizing the effect of peripheral factors and reaching more evidence-based release decisions, while simultaneously reflecting the unique parameters of parole decision making resulting from legislation and policy. For instance, though evidence consistently demonstrates, as mentioned before, that actuarial methods of making decisions are superior to and more consistent than subjective alternatives (Ægisdóttir et al., 2006; Grove & Meehl, 1996), parole is one forum in which an exclusive reliance on actuarial measures is not possible. In Canada, as elsewhere, policy effectively prohibits actuarial predictions of risk being used alone in reaching parole decisions; instead, a comprehensive list of factors must also be weighed and considered (CSC, 2009; PBC, 2011). In this context, then, structured professional judgment was deemed the most appropriate tactic and in recent years, such a structured professional judgment instrument – the Structured Release Decision Making Framework (Serin, 2004) – was developed for the PBC. The development of this instrument can easily be considered long overdue, given that one PBC member called for the development of such a framework 30 years ago, saying:

What is needed [to improve parole decision making] is a well articulated set of guidelines and a method for applying the details of the guidelines. There is a need for a rigorous, systematic, consistent methodology with respect to valid factors on which to base parole granting or denying but which does not limit the power of discretion of a member. (Hutson, 1982, p. 254)

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<sup>1</sup> Available by contacting Dr. Ralph Serin at [ralph\\_serin@carleton.ca](mailto:ralph_serin@carleton.ca).

The framework was intended to meet three primary goals: (1) to respond to long-standing critiques that the board's failure to adhere to a formalized decision making process results in inconsistency and arbitrariness in parole decision making (e.g., Department of the Solicitor General, 1973; Vantour, 1986); (2) to incorporate the substantial body of knowledge from the study of recidivism (e.g., Andrews & Bonta, 2006) into parole decision making by ensuring that all relevant factors, and no irrelevant factors, are considered in reaching parole decisions; and (3) to contribute to an increase in the transparency and defensibility of individual decisions, both for the benefit of offenders and in appeal or investigation circumstances. Further, the framework, as part of an evidence-based policy-driven decision making approach, can enhance public safety, contribute to appropriate management of limited public resources, and insulate decision makers in situations where paroled offenders re-offend (Burke, 2011).

In the specifics of its approach, the framework reflects the position argued by Nguyen, Acklin, Fuger, Gowensmith, and Ignacio (2011) that “[a]ctuarial risk methods with structured professional judgment should be the standard used to inform any decision making process” (p. 345). Briefly, it is anchored by an actuarial estimate of risk of re-offending, where available, or a clinical estimate otherwise. It then specifies a number of empirically-supported factors for further consideration, and includes a number of indicators and self-reflection questions that board members can use to better conceptualize how each factor might be relevant to the case under consideration. The framework concludes with a worksheet which board members can use to summarize their impressions and concerns relevant to each factor for the case, and to guide their decision of how these factors should (or should not) modify the anchoring estimate of risk. It is

noteworthy that the framework also stipulates the consideration of case-specific factors and discrepant information. This allows the board members to diverge from what is suggested by the risk estimate in instances where case factors suggest that this might be necessary, and also facilitates the provision of an appropriate supporting rationale for doing so.

In 2009, the framework originally developed for the PBC was modified for use by CSC parole officers in the formulation of parole recommendations. Given the extensive similarity between the parole decision making and recommendation making, very few changes were required. That said, examples and self-reflection questions were modified to make them more appropriate for parole officers, and verifications were made to confirm that the framework was compliant with all relevant CSC policy and legislation.

### **Framework Components**

The component factors of the framework were originally identified as a result of an extensive review of the literature on parole and recidivism and of PBC policy documents (Serin, 2004). In addition to the *actuarial estimate of risk* which acts as an anchor, seven specific areas were identified and are therefore highlighted for consideration in the framework. These are: *criminal/parole history*; *institutional/community behaviour*; *disinhibitors*; *responsivity issues*; *offender change*; *release plan*; and, *case-specific factors*.

Given the ample evidence of actuarial methods' superiority to clinical ones in terms of estimating risk in virtually any context (Ægisdóttir et al., 2006; Grove & Meehl, 1996), the *actuarial estimate of risk* was chosen to act as an anchor for the framework decision. For Canadian federally sentenced offenders, a variety of actuarial assessment

tools are typically available; board members and parole officers using the framework are encouraged to use estimates derived from tools most appropriate to the offender being considered (e.g., to use an estimate from an instrument estimating risk of sexual recidivism for sex offenders). For some types of offenders, notably women offenders and Aboriginal offenders, it is possible that no actuarial risk assessment instruments be available. In these cases, decision makers use documented clinical assessments of offender risk as an anchor.

The first area considered in addition to the actuarial estimate is *criminal/parole history* – that is, the offender’s history of interaction with the criminal justice system prior to the current sentence. Of course, criminal history is usually considered to some extent in a formalized assessment of risk; the item is nonetheless considered separately as well in order to ensure that the board member or parole officer explicitly considers any changing trends or patterns in the offender’s criminality, behaviour under community supervision, or the severity of his or her offences. Ample research demonstrates the relevance of considering patterns of offending in assessing risk for various types of offenders (Blackburn, 1993; Douglas, Webster, Hard, Eaves, & Ogloff, 2001; Kropp, Webster, Hart, & Eaves, 2003; LeBlanc, 1990).

Next, the offender’s behaviour during the current sentence – *institutional/community behaviour* – is considered. Given that poor institutional behaviour is associated with poor post-release outcome (Luciani, Motiuk, & Nafekh, 1996), it is important that such behaviours be explicitly considered in reaching parole decisions.

The next domain, *disinhibitors*, refers to factors which may influence an offender's ability to regulate his or her behaviour. They are termed disinhibitors because they are those variables which "limit an individual's ability to inhibit antisocial and criminal behaviour, and to therefore act in a well-regulated manner, especially when presented with high-risk situations" (Serin, 2004, p. 11). Given that not all sub-types of offenders are equally influenced by each type of disinhibitor, specific guidelines for this section are quite explicit. For instance, research has demonstrated that the following areas may contribute to poorly regulated behaviour in at least some types of offenders: presence of anti-social peers (Andrews & Bonta, 2006), substance use (Dowden & Brown, 2002), impulsivity (Serin, 1996), and affective states such as jealousy and rejection (Holtzworth-Munroe, Meehan, Herron, Rehman, & Stuart, 2003).

*Responsivity issues* refer to the extent to which specific offender characteristics (e.g., gender, culture, language, age, program dosage and targets) are incorporated and considered in the delivery of correctional programs and other interventions. A body of literature demonstrates that incorporating responsivity concerns is associated with more successful outcomes for offenders (Andrews & Bonta, 2006; Dowden & Andrews, 2000; Lösel, 1995).

The next domain, *offender change*, refers to any evidence that an offender has benefited from his or her participation in correctional programming. Though evidence exists that such programming is linked to reductions in recidivism (McGuire, 2002), some individuals benefit more than others. For this reason, it is important for board members and parole officers to examine both program participation and program benefit, as assessed by program facilitators and as demonstrated by any indications of having or

not having incorporated program skills in daily life in the institution and/or the community.

The offender's *release plan* is considered next. Prior to being considered by the PBC, each offender formulates a release plan in which he or she outlines the plans made to support success. Such a plan is formulated whether the decision being sought is with respect to the offender's initial release, a broadening of conditional release, or regarding a parole suspension. Typically, such plans include housing, employment, and concerns related to family, partners, and peers. Research focused on the factors associated with desistance from crime corroborates the importance of these factors; evidence demonstrates that successful post-release outcomes are associated with stable housing (Brown, 2004), steady, legal employment that provides a living wage (Uggen & Kruttschnitt, 1998), and pro-social relationships with family, spouses or partners, and peers (Giordano, Cernkovich, & Holland, 2003; Laub & Sampson, 2001). The framework therefore guides board members and parole officers in considering the extent to which each offender's release plan is realistic, includes components supportive of desistance, and includes components which might impede a return to criminality (i.e., protective factors).

Finally, board members consider *case specific factors*. This catch-all category is intended to allow for the consideration of any unique case factors that board members and parole officers have reason to believe are relevant to the offender's release outcome. This could include, for example, factors unique to special population membership (e.g., a domestic violence offender who continues to try to have contact with his or her victim) or to the offender him- or herself (e.g., a medical condition resulting in the offender being

confined to a hospital and thereby significantly increasing the extent to which risk can be safely managed).

As mentioned earlier, the framework includes a worksheet which allows board members and parole officers with some degree of familiarity with these constructs to rapidly assess a case. This worksheet also includes areas for information derived from the hearing or interviews as well as any discrepant information obtained from the file or orally. By using this framework, then, and noting the starting actuarial risk estimate and whether each domain, by and large, can be considered to worsen, attenuate, or not impact this estimate, board members and parole officers have a concise and balanced aide-mémoire at their disposal when formulating a recommendation or decision.

Anecdotal evidence from board members who use this framework in the field and/or were trained on it as part of the orientation training for new board members has been very promising. Board members find the instrument simple, efficient, and helpful. They particularly appreciate its utility in organizing and appropriately weighing large volumes of information under time pressure.

### **Evaluation of the Framework**

To date, there have been four examinations of the applicability of the framework to parole decision making (Gobeil, Scott, Serin, & Griffith, 2007), all focused on its use by PBC members. Its applicability has been investigated for standard cases (Gobeil & Serin, 2005; Scott & Serin, 2006), cases referred to boards of investigation due to serious failure after release (Serin, 2007), and for cases corresponding to provincial offenders and other offenders with short sentences (Griffith, Serin, & Gobeil, 2007). All research has been conducted retrospectively based on reviews of offender files after the cases were

decided by normal means. It should be acknowledged, however, that in evaluating structured professional judgment instruments with retrospective file reviews, it is nearly impossible to replicate the capacity to incorporate case-specific factors afforded by using such an instrument in real time. Conversely, it would have been ethically inappropriate to use such an instrument to actually decide a case until the instrument was validated. Thus, the only research possible in these evaluations involved strict adherence to the framework guidelines – in other words, for purposes of evaluation, the framework was treated as an actuarial instrument rather than as representing structured professional judgment. Further, as a result of each of the studies detailed below, changes have been made to the framework, both to try to address any limitations and to make it more user-friendly and easy to interpret. As such, the versions of the framework used in each study differ in minor ways.

The first study was largely exploratory, and examined whether parole decisions produced by the framework differed from those made by PBC members in a small sample of cases (Gobeil & Serin, 2005). The study involved both false positive (that is, cases where offenders were predicted to be poor parole candidates but when ultimately released, did not re-offend;  $n = 10$ ) and false negative cases (those corresponding to offenders who were predicted to be good parole risks, but who re-offended while on parole;  $n = 5$ ). The researchers found that in this sample of 15 cases, the framework produced a decision inconsistent with the decision made by the PBC members in 9, or 60% of cases. Since these cases were selected due to the difference between case outcome and PBC decision, then, these results suggest that strict adherence to the framework would have resulted in fewer errors. Notably, the proportion of cases of

discrepancy for false positives and false negatives were very similar, suggesting that the framework can contribute to both decision making contexts.

In addition to being very preliminary and including very few cases, however, this first study was limited in that it did not include true negative (that is, offenders correctly predicted to be good parole candidates) and true positive cases (those correctly predicted to be poor parole candidates). A second study addressed this omission by assessing the applicability of the framework to 20 cases in each of the four categories: false positives, false negative, true positives, and true negatives (Serin & Scott, 2006). Results from this study were somewhat mixed, in that predictions of outcome did not achieve the conventional threshold of predictive ability used in social science (i.e., an area under the receiver operating characteristic curve [*AUC*] of .70 [Hosmer & Lemeshow, 2000]; in this study, the *AUC* was .65).<sup>2</sup> Nonetheless, the application of the framework did not result in diminished accuracy of parole decisions.

The subsequent investigation focused on whether use of the framework may have resulted in different decisions in cases that were particularly problematic. In this study, Serin (2007) retrospectively applied the framework to the file information of 43 false negative cases referred to a Board of Investigation due to a post-release outcome that was markedly serious and violent. The study demonstrated that in 18 of these 43 cases (42%), use of the framework resulted in a different decision – that is, a decision not to release. This trend was even more striking when considering only those cases corresponding to offenders with high or moderate-high risk profiles. For this sub-group, use of the framework resulted in a different decision in 58% of cases. These results suggest that

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<sup>2</sup> Notably, however, clinical approaches to decision making have been estimated to predict outcome (generally) at rates no better than chance – in other words, at an *AUC* of approximately .50 (Ægisdóttir et al., 2006) – much less than that obtained for the framework.

use of the framework may be particularly helpful for certain cases. Findings also provided some preliminary indications that the framework's systematic use might have important implications in terms of reducing serious re-offending.

The last study conducted to-date in this area aimed to assess the applicability of the framework to provincial cases and to federal offenders serving short terms (Griffith et al., 2007). This study was particularly timely given that there has been a reduction in the average length of sentence served by a Canadian federal offender over the last decade (CSC Research Branch, 2006). Within this context, it was important to assess whether it was possible to be confident that the files of offenders serving short sentences – typically shorter and less comprehensive themselves – contain sufficient information to allow for the application of the framework. Griffith and colleagues found that in only 7 of the 40 cases reviewed were there difficulties in obtaining sufficient information to apply the framework. This difficulty was significantly greater for the files of provincial offenders, which likely indicates a difference in the manner in which files are created and managed in each jurisdiction.

Collectively, these findings suggest that the framework can be applied in all types of cases. Not only is it appropriate for false negative, false positive, true negative, and true positive cases, but it is also particularly well-suited to cases with the potential for very serious repercussions, and to a growing segment of the offender population. Given the positive results stemming from these evaluation studies, the PBC has endorsed the use of the framework among its board members. Training in its use is a National Training Standard for new PBC members (J. Sutton, March 7, 2008, personal communication);

further, its use has been championed by experienced parole board members in each region, and, as of 2011, was formally accepted into policy (PBC, 2011a).

Further, though it is impossible to know the extent to which the implementation of the framework was implicated, it is notable that the Board has seen a decrease in rates of revocation with offence since parole board members began to be trained in its use (PBC, 2011b). From fiscal year 2006/07 to fiscal year 2010/11, the rate of revocation with offence for federal offenders has decreased both for offenders on day parole (from 6.1% to 2%, or by 66%) and on full parole (from 12% to 6%, or by 50%). Though the rate has also decreased for those on statutory release, a legislatively mandated release with supervision at two-thirds of the sentence, the percent reduction was much less than that of the two groups for whom discretionary parole decisions were made (15% to 10%, or by 33%). These patterns suggest improvements in Board members' discretionary release decision making, though whether or not this is as a result of the implementation of the framework cannot be determined solely from these numbers.

Regardless, CSC and the PBC have come to recognize the need for greater consistency in the formulation of parole recommendations and final parole decisions. In addition, CSC has realized that further guidance is required for parole officers in terms of how to incorporate into their recommendations the extensive list of factors which parole officers are required by policy to consider (B. Arsenault, personal communication, April 7, 2008). Given the positive results resulting from the use of the Structured Release Decision Making Framework in parole decisions and the manner in which it was received by PBC members, CSC has been supportive of its introduction among its parole officers. Indeed, standardizing training and having more continuity in the way in which parole

decisions are considered by CSC and the PBC seems likely to facilitate the overall parole decision making process. Campbell recently argued that “the most effective models are those in which corrections agencies and paroling authorities share assessment tools and case management and treatment plans” (2008, p. 19). Sharing a common method of assessing the results of these tools and the impacts of these plans cannot help but further strengthen accuracy and confidence in the decision making process.

### **Program of Research**

Though it spans over half a century, the existing body of literature on parole decision making is still quite limited. That focused on parole officers' contribution through the formulation of parole recommendation is even more lacking; indeed, it is virtually non-existent. Given the high rate of concordance between parole officers' recommendations and parole board members' decisions and the very serious potential consequences of parole decision making, including further victimization, it is important that this gap be addressed. Thankfully, scholarly interest in parole decision making is enjoying a resurgence; however, to date, no similar increased attention has been seen with respect to parole officers' role.

The studies summarized here aimed to address this long-standing oversight, specifically by focusing on the contribution of parole officers working with federal offenders in Canada to PBC parole decision making. Though the studies included both institutional and community-based parole officers, in keeping with the focus of literature to date, the emphasis was on initial conditional release decisions. Three studies were developed: First, research was conducted to better understand the offender and parole officer factors influencing parole recommendations made by parole officers. Next, training in risk assessment, case analysis, and the use of the Structured Release Decision Making Framework was delivered to all CSC parole officers in Canada. The second study involved collecting and analyzing their evaluations of this training. Finally, a third study was undertaken to examine whether the training influenced the assessments for decisions written by parole officers in order to support their parole recommendations. Together, these studies will provide a starting point in understanding the factors

associated with parole officers' recommendations and the extent to which the manner in which these recommendations are formulated is amenable to change as a result of participation in training in the use of the Structured Release Decision Making Framework.

### **Study 1: Exploratory Examination of Parole Officers' Parole Recommendations**

As mentioned, the body of research focused on parole decision making remains limited, though it is growing (e.g., Caplan, 2007, 2010a, 2010b; Hannah-Moffat & Yule, 2011; Huebner & Bynum, 2006; Morgan & Smith, 2005), but that on the parole recommendations made by parole officers is nearly non-existent. Moreover, for the small amount of research touching on the topic that could be found (Carroll et al., 1982; Carroll & Burke, 1990; Metchik, 1988), parole officer recommendations were typically a peripheral topic (cf., Taylor, 1998).

For this reason, the first study in this program of research was largely exploratory in nature and aimed to better understand the factors which influence parole officers' release recommendations. Research on the factors found to be associated with parole decision making amongst parole board members and other forensic decision making was incorporated in the development of the study, which was modeled on a similar study previously conducted with PBC and New Zealand Parole Board members (Gobeil, 2006). The study aimed to examine the extent to which a number of offender factors and parole officer factors were associated with parole officers' release recommendations.

#### **Factors Influencing Parole Decisions**

**Offender factors.** As briefly mentioned, a number of offender-level factors have been identified as being consistently associated with parole decision making. Caplan (2007) recently conducted a thorough review, spanning 25 years, of these factors and singled out criminal history and institutional behaviour as among those most predictive of parole decision. Altogether, offenders with more extensive criminal histories or more serious institutional misbehaviour were less frequently granted discretionary parole, and

when they were granted release, it was typically after having served a greater proportion of their sentence. Presumably, parole decision makers apply the maxim that “past behaviour is the best predictor of future behaviour.”

Numerous studies support Caplan’s conclusion that offence history or criminal history is strongly associated with parole decision (e.g., Carroll & Burke, 1990; Cumberland & Zamble, 1992; Metchik, 1988; Huebner & Bynum, 2006; Welsh & Ogloff, 2000). This finding is also well supported in research on recidivism, including in the development of empirically-based tools to predict re-offending, by findings that demonstrate that offenders with more prolific and serious patterns of criminal history are more likely to re-offend (e.g., Blackburn, 1993; Douglas et al., 2001; Kropp et al., 2003; LeBlanc, 1990).

Considerable research also supports Caplan’s conclusion regarding institutional behaviour (e.g., Carroll et al., 1982; Carroll & Mondrick, 1976; Citizens’ Alliance on Prisons and Public Spending, 2009; Couillard, Gagnon, & Audet, 1981; Holland et al., 1978; Pogrebin et al., 1986; Talarico, 1988; Turpin-Petrosino, 1999). It is notable, however, that the link between institutional and post-release behaviour is not straightforward. While some researchers have found that institutional behaviour is not linked to parole outcome (Carroll et al., 1982; Holland et al., 1978), others have demonstrated that only negative institutional behaviour is linked to post-release outcome, with positive institutional behaviour having no association (either positive or negative) with community behaviour (Luciani et al., 1996). More recently, Mooney and Daffern (2011) have suggested that only offence-paralleling institutional behaviour should be considered in reaching parole decisions. In sum, it seems that parole decision makers’ reliance on

institutional behaviour as a predictor of post-release outcome has outpaced research's findings in this domain; the appropriateness of the primacy of this factor is therefore questionable.

Also of note is that most studies on the factors influencing parole decisions have focused exclusively or primarily on male offenders (e.g., Carroll et al., 1982; Huebner & Bynum, 2006; Metchik, 1988; cf, Hannah-Moffat & Yule, 2011). More recently, researchers and theorists have begun to consider the influence of offender gender on parole decisions (Gobeil, 2006, 2007a; Silverstein, 2006). What limited evidence exists suggests that gender is an important factor in predicting release decisions. Using a vignette-based experiment, Gobeil (2006, 2007a) found that even after controlling for an offender's level of risk and the parole board member's perception of the offender's likelihood of successfully completing his or her sentence, parole board members were significantly more likely to grant release when considering vignettes featuring women offenders. This finding is consistent with evidence that women are both more likely to successfully complete a period of parole (Grant & Gillis, 1999; Hannah-Moffat, 2005) and have lower rates of recidivism (Gendreau, Little, & Goggin, 1996; Markarios, Steiner, & Travis, 2010) than their male counterparts. In addition, surveys of parole board members demonstrate that most are aware of legal requirements to be sensitive to gender, but are not sure how to incorporate sensitivity in their decision making (Hannah-Moffat, 2005).

Other offender-level factors have also received research attention and been identified as strongly associated with parole decisions, including ethnicity, mental health, and victim input. Research focused on the association of Aboriginal ethnicity with parole

decisions (that most relevant to the Canadian context) has been ambiguous. While Bynum and Paternoster (1984) found that Aboriginal offenders served significantly longer portions of their sentences prior to being granted release than did their non-Aboriginal counterparts, others found that this relationship did not remain after accounting for differences in other variables reflective of risk (Welsh & Ogloff, 2000). Researchers have found that mental health concerns in offenders are associated with parole refusal (e.g., Couillard et al., 1981; Feder; 1994; Turpin-Petrosino, 1999), with some further finding that mental illness interacts with age (Carroll et al., 1982) or gender (Hannah-Moffatt, 2004) to influence parole decisions. More recently, however, Matejkowski (2010) found that mental health did not influence parole decisions, either directly or indirectly through an influence on risk. Finally, the role of victim input in parole decision making is also beginning to be studied. Early studies were unanimous in concluding that victim participation in the parole process was associated with a lower likelihood of release being granted (McLeod, 1989; Morgan & Smith, 2005; Parsonage, Bernat, & Helfgott, 1994; Smith, Watkins, & Morgan, 1997). Moreover, Smith and colleagues (1997; 2005) determined that as the level of victim involvement increased, so did the likelihood of being denied parole, with in-person testimonials having the strongest impact. In contrast, based on an analysis of parole decisions rendered in New Jersey, Caplan (2010a; 2010b) concluded that neither verbal nor written victim input was associated with parole decisions. It may be that paroling authorities differ in terms of the way they incorporate victim information in their decision making.

**Decision maker factors.** Most researchers interested in the factors influencing parole decisions have focused primarily or exclusively on offender factors. Some studies,

however, have determined that decision maker factors are also linked to parole decisions (e.g., Conley & Zimmerman, 1982; Gottfredson & Ballard, 1966; Griffitt & Garcia, 1979; Kerbs et al., 2009). Though an argument was made several decades ago for greater focus on decision maker variables in parole decision making (Carroll, 1978), such research has been limited.

One decision maker factor of interest is authoritarianism, which refers to a constellation of factors such as submission to authorities, conformity to social conventions and rules, ostracism of people who fail to conform to these conventions and rules, and a very rigid view of the world (Adorno, Frenkel-Brunswick, Levinson, & Sanford, 1950). Over thirty years ago, Vecchio (1977) found that among students asked to make mock parole recommendations, level of authoritarianism was significantly associated with recommendations. As students scored higher on the measure of authoritarianism, the punitiveness of their parole recommendations increased. Griffitt and Garcia's (1979) research resulted in similar findings, in that high levels of authoritarianism were linked with recommendations that fictitious offenders serve longer portions of their sentences prior to release.

More recently, forensic decision making has seen a shift from the global concept of authoritarianism to legal authoritarianism, a similar but somewhat more narrow construct. Essentially, legal authoritarianism refers to the extent to which an individual believes that the rights of the government take precedence over those of the individual in legal contexts (Kravitz, Cutler, & Brock, 1993). Though the influence of legal authoritarianism on parole decision making has not yet been examined, the construct has been found to strongly influence perceptions of culpability (e.g., Martin & Cohn, 2004)

and willingness to recommend the death penalty (Butler & Moran, 2007a). Moreover, meta-analytic findings have demonstrated that legal authoritarianism is more strongly linked to these perceptions among mock jurors than is the global authoritarianism construct (Narby, Cutler, & Moran, 1993).

A second decision maker characteristic of relevance to parole decision making is cognitive style, or way of thinking and organizing cognitive information. Cognitive style has not been examined in parole decision making, except in one case (Gobeil, 2006), where it was not found to be associated with likelihood of granting release or other parole decision making variables. Nonetheless, considerable support from other fields for the importance of cognitive style in decision making suggests that it would be premature to discontinue investigation of this topic. Three cognitive styles are of particular interest: need for cognition, personal need for structure, and personal fear of invalidity.

Need for cognition refers to the tendency to engage in, and to enjoy, cognitively challenging tasks (Cacioppo & Petty, 1982; Cacioppo, Petty, & Kao, 1984). High levels of need for cognition are associated with more complex patterns of thinking (Cartwright, Galupo, Tyree, & Jennings, 2009), more accurate completion of cognitive tasks such as arithmetic (Cacioppo, Petty, Feinstein, & Jarvis, 1996), more explanatory thinking and better recall (Lassiter, Briggs, & Bowman, 1991; Lassiter, Briggs, & Slaw, 1991), and greater focus on key rather than peripheral issues in an argument (Cacioppo et al., 1996; Petty & Jarvis, 1996). A strong positive association has been found between need for cognition and a tendency to root one's judgments in empirical findings (Leary, Shepperd, McNeil, Jenkins, & Barnes, 1986), while a negative association has been found with impulsive decision making (Kelly, 2005). Individuals high in need for cognition have

also been found to rely less on decisional heuristics when reaching decisions under time pressure (Verplanken, 1993), to conduct thorough reviews of information prior to making decisions (Bailey, 1997), and to be more attentive to and to better recall task instructions (Allison & Brimacombe, 2010).

Researchers have examined the relationship between need for cognition and punitiveness in mock juror scenarios, with mixed results. Gordon (2007) found that sentencing recommendations did not differ according to need for cognition scores in her sample of undergraduate participants, while Vinson, Costanzo, and Berger (2008) found that individuals high in need for cognition did not differ from their lower need for cognition counterparts with regards to verdict, but that they did award higher punitive damages to the plaintiff in one of the three mock cases they examined. On the other hand, Sargent (2004) and Shestowsky and Horowitz (2004) found that those high in need for cognition were more likely to respond punitively in mock juries, while Butler and Moran (2007b) also found that these individuals are more likely to vote for capital punishment.

The second cognitive style, personal need for structure, refers to a need for clarity and certainty, discomfort with ambiguity, generation of few hypotheses when processing information, and high judgmental confidence (Thompson, Naccarato, Parker & Moskowitz, 2001). High personal need for structure is associated with greater use of heuristics (Hansen & Bartsch, 2001) and a greater likelihood of perceiving illusory correlations (Gordon, 1997). Research has demonstrated that individuals high in personal need for structure are more likely than their lower personal need for structure counterparts to utilize stereotypes and to base judgments on previous knowledge, as well

as to fail to integrate new information into existing structures (Judice, 1997; Thompson et al., 2001), especially when under time pressure (Kaplan, Wanshula, & Zanna, 1993).

Collectively, the above led Thompson and her colleagues (2001) to conclude that high levels of personal need for structure may not be ideal in situations where it is necessary to rapidly assimilate new information and reconsider opinions in light of divergent evidence. Other than in Gobeil (2006), personal need for structure has not been investigated in mock jury or any other forensic decision making situations.

Finally, personal fear of invalidity refers to a concern with the cost of decisional errors, and an associated tendency to see numerous alternative solutions and to vacillate between them when making a decision (Blais, Thompson, & Baranski, 2005; Thompson et al., 2001). To date, only limited research has been conducted on this cognitive style, but what research does exist demonstrates that personal fear of invalidity is linked to the decisional “termination” threshold – that is, the subjective point at which an individual perceives that sufficient information has been processed to allow decisions to be made with confidence – with those high in personal fear of invalidity having a higher threshold than their lower personal fear of invalidity counterparts (Judice, 1997). Consequently, as compared to those low in personal fear of invalidity, those high in personal fear of invalidity attempt to gather more information prior to making a decision, and are less confident in their decisions once they are reached (Thompson & Zanna, 1995). Again, except for Gobeil (2006), no forensic decision making research focused on this construct was identified.

### **Study Overview**

As mentioned, the purpose of this first study was to examine the offender and recommendation maker factors that were associated with parole recommendations. In addition to being informative in its own right, a better understanding of the relationships between both offender and parole officer factors and recommendations was seen as helpful in terms of framing the training provided to parole officers as part of Studies 2 and 3.

This first study's design allowed for systematic variation of three factors within the offender vignettes which comprised the study's experimental materials. The first two factors, criminal history and institutional adjustment, were selected given they have consistently been identified as those most strongly associated with parole decisions (Caplan, 2007). The final factor, offender gender, was selected because it is known that there are significant differences in parole outcome by gender (Gendreau et al., 1996; Grant & Gillis, 1999; Hannah-Moffat, 2005; Markarios et al., 2010) and also because, as argued by Hannah-Moffat and Yule (2011), there is a dearth of parole-related research that explicitly considers gender. In addition to these offender characteristics, given previous findings that they can have considerable impacts on decision-making (e.g., Judice, 1997; Kelly, 2005; Leary et al., 1986; Martin & Cohn, 2004; Thompson et al., 2001), the study included the measurement of a small number of recommendation makers' cognitive style characteristics, as well as of their levels of legal authoritarianism.

Given research that parole decision makers' consideration of information can also vary importantly (e.g., Carroll et al., 1982; McCarthy & Langworthy, 1987; Turpin-Petrosino, 1999), the study also examined both the breadth of additional vignette

information accessed and the specific areas accessed. The areas available for consideration paralleled those outlined in relevant legislation and policy (*Corrections and Conditional Release Act*, 1992; PBC, 2011a) as well as those supported by research (Caplan, 2007; Morgan & Smith, 2005). Specifically, the experimental design allowed participants to access additional information in the following domains: risk assessment, release plan, program completion, criminal history, mental health, and victim information. Of note, however, is that because it was information *access* that was of interest rather than the information itself, the “additional information” provided simply paraphrased that already provided to participants rather than expanding on it.

### **Hypotheses**

By extrapolating from the relationship of offender characteristics and decision-maker cognitive style and legal authoritarianism with parole and other forensic decisions, it was possible to formulate a number of hypotheses for this first study. Specifically, it was expected that the cognitive style and legal authoritarianism variables, as well as the three systematically varied case characteristics of gender, criminal history, and institutional adjustment, would be related to the parole officers’ parole recommendations in the following ways:

*H. 1:* Release recommendation was expected to be related to each of the manipulated case characteristics. It was predicted that vignettes representing male offenders, offenders with more extensive criminal histories, and offenders with more problematic institutional behaviour would receive fewer recommendations that release be granted than their counterparts.

- H. 2:* It was expected that both legal authoritarianism and cognitive style would be related to release recommendations. Specifically, the magnitude of the relationship between the measures of cognitive style and legal authoritarianism and release recommendation was expected to be greatest for need for cognition and legal authoritarianism, followed by personal need for structure and personal fear of invalidity. As well, individuals with high scores on the measure of legal authoritarianism were expected to be less likely to recommend release.
- H. 3:* It was also expected that there would be considerable variability in the breadth and types of additional information accessed, but no specific hypotheses were formulated regarding which information domains would be accessed more and less often.

## **Method**

### **Participants**

Participants were parole officers employed by CSC. Participation was solicited in the context of the 2009-10 Parole Officer Continuous Development training, which was mandatory for all CSC parole officers. As part of their invitation to participate in this training, certain parole officers were sent an internal memorandum explaining the purpose of the study and requesting their participation. Unfortunately, operational challenges, turnover with respect to the researcher's CSC contacts responsible for distribution, and misunderstanding between the researcher and her contacts all contributed to this memorandum being distributed to a considerably smaller number of parole officers than anticipated, and the potential recruitment pool was smaller than expected (though its exact size was unknown). A total of 48 parole officers completed

the study between January 2009 and June 2010. Of these, 11 completed the study in French and the remainder responded to materials in English.

As Table 1 demonstrates, most of these 48 parole officers<sup>3</sup> were between 25 and 44 years old, and two-thirds of participants were male. Almost all had a college diploma or undergraduate university degree. On average, respondents had been with CSC for 10.2 years ( $SD = 7.5$ ; range = 1 – 28) and in their current position for 7.3 years ( $SD = 5.9$ ; range = 0.5 – 20). Almost all worked exclusively or partly with male offenders. Finally, three-quarters had previously held a different position with CSC, with 13.9% of this group (5 of 36) previously having been a community parole officer, 33.3% (12 of 36) having held multiple positions, and 52.8% (19 of 36) endorsing *other*.<sup>4</sup>

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<sup>3</sup> The demographic and employment characteristics of the sample reflect the full 48 parole officers who provided at least partial data. However, as will be discussed in greater detail, a section of analyses were conducted with only 40 offenders due to missing data issues. The demographic and employment characteristics summarized here can nonetheless be considered representative of this smaller sample, though, as confirmed by the lack of significant differences between the 40 parole officers who were not eliminated in future analyses and those who were on these variables, as measured using t-tests for continuous variables and Fisher's exact test for categorical variables (due to expected cell counts).

<sup>4</sup> Likely one of the most common *other* positions was correctional officer. Unfortunately, this option was not explicitly presented.

Table 1  
*Participants' Demographic and Employment Characteristics*

Characteristic	Percentage	(n / 48)
<b>Age Group</b>		
25 – 34	37.5	18
35 – 44	41.7	20
45 – 54	14.6	7
> 55	6.3	3
<b>Gender</b>		
Male	33.3	16
Female	66.7	32
<b>Education</b>		
College diploma/ university degree	89.6	43
Post-graduate degree	10.4	5
<b>Primary clientele</b>		
Male offenders	85.4	41
Women offenders	6.3	3
Both men and women	8.3	4
<b>Previously worked for CSC in another capacity</b>		
No	25.0	12
Yes	75.0	36

*Note.* Percentages for each variable may not sum to 100 due to rounding.

### **Procedure**

The memorandum of invitation sent to parole officers directed those interested in participating to a secure website. The website was accessible from any location (e.g., office or home computer), thereby allowing parole officers to participate at their convenience. Once participants accessed the site, they were guided in choosing the official language in which they wished to view the site and in the creation of an individual username and password which allowed them to interrupt the experiment and

return later if they wished. Thereafter, all participants were presented with an informed consent form explaining their rights and confidentiality,<sup>5</sup> as well as providing contact information for the primary researcher (see Appendix A). Participants were asked to indicate their consent by clicking on the appropriate button on-screen. They were then presented with a background questionnaire, case-based vignettes, and four questionnaires assessing cognitive style and legal authoritarianism. The questionnaires were completed after the case-based vignettes in order to reduce any potential demand characteristics, and the items therein were randomly ordered in order to reduce transparency.

Most participants required approximately forty to sixty minutes to complete the study, but there were no time constraints. A “quit” option was provided throughout data collection, and respondents were able to discontinue their participation at any time by clicking on the appropriate button. If they wished to do so, they could return at a later time to complete any unanswered questions. Once the participants had finished responding or had quit, they were presented with an on-screen debriefing, again with contact information for the primary researcher (see Appendix E). Respondents were encouraged to print the debriefing information for their records. No direct compensation was provided for participation but two participants randomly selected amongst those who chose to submit their name and email for a draw received a \$50.00 gift certificate to Chapters.

## **Materials**

All experimental materials were available in both English and French, and participants chose their preferred language. As none of the measures were originally

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<sup>5</sup> Given that it was originally anticipated to have participants repeat the study after training participation and examine changes from pre- to post-training, it was impossible to promise participants anonymity.

available in French, they were professionally translated. All materials were presented electronically in order to facilitate participant responding and minimize or eliminate data recording errors.

**Background questionnaire.** Each participant was asked to provide information on a number of demographic variables (see Appendix B). Specifically, participants were asked to indicate their gender, their age (by choosing among five categories), and their level of education (by choosing among five categories, including an *other* option). Respondents were also asked how long they had been parole officers, what other positions they have held with CSC, and how long they have worked for CSC in total.

**Case-based vignettes.** This measure (presented in Appendix C) was adapted with permission from one developed by Serin (2005). It involves the randomized presentation of a number of release recommendation vignettes. Vignettes were designed to vary systematically according to a 2 (gender: male, female) X 2 (institutional adjustment: low, high) X 2 (criminal history: extensive, limited) design. However, as much as possible, the cases were formulated to represent the same level of risk.<sup>6</sup> As it was originally intended that the vignettes be completed by participants both prior to and after training, a total of 16 vignettes were created. Vignettes were created by the researcher in consultation with her advisor and a member of the PBC.

Each participant was presented with one vignette representing each cell in the design (for a total of eight vignettes), but the specific vignettes selected were randomized in order to offset the impact of any unidentified biasing factors. Besides varying on these

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<sup>6</sup> This was achieved by varying such factors as density, frequency, and persistence for each of institutional adjustment and criminal history in order to manipulate resulting statistical risk scores or risk ratings.

factors, the vignettes were made to be very similar; all vignettes included comparable content areas (e.g., indication of risk level) and were approximately equal in word count.

After reading each vignette, participants were asked to either choose to recommend that parole be or not be granted, or to access additional information prior to making a recommendation. Additional information could be accessed relating to criminal history, risk assessment, mental health, victim impact, program completion, and the offender's release plan. Once participants had accessed information in a given area once, they could no longer do so, but could choose between making a recommendation and accessing other information. If participants exhausted all the additional information, they were asked to make a recommendation. As a verification of the quality of the experimental materials, once participants made a release recommendation, they were also asked to provide a rating of the degree to which the vignette was representative of cases typically encountered in their daily work.

Responses were scored both across all eight vignettes and individually for each vignette. First, two variables were calculated across all vignettes for each participant: percentage of releases recommended (ranging from 0 to 100%), and vignette mean representativeness (ranging from 0 to 100%). The data were then reorganized to allow analyses by vignette type, providing a dichotomous *grant/deny release* variable in addition to vignette mean representativeness (ranging from 0 to 100%).

**Revised Legal Attitudes Questionnaire.** This measure, developed by Kravitz and colleagues (1993; Appendix D) was used to assess legal authoritarianism. The 23-item scale is a reformulation of the Legal Attitudes Scale developed by Boehm (1968). Examples of items included in this scale are "Any person who resists arrest commits a

crime” and “All too often, minority group members do not get fair trials” (reverse-scored). A six-point Likert-type scale ranging from *strongly disagree* to *strongly agree* is used to answer these items. Total scores range from 23 to 138, with higher scores representing greater legal authoritarianism.

In previous studies, the Revised Legal Attitudes Questionnaire has been found to have adequate to strong internal consistency, ranging from  $\alpha = .70$  to  $\alpha = .81$  (Kravitz et al., 1993). No test-retest reliabilities have been reported. Evidence of the convergent and divergent validity of this measure is satisfactory (Kravitz et al., 1993; Martin & Cohn, 2004). Though there is some evidence of a two-factor structure to the scale (Kravitz et al., 1993; García, Solana, Arias, & Sánchez, 2004), the two factors are not stable across studies. Moreover, virtually all research involving the measure has used only the total scale score (e.g., Butler & Moran, 2007a; Martin & Cohn, 2004; Solana, García, & Tamayo, 1998), and this procedure was also used in the present study. Though gender has been found to correlate with an alternate measure of legal authoritarianism (Moran & Comfort, 1982), the extent to which this association applies to the current scale has not been investigated. Further, no studies assessing the impact of social desirability on this measure were found.

In the present study, internal consistency was somewhat disappointing at  $\alpha = .47$ . Though the English version of the scale’s internal consistency was somewhat higher than the French version’s ( $\alpha = .51$  compared to  $\alpha = .43$ ), both were low.

**Need for Cognition Scale.** Cacioppo and Petty (1982) originally developed a 34-item scale to measure need for cognition, but later created an 18-item version (Cacioppo et al., 1984; Appendix D). Given that some researchers have suggested that longer

measures can include redundant items which increase score variability without increasing reliability (e.g., Clark & Watson, 1995), and that the 18-item version has found to be as or more valid than the 34-item version (Cacioppo et al., 1984), the shorter version was used here. Examples of items included in the scale are “Thinking is not my idea of fun” (reverse-scored) and “The notion of thinking abstractly is appealing to me”. Though the scale was originally rated on a nine-point Likert-type scale ranging from *strongly disagree* to *strongly agree*, a variety of scoring methods have been used, ranging from the nine-point scale to dichotomous *yes* or *no* scoring; no significant differences arise based on scoring scheme (Cacioppo et al., 1996). As such, a six-point Likert-type scale was utilized in the present study in order to be consistent with the other scales. Total scores range from 18 to 108, with higher scores representing higher need for cognition.

The 18-item measure has demonstrated excellent internal consistency, ranging from  $\alpha = .81$  to  $\alpha = .97$ , median  $\alpha = .89$  (see Cacioppo et al., 1996); a seven-week test-retest reliability of  $r = .88$  (Sadowski & Gulgoz, 1992); and, excellent convergent and divergent validity (see Cacioppo et al., 1996). Though some researchers have found the scale to be multidimensional (Lord & Putrevu, 2006; Tanaka, Panter, & Winborne, 1988), these results have been inconsistent. Moreover, most researchers have found that the scale is unidimensional (Bors, Vigneau, & Lalande, 2006; see also Cacioppo et al., 1996). No gender differences have been found on scores on the scale (Cacioppo & Petty, 1982; Lassiter et al., 1991; Tanaka et al., 1988), although both education and age have been found to have small but significant relationships with need for cognition (Spotts, 1994). The relationship between need for cognition and social desirability has been found to be weak and non-significant (Cacioppo & Petty, 1982).

Internal consistency in the current sample was slightly lower than what has been reported elsewhere ( $\alpha = .72$ ). The English scale's internal consistency, at  $\alpha = .75$ , was quite similar to the minimum value reported elsewhere (Cacioppo et al., 1996), though the French version's was a bit lower ( $\alpha = .67$ ).

**Personal Need for Structure Scale.** This scale includes twelve items such as “I find that consistent routine enables me to enjoy life more” and “I don't like situations that are uncertain” (Thompson et al., 2001; Appendix D). Most researchers have eliminated one of the questions (“I enjoy being spontaneous”) due to concerns about social desirability (e.g., Neuberg & Newsom, 1993); the same was done here. Items are rated on a six-point Likert-type scale ranging from *strongly disagree* to *strongly agree*. Total scores on this measure range from 11 to 66, with higher scores indicating a higher need for structure.

Internal consistency reliabilities for the scale are good, ranging from  $\alpha = .77$  to  $\alpha = .91$ , median  $\alpha = .86$  (Neuberg & Newsom, 1993; Thompson et al., 2001). Further, the scale has demonstrated a twelve-week test-retest of  $r = .76$  and strong convergent and divergent validity (Neuberg & Newsom, 1993), including a positive association with right-wing authoritarianism (Jugert, Cohrs, & Duckitt, 2009). Though a two-factor interpretation of the scale (including Desire for Structure and Response to Lack of Structure subscales) has been reliably found (Neuberg & Newsom, 1993), most users have employed the measure's total score (e.g., Kaplan et al., 1993, Moskowitz, 1993); this approach was also used here. No studies assessing the relationship of personal need for structure to gender or education were found, though it has been found not to be associated with age (Hess, 2001) or social desirability (Neuberg & Newsom, 1993).

The overall internal consistency calculated for the scale in the current study was  $\alpha = .84$ . As was the case for the other measures, internal consistency was more promising for the English version of the measure ( $\alpha = .87$ ) than the French ( $\alpha = .60$ ).

**Personal Fear of Invalidity Scale.** This 18-item scale includes such items as “Sometimes I see so many options to a situation that it is really confusing” and “I wish I did not worry so much about making errors” (Thompson et al., 2001; Appendix D). Again, items are rated on a six-point Likert-type scale ranging from *strongly disagree* to *strongly agree*. Total scores range from 14 to 84, with higher scores representing higher personal fear of invalidity.

The scale’s internal consistency coefficients are satisfactory, ranging from  $\alpha = .79$  to  $\alpha = .88$ , median  $\alpha = .83$  (Neuberg, Judice, & West, 1997; Thompson et al., 2001). No test-retest reliabilities have been reported. There is less support in the form of convergent and divergent validity for this scale than for the others, but preliminary findings are encouraging (see Britt, Millard, Sundareswaran, & Moore, 2009; Thompson et al., 2001). No studies were found assessing the relationship of this unidimensional measure to gender, education, age, or social desirability.

Of the scales used in this study, the Personal Fear of Invalidity scale was the only one for which the French version produced a higher internal consistency than the English. In this case, the French version’s internal consistency was excellent ( $\alpha = .91$ ) and the English version’s was satisfactory ( $\alpha = .76$ ). The overall internal consistency was  $\alpha = .84$ .

**Analytic Strategy**

In order to answer the research questions, it was necessary to conduct two series of analyses, each of which required the data to be organized in a specific fashion. First, a series of analyses was conducted with the vignettes as the unit of analysis ( $N = 370$ ). Secondly, parole officers were used as the unit of analysis ( $N = 40$ ).

**Vignette-level analyses.** For analyses at the vignette level, means and standard deviations were used to describe the few continuous variables, and frequencies to describe the more numerous dichotomous variables. For the remainder of analyses, it was necessary to acknowledge that both the observations and outcomes were not independent (given that each parole officer completed multiple vignettes). As such, analyses that accounted for this inter-correlation were selected.

The outcomes of interest were the recommendation to grant or deny parole and the amount of additional information accessed. To examine the relationship of these variables to the three manipulated vignette characteristics (offender gender, offender institutional adjustment, and offender criminal history), it was inappropriate to use multiple and logistic regressions as these analyses cannot account for the inter-correlation amongst observations from each participant. Instead, the method of generalized estimating equations (GEE) was selected as it accounts for correlations amongst predictors and approximates a repeated-measures multiple or logistic regression (Hanley, Negassa, Edwardes, & Forrester, 2003; Liang & Zeger, 1986). GEE is often used with binary predictors and therefore well-suited to these analyses. It can also be used with either binary or continuous outcome variables.

Essentially, GEE is an adaptation of generalized linear models based on a quasi-likelihood rather than maximum likelihood approach. It allows for correlations within “clusters” (for these data, these are individual parole officers) and uses weighted combinations of observations to extract the appropriate amount of information from correlated data. To do so, a correlation structure is established. First, an ordinary multiple or logistic regression, depending on the outcome variable, is computed. This first equation assumes a given correlation structure between observations in the same cluster. Residuals are then calculated by subtracting predicted from observed outcomes, and an interim working correlation matrix is estimated from these residuals. Then the regression coefficients are refit, correcting for the interim working correlation structure, and residuals are recalculated. This process is repeated until the estimates become stable. This process requires a starting specification of the correlation structure from the researcher; however, fortunately, GEE approaches tend to be robust to misspecification of the correlation structure (Liang & Zeger, 1986).

Though the data structure – observations within clusters – is similar to that used in multi-level analyses, the GEE method approaches data differently. While multi-level analyses estimate between-cluster variance and incorporate these estimates into standard errors, the GEE approach focuses on similarity rather than variance and uses estimates of similarity to produce more accurate regression parameters and standard errors for the within-cluster variables (Hanley et al., 2003). The limitation associated with this difference, however, is that the parameters produced by GEE are considered population-averaged rather than subject-specific – that is, results do not allow an evaluation of differences in an individual’s response; instead they allow evaluations *across* individuals

(Zeger, Liang, & Albert, 1988). This type of analysis was considered appropriate given the study's focus on parole officers as a group.

In addition to producing regression coefficients and their standard errors, GEE produces a statistic akin to Akaike's Information Criterion. Because GEE is non-likelihood based (as opposed to based on maximum likelihood), Akaike's Information Criterion is inappropriate. Instead, GEE provides an estimate of model fit where the likelihood is replaced by the quasi-likelihood and certain adjustments are made, the Quasi-likelihood under the Independence model Criterion (QIC; Pan, 2001). Lower QIC values indicate a better-fitting model, but there are no further guidelines for comparing the changes associated with adding and removing variables in nested GEE models.

**Parole officer-level analyses.** For analyses with parole officers as the unit of analyses, means, standard deviations, and frequencies were again used to describe data. In addition, multiple linear regression was used to examine the relationship of scores on the cognitive style and legal authoritarianism questionnaires with each of the percentage of vignettes resulting in a grant recommendation and the average number of extra information categories viewed per vignette.

## **Results**

### **Data Entry and Screening**

Forty-eight participants completed this study. Given the computerized data collection method used, data entry was not required. Data were screened for out-of-range values and, for continuous variables, plausible means and standard deviations. No problems were detected. Given that analyses conducted at the parole officer and vignette

level were conducted separately, the remainder of the data screening and cleaning was also.

**Vignette-level data screening.** Only vignettes with at least partial data were retained. Fourteen of the 384 presented vignettes (3.6%) were skipped by the parole officers and were therefore dropped. For one remaining case, no representativeness rating was provided. This value was replaced with the mean for other vignettes with the same manipulated case characteristics.

Next, the two continuous variables were examined for possible univariate outliers by standardizing variables as z-scores. None of the z-scores exceeded  $\pm 3$ , indicating that no univariate outliers were present (Stevens, 2002). Similarly, neither of these variables was found to be problematic in terms of skewness and kurtosis. Dichotomous variables were assessed for extreme distributions, with no problems identified. A summary of the results of these verifications, of the frequency distributions of the dichotomous variables and of the means, standard deviations, and ranges of continuous variables, are presented in Appendix F.

Given that planned analyses involved generalized estimating equations with all predictors being dichotomous variables (the manipulated vignette characteristics and the information domains accessed), many typical verifications were omitted or modified. Specifically, the assumptions of linearity and homoscedasticity did not apply and were not assessed. In addition, Mahalanobis distance could not be calculated – instead, multi-way cross-tabulation tables were computed to examine possible redundancies among variables. None were identified. Finally, intercorrelations amongst variables were calculated using biserial correlations (for the association between dichotomous and

continuous variables) and phi coefficients (for the associations amongst dichotomous variables). As can be seen in Appendix G, inter-correlations amongst the variables were weak, thereby revealing no problems with respect to multicollinearity or singularity.

**Parole officer-level data screening.** For analyses conducted at the parole officer level, eight participants (16.7%) had missing data on all four questionnaires. Given that this represented *all* the independent variables to be used in these analyses, replacement of data was deemed inappropriate and the cases were omitted from these analyses.<sup>7</sup> Of the remaining 40 parole officers, 15 (38%) were missing data on the Personal Fear of Invalidity scale. Investigation revealed that this was due not necessarily to failure to respond to this questionnaire but instead to a technical challenge resulting in these data not being properly recorded. The pattern of these missing data were further investigated using a Little's MCAR test for which demographic variables (gender, age, and education), length of time working with CSC, length of time in current position, percentages of vignettes resulting in a grant recommendation, average representativeness rating, average number of additional information domains accessed, and scores on the other three measures of cognitive style and legal authoritarianism were included. Test results were non-significant,  $\chi^2 (13, N = 40) = 9.22, p = 0.76$ , which indicates that the data were Missing Completely At Random (MCAR) and therefore, could be replaced using multiple imputation techniques, considered the most appropriate for replacing data

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<sup>7</sup> Given that the missing data were not relevant to analyses at the vignette level, these parole officers' data were retained for those analyses. To determine whether the slight differences in samples represented by each series of analyses had a significant impact on results, a dummy variable which represented whether the case was used in parole officer level analyses was added to the vignette-level analyses. Because GEE cannot accommodate random effects, this variable was treated as a fixed effect. In addition, given that the eight cases omitted in this series of analyses were retained for the vignette-level analyses, they were included in the sample description.

which are Missing at Random (MAR) or Missing Completely at Random (MCAR; Allison, 2001).

Though five imputed datasets has been the norm and is cited as sufficient in important texts regarding missing data (e.g., Allison, 2001), more recent research demonstrates that a large number of imputed datasets results in more stable estimates and therefore stronger statistical inferences, especially with higher percentages of missing data and with smaller samples (e.g., Graham, Olchowsky & Gilreath, 2007; Johnson & Young, 2011). Given that both of these conditions were met in the current situation, Johnson and Young's (2011) recommendation was followed and 25 imputed datasets were calculated and used in performing analyses.

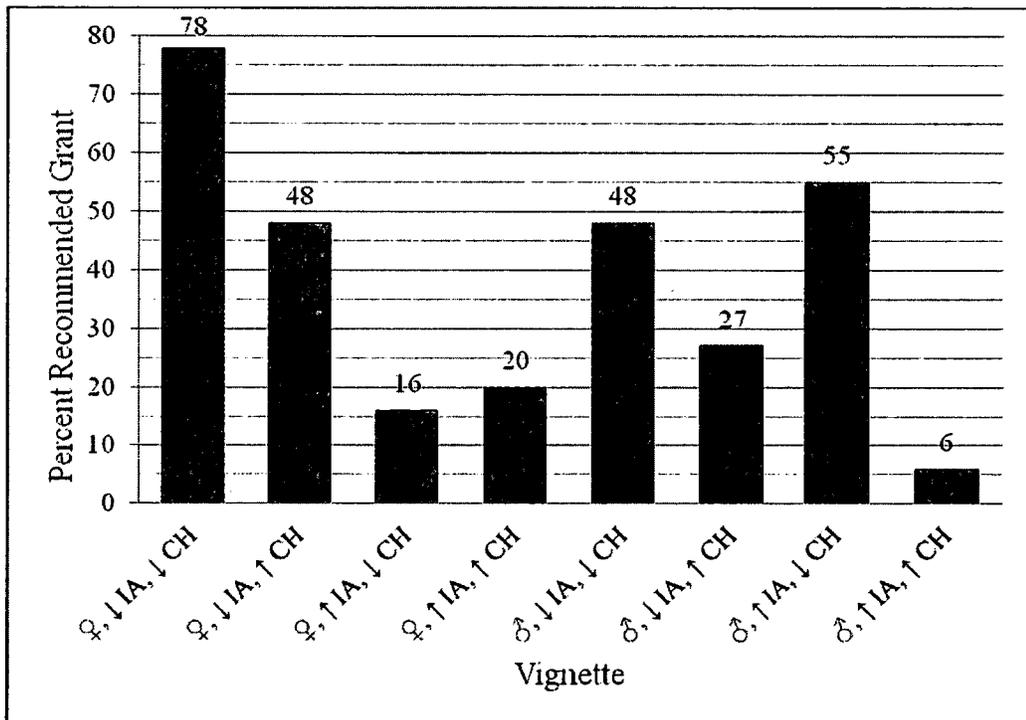
At this point, the possible presence of univariate outliers amongst continuous variables was also examined; none were found. Continuous variables were also assessed for normality (skewness and kurtosis) and for linearity and homoscedasticity through the use of bivariate scatterplots; no violations were found. Appendix F presents the details of these verifications, along with means, standard deviations, and ranges of continuous variables and distributions of categorical variables.

The calculation of Mahalanobis distance values demonstrated that the dataset included no multivariate outliers. An intercorrelation matrix was also calculated (see Appendix G) to screen for multicollinearity and singularity, but revealed none of concerning magnitude. Finally, for the multiple regression analyses, the ratio of cases to predictors did not achieve that outlined by Tabachnik and Fidell (2007), but did exceed the more liberal ratio of 5 to 1 presented by Hair, Anderson, Tatham, and Black (1998).

**Vignette-Level Analyses**

**Descriptive statistics.** The dependent variables in the vignette-level analyses were whether release was recommended and the number of additional information domains accessed. Across all vignettes, release was recommended in 37.3% of cases. As can be seen in Figure 1, patterns between recommendations and the manipulated case characteristics did not seem consistent or were not readily apparent, which may suggest the presence of interactions amongst the characteristics.

Figure 1  
*Percentage of Vignettes for Which Release Was Recommended, by Vignette Category*



Note. ♀ = female. ♂ = male. ↑ IA = high institutional adjustment. ↓ IA = low institutional adjustment. ↑ CH = extensive criminal history. ↓ CH = limited criminal history.

On average, 3.0 (*SD* = 2.5) information domains were accessed per vignette. The range of information domains accessed was from 0 to 6, indicating that for some vignettes, participants accessed all the vignettes, while for others, they accessed none.

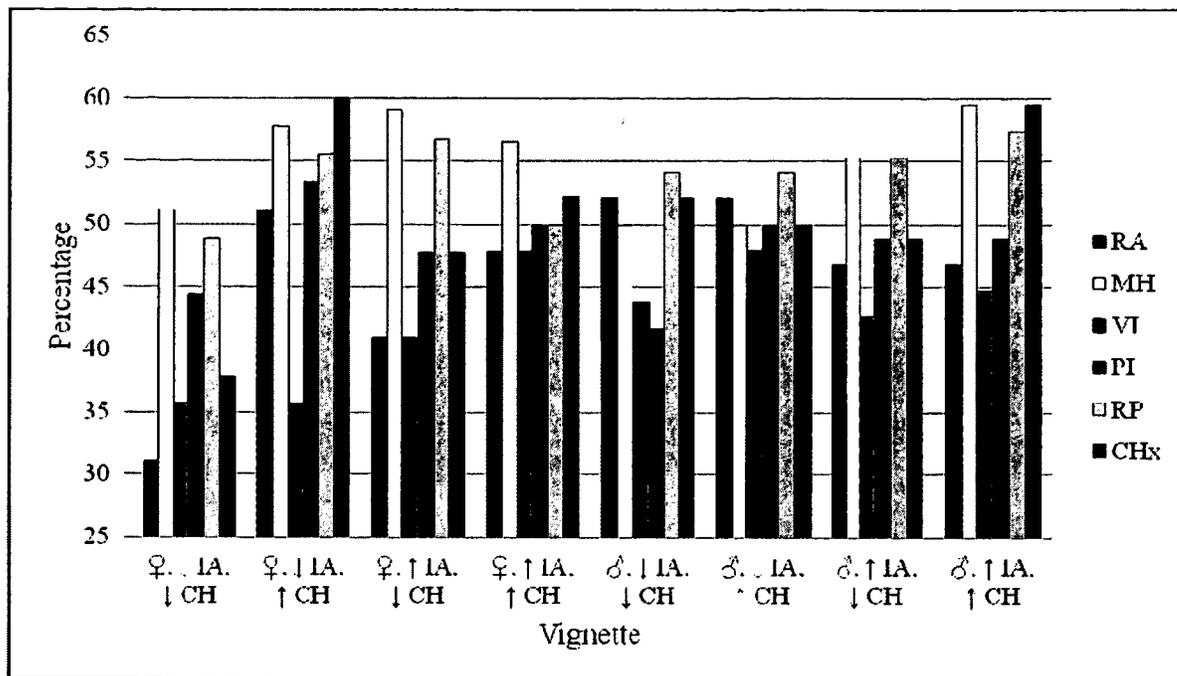
Figure 2 presents the percentage of cases in which each information domain was accessed, broken down by vignette. As can be seen, there was considerable variability in the percentage for each type of vignette wherein a given information domain was accessed. While some domains, including mental health information and release plan information, were accessed in relatively similar proportions of cases for each type of vignette (with a difference of less than 10 percentage points between the vignettes with the lowest and highest percentage points), this was not consistently the case. Both risk assessment and criminal history had a difference of greater than 20 percentage points between the percentage of cases wherein the domain was accessed in the vignettes where they was most often and least often accessed.

In addition, it was apparent that there were differences amongst the vignettes in terms of the percentage of cases wherein additional information was accessed. Specifically, the vignette representing a female offender with low (poor) institutional adjustment and limited criminal history was the one for which participants tended to view the least information (41.5% overall). This seemed lower than all of the other vignettes, which ranged in average information access rate from 48.9% to 52.8%.<sup>8</sup>

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<sup>8</sup> While the manner in which the data are presented in this figure might suggest that this difference could be attributable to the vignette representing a female offender with low institutional adjustment and limited criminal history being presented first, this, in fact, was not the case. The order of presentation of the vignettes was randomized for each participant.

Figure 2  
*Percentage of Cases Wherein Each Additional Information Domain Was Accessed, by Vignette*



Note. RA = risk assessment. MH = mental health. VI = victim information. PI = program information. RP = release plan. CHx = criminal history. ♀ = female. ♂ = male. ↑ IA = high institutional adjustment. ↓ IA = low institutional adjustment. ↑ CH = extensive criminal history. ↓ CH = limited criminal history.

Despite these small differences, correlations amongst the information domains accessed were quite strong. As can be seen in Appendix G, correlations amongst the variables indicating whether each domain was accessed ranged from  $r = .57$  to  $r = .74$ . Correlations were weakest between risk assessment and each of victim information and program information, and strongest between mental health information and all the other domains save risk assessment.

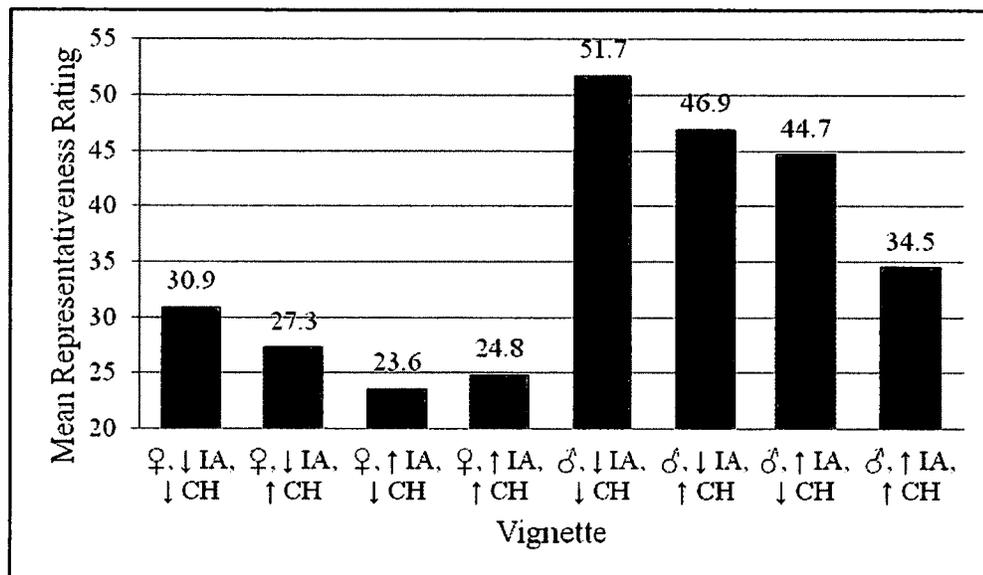
**Effects of manipulated offender characteristics on parole recommendations.**

*Representativeness of offender vignettes.* Prior to further analyses, as a verification of the quality of the experimental stimuli, the representativeness ratings given vignettes were examined. The overall mean rating of 35.8 ( $SD = 27.9$ ) on a scale of 0 to

100 suggested that participants did not find the vignettes particularly representative.

When vignettes were examined individually (see Figure 3), it seemed that the vignettes corresponding to male offenders were considered more representative than were those corresponding to women offenders. Indeed, a paired-sample t-test confirmed that those corresponding to male offenders ( $M = 44.5$ ;  $SD = 25.7$ ) were rated as significantly more representative than were those for women offenders ( $M = 26.7$ ;  $SD = 27.3$ ),  $t(368) = 6.46$ ,  $p < .001$ .

Figure 3  
Mean Representativeness Rating, by Vignette



Note. ♀ = female. ♂ = male. ↑ IA = high institutional adjustment. ↓ IA = low institutional adjustment. ↑ CH = extensive criminal history. ↓ CH = limited criminal history.

This difference may be at least partially attributable to the fact that about 85% of parole officers who participated in the study stated that they worked predominantly with male offenders. Nonetheless, even for male offender vignettes, the representativeness ratings did not reach the levels that were expected, particularly considering the mean representativeness ratings provided by PBC and New Zealand Parole Board members

when presented with similar vignettes in a previous study (Gobeil, 2006). These parole board members provided representativeness ratings ranging from a low of 54.9 to a high of 69.4 – all of which are higher than the highest rating in the current study. Overall, then, the patterns of results reveal that parole officers did not feel that the vignettes with which they were presented were representative of those encountered in their daily work. This has very significant implications for the interpretation of findings from this study.

*Effects of manipulated offender characteristics.* Vignettes were systematically varied in terms of the protagonist offender's gender (male or female), institutional adjustment (low or high) and criminal history (limited or extensive). Of interest was the association of each of these manipulated characteristics with both the recommendation to grant or to deny release and the mean number of additional information domains accessed.

Table 2 presents the percentage of vignettes wherein grant was recommended as a function of the manipulated vignette characteristics. The percentage of cases wherein the granting of parole was recommended seemed to vary with the institutional adjustment and the criminal history of the offender depicted with the vignette. While the relationship between criminal history and grant recommendation was as would be expected, with a greater proportion of cases with limited criminal involvement receiving a grant recommendation (49.5% vs. 25.3%), the relationship with institutional adjustment seemed contrary to expectation: relative to the vignettes representing high institutional adjustment, a greater percentage of those representing low adjustment received a recommendation to grant parole (50.0% vs. 24.5%). Again, however, patterns were inconsistent, perhaps suggesting an interaction among offender characteristics.

Table 2  
*Percentage of Grant Recommendations by Manipulated Vignette Characteristics*

Gender	Institutional Adjustment	Criminal History		Row Totals
		Limited	Extensive	
Female	Low	77.8	48.9	63.3
	High	15.9	19.6	17.8
	Total	47.2	34.1	40.6
Male	Low	47.9	27.1	37.5
	High	55.3	6.4	30.9
	Total	51.6	16.8	34.2
Column Totals		49.5	25.3	37.3

To assess these differences statistically, GEE analysis was conducted using an exchangeable correlation matrix. Given the considerable variability but lack of discernible patterns in the percentages of vignettes resulting in a grant recommendation across the cells in the earlier table, a model with all three two-way interaction terms and the three-way interaction term was fitted first, and produced a QIC of 419.50. A second model was then fitted which omitted the three-way interaction term, which resulted in a QIC of 428.55. Given that lower QIC values indicate better fit, these results support that the more complex model better represented the data.

Table 3 presents the regression coefficients (including a 95% confidence interval), their standard error, and the test for significance for each parameter. Given that the three-way interaction of gender, institutional adjustment, and criminal history was statistically significant,  $z = -3.16$ ,  $p < .01$ , this is the only term in the equation that was interpreted.

Table 3  
*Generalized Estimating Equation of Recommendation on Manipulated Vignette Variables*

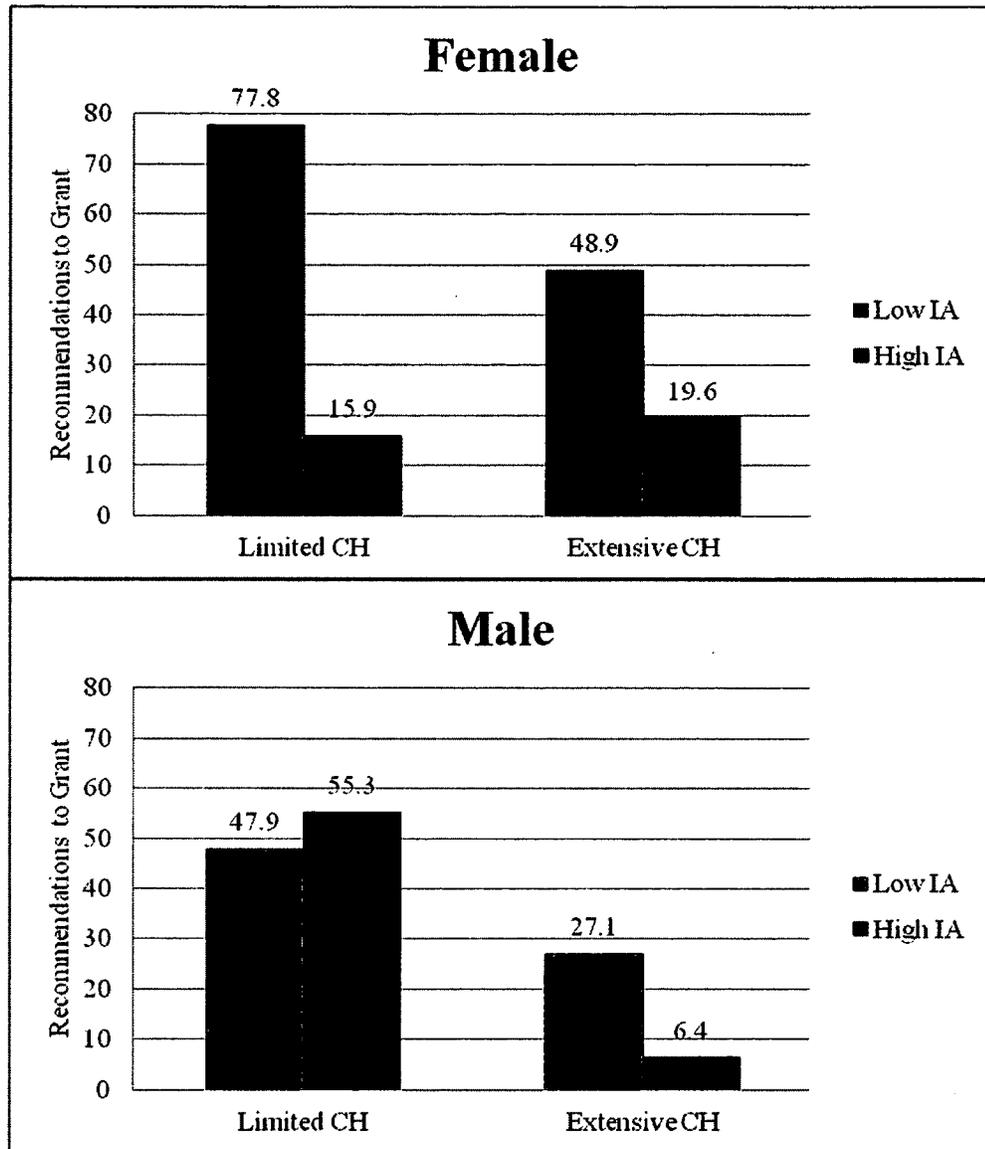
Manipulated Vignette Variable	<i>B</i>	SE ( <i>B</i> )	<i>z</i>	95% C.I. for <i>B</i>	
				Lower	Upper
Gender (1 = 'female')	-1.27	0.73	-1.73	-2.71	0.16
Institutional Adjustment (1 = 'low')	1.36	0.50	2.73**	0.38	2.34
Criminal History (1 = 'limited')	-0.24	0.60	-0.40	-1.41	0.93
Gender X Institutional Adjustment	0.32	0.86	0.38	-1.36	2.00
Gender X Criminal History	3.13	0.82	3.82***	1.53	4.74
Institutional Adjustment X Criminal History	1.55	0.79	1.97*	0.01	3.10
Gender X Institutional Adjustment X Criminal History	-3.54	1.12	-3.16**	-5.74	-1.34

*Note:* Reference category is 'recommend grant'.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Unfortunately, the nature of the three-way interaction was not immediately clear. Figure 4 presents a graphical representation of the percentage of vignettes resulting in a grant recommendation associated with every combination of the three manipulated vignette characteristics. The first conclusion is that the pattern differed notably by the protagonist's gender. For the vignettes featuring women offenders, as well as for that of the male offender with extensive criminal history, greater institutional adjustment was associated with a lower percentage of recommendations to grant parole, while lower institutional adjustment was associated with a higher percentage of recommendations to grant parole. For the vignettes featuring a male offender with limited criminal history, however, this relationship was inversed, and greater institutional adjustment was associated with a slightly greater percentage of recommendations to grant release.

Figure 4  
*Three-Way Interaction for the Percentages of Cases Where Grant Was Recommended*



Note. CH = criminal history. IA = institutional adjustment.

In addition, the magnitude of the difference in percentage of recommendations to grant across levels of criminal history was not consistent across gender or levels of institutional adjustment. While the difference in percentage of recommendations to grant was similar across gender between those with limited and extensive criminal history when focusing only on low institutional adjustment, this pattern did not hold for those

with high institutional adjustment. Indeed, the percentage of recommendations resulting in a grant recommendation for women offenders with high institutional adjustment was roughly the same regardless of criminal history, while this was not the case for male offenders.

As mentioned previously, the parole-officer level analyses conducted next were conducted with a somewhat smaller sample size as a result of the fact that several parole officers' data had to be deleted as they were missing data on all cognitive style questionnaires. To examine if the current results were also representative in this smaller sample, the above analysis was repeated with a dummy variable representing inclusion in the next series of analyses added. In other words, a second GEE with all three manipulated vignette characteristics, including two-way and three-way interaction terms, and with the addition of a "missing" dummy variable was conducted. The QIC of 421.58 resulting from this analysis was larger than that without the dummy variable (QIC = 419.50), indicating that the dummy variable did not add significantly to the predictive ability of the equation. In other words, whether or not the parole officer was omitted from later analyses was unimportant in this relationship.

Next, analyses were conducted to examine the relationship of the manipulated case characteristics to the number of additional information domains accessed. As can be seen in Table 4, which presents the mean number of additional information domains accessed, according to the vignette characteristics, there was considerably less variability in the number of information domains accessed by vignette characteristic than had been the case in the percentage of vignettes resulting in a recommendation to grant parole.

Table 4  
*Mean Number of Information Domains Accessed by Manipulated Vignette Characteristics*

Gender	Institutional Adjustment	Criminal History		Row Totals
		Limited	Extensive	
Female	Low	3.0	2.9	3.0
	High	3.1	2.5	2.8
	Total	3.1	2.7	2.9
Male	Low	3.2	3.0	3.1
	High	3.0	2.9	3.0
	Total	3.1	2.9	3.0
Column Totals		3.1	2.8	3.0

Again, GEE analysis was undertaken using an exchangeable correlation matrix. In this case, it was not obvious whether to begin with a saturated model or a constant-only model. As such, a comprehensive series of GEEs were computed. Comparison of the models was complicated by the fact that published guidelines for comparing QIC values associated with various GEE models specify only that a lower QIC value is indicative of better fit – there is no equivalent to the contrasting of -2 Log Likelihood values, using differences in degrees of freedom and the chi-square distribution, possible for multiple and logistic regressions (Tabachnik & Fidell, 2007). In absolute terms, the QIC value associated with the saturated model, including all main effects, all two-way interactions, and the three-way interaction, had a lower QIC value (377.28) than any other model. That said, it was only .02 units lower than the next lowest (QIC = 377.30 for the model including the interaction of gender with each of institutional adjustment and criminal history); in fact, the difference in QIC values between the saturated model and the

constant-only model was of only 1.81 units, yet the saturated model included an additional 15 parameters requiring estimation (i.e., had 15 fewer degrees of freedom).

Though the published literature does not seem to incorporate any guidelines on the relative importance of model simplicity in GEE, it is generally accepted in comparing regression models that if several fit the data equally well, one should select the simplest. For example, Larsen (2008) argues that unnecessarily complex models lead to confusing interpretations and less precise parameter estimates. Applying this logic to the present analyses, then, resulted in the selection of the constant-only model as the one which fit the data similarly to other models and was most parsimonious. In other words, GEE analysis did not support the existence of any relationship between the three manipulated case characteristics and the number of information domains accessed.

Again, an additional GEE analysis was conducted with the addition of a dummy variable indicating whether the parole officer was omitted from parole officer-level analyses. This equation produced a QIC of 384.14, greater than that of 379.09 for the constant-only model, indicating that the addition of the dummy variable to the equation did not produce a better fit.

Finally, analyses were conducted to examine whether accessing specific information domains was associated with a recommendation to grant or deny release. Again, GEE with an exchangeable correlation matrix was used to identify the model which best fit these data. In this case, interaction terms were not meaningful and were therefore omitted from the analyses. A full model, including all six information domains, produced a QIC of 484.04, whereas a constant-only model produced a QIC of 491.31; the

range for all models was of 482.31 to 495.63. The best model (QIC = 482.31) was one restricted to risk assessment, program information, and release plan.

Table 5 presents the regression coefficients (including a 95% confidence interval), their standard error, and the test for significance for each parameter for this model. Though the model as a whole was the one which best fit the data, only the accessing of program information and of release plan were significantly associated with release recommendation.

Table 5  
*Generalized Estimating Equation of Release Recommendation on Information Domains Accessed*

Information Domain	<i>B</i>	SE ( <i>B</i> )	<i>z</i>	95% C.I. for <i>B</i>	
				Lower	Upper
Risk Assessment	-0.41	0.29	-1.41	-0.99	-0.16
Program Information	-0.84	0.41	-2.06*	-1.64	-0.04
Release Plan	1.50	0.40	3.78***	0.72	2.28

*Note:* Reference category is 'recommend grant'.

\* $p < .05$ . \*\*\* $p < .001$ .

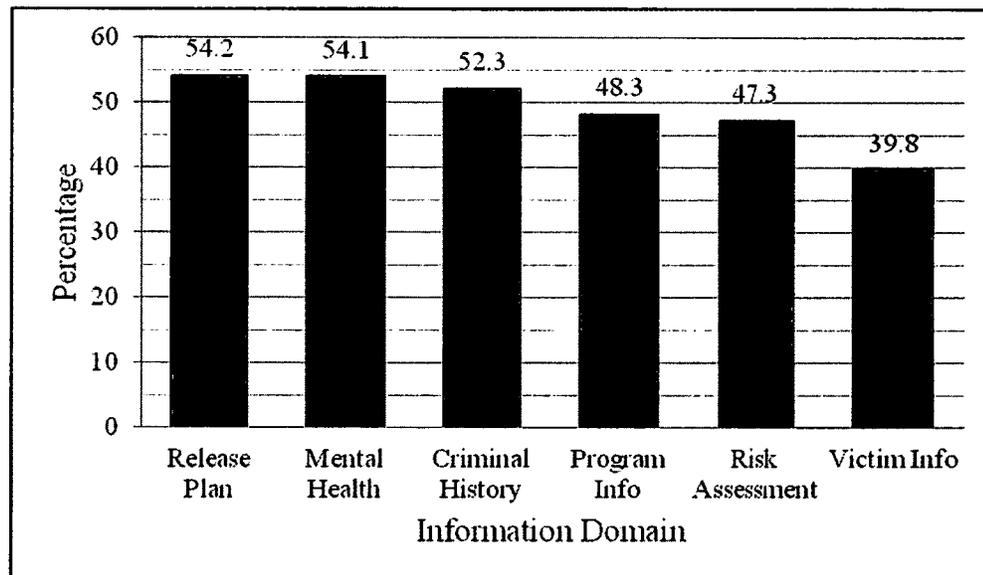
### Parole Officer-Level Analyses

#### Descriptive statistics.

**Dependent variables.** The dependent variables in the analyses at the level of the parole officer were the mean percentages of vignettes resulting in a grant recommendation and the mean number of additional information domains accessed. Across participants, the mean percentage of releases recommended was 37.0% ( $SD = 20.0$ ). While some participants recommended that release be granted for up to three-quarters of vignettes, none recommended granting in all cases – overall, the range of percentages of vignettes resulting in a grant recommendation was from 0% to 75%.

On average, participants accessed about half ( $M = 3.3$ ;  $SD = 2.1$ ) of the additional information domains, with some accessing all and some accessing none. Figure 5 presents the mean percentage of the vignettes to which parole officers responded that they consulted each additional information domain. Across vignettes, the most commonly accessed domain areas were mental health and release plan (in 54% of vignettes each), while victim information was accessed least frequently (in 40% of vignettes).

Figure 5  
*Mean Percentage of Vignettes Wherein Information Domain Accessed*



The dependent variables were also examined for possible associations with the demographic and employment variables. A series of t-tests and ANOVAs revealed that neither were associated with any of the categorical demographic and employment characteristics (see Table 6).

Table 6  
*Release Recommendation Variables by Demographic and Employment Characteristics*

Characteristic	Mean (SD)	
	Percentages of Vignettes for Which Grant Recommended	Number of Information Domains Accessed
<b>Age Group</b>		
25 – 34	36.7 (21.4)	3.9 (2.1)
35 – 44	41.3 (18.6)	3.3 (2.0)
45 – 54	18.8 (16.1)	1.3 (1.4)
> 55	37.5 (21.7)	2.4 (1.9)
<i>F</i>	1.43	2.2
<b>Gender</b>		
Male	31.3 (18.1)	3.7 (1.9)
Female	39.5 (20.6)	3.1 (2.1)
<i>t</i>	1.20	0.88
<b>Education</b>		
College diploma/ university degree	37.0 (25.0)	3.3 (2.0)
Post-graduate degree	37.5 (35.4)	3.3 (3.9)
<i>t</i>	0.04	0.01
<b>Primary clientele</b>		
Male offenders	38.4 (20.1)	3.4 (2.1)
Women offenders	25.0 (25.0)	3.1 (1.1)
Both men and women	31.3 (8.8)	1.3 (1.8)
<i>F</i>	0.69	1.04
<b>Previously worked for CSC in another capacity</b>		
No	31.3 (20.3)	3.1 (2.3)
Yes	39.5 (19.8)	3.3 (2.0)
<i>t</i>	1.20	-0.41

All results non-significant.

The calculation of the correlation of the percentage of release recommendations with both length of time employed with CSC ( $r = -.20, p = ns$ ) and length of time in the

current position ( $r = -.16, p = ns$ ) demonstrated that no significant associations existed amongst these variables. The calculation of the correlation of the number of information domains accessed with length of time employed with CSC and length of time in the current position ( $r = -.33, p = .06$ , and  $r = -.35, p = 0.8$ , respectively, after application of a Bonferroni correction) revealed negative correlations of somewhat larger magnitude which approached but did not quite attain statistical significance. In other words, there was a non-significant but suggestive trend for participants with more experience as parole officers to recommend release for fewer vignettes and to consider less information before reaching their recommendations.

***Independent variables.*** The independent variables were parole officers' scores on the four cognitive style and legal authoritarianism measures. Means and standard deviations on these measures are presented in Table 7. Given that each measure had a different number of items, the range of possible scores differed. To increase comprehensibility, scores on each measure were divided by the number of items on the measure, which yielded adjusted means and standard deviations measured on a common metric, with a range from 1 (*strongly disagree*) to 6 (*strongly agree*). Scores on the Revised Legal Attitudes Questionnaire and the Personal Need for Structure Scale fell almost exactly at the midpoint between *strongly disagree* and *strongly agree*; in contrast, average scores on the Need for Cognition Scale were relatively low while those on the Personal Fear of Invalidity Scale were somewhat high.

Table 7  
*Participants' Mean Cognitive Style and Legal Authoritarianism Questionnaire Scores*

Questionnaire	<i>M</i> ( <i>SD</i> )	Adjusted <i>M</i> ( <i>SD</i> )
Revised Legal Attitudes	77.1 (9.2)	3.3 (0.4)
Need for Cognition	45.3 (8.4)	2.5 (0.5)
Personal Need for Structure	38.7 (8.7)	3.5 (0.8)
Personal Fear of Invalidity	54.3 (10.6)	3.9 (0.8)

*Note.* "Adjusted *M*" is the raw mean divided by the number of items within that scale; it is calculated to allow for comparison across measures.

Participants' scores on the cognitive style and legal authoritarianism questionnaires were contrasted with scores on these measures reported elsewhere, with the exception of the Revised Legal Attitudes Questionnaire. (Despite extensive searching, no published mean scores could be found for this measure.) Participants' scores on two of the three cognitive style measures were similar to those found in a previous examination of 419 Canadian undergraduate students (Blais et al., 2005). Specifically, mean scores on the Personal Need for Structure Scale were quite close in the present (3.5) and previous (3.6) samples, while those for the Personal Fear of Invalidity Scale were relatively similar (3.9 in the present study vs. 3.3 in the previous). However, participants in the present study's average score on the Need for Cognition Scale was considerably lower than that found by Blais and colleagues (2.5 vs. 3.9).

It was also possible to contrast the parole officers' scores on these measures to those of a sample of Canadian and New Zealand parole board members (Gobeil, 2006). Again, the largest gap was for the Need for Cognition Scale (for which the average score was 2.5 amongst parole officers vs. 3.6 amongst parole board members). Scores on the Personal Need for Structure Scale were identical for the two groups while those for the Personal Fear of Invalidity Scale were 0.3 points higher in the present sample.

Manual calculation of independent samples t-tests revealed that the difference between parole officers and parole board members on scores on the Need for Cognition scale were statistically significant,  $t(69) = 11.75, p < .001$  (based on actual rather than adjusted mean values), though the differences for the other two cognitive style measures were not significant. The same pattern emerged in comparing parole officers to the sample of Canadian students examined by Blais and her colleagues (2005): parole officers had significantly lower scores on Need for Cognition,  $t(467) = 16.78, p < .001$ , though scores on the other two measures did not differ significantly.

As was done for the dependent variables, the independent variables were further examined with respect to any possible association with the demographic and employment variables. As can be seen in Table 8, parole officers who had been employed at CSC longer tended to have significantly higher scores on the Personal Fear of Invalidity Scale.

Table 8  
*Cognitive Style and Legal Authoritarianism Questionnaire Scores by Continuous Employment Characteristics*

Employment Characteristic	Correlation			
	RLAQ	NFC	PNS	PFI <sup>a</sup>
Time Employed with CSC	-.15	.09	-.10	.55*
Time in Current Position	-.11	.06	-.06	.26

*Note.* RLAQ = Revised Legal Attitudes Questionnaire. NFC = Need for Cognition Scale. PNS = Personal Need for Structure Scale. PFI = Personal Fear of Invalidity Scale.

<sup>a</sup> PFI results are pooled across 25 imputed datasets.

\* $p < .006$  (Bonferroni correction:  $.05 / 8$ ).

A series of t-tests and ANOVAs were used to examine if scores on the cognitive style and legal authoritarianism measures were significantly associated with the demographic and employment characteristics (see Table 9). Once again, a significant

association was found for scores on the Personal Fear of Invalidity Scale – this time with parole officer age. A post hoc Scheffé test further revealed that those who were above the age of 55 had significantly higher scores on the Personal Fear of Invalidity Scale than did younger counterparts. This result is consistent with the correlation of this same cognitive style measure with length of time employed with CSC, of course, as having reached an older age is required in order to be able to have worked somewhere for longer.

Table 9  
*Cognitive Style and Legal Authoritarianism Questionnaire Scores by Categorical Demographic and Employment Characteristics*

Characteristic	Mean (SD)			
	RLAQ	NFC	PNS	PFI <sup>a</sup>
<b>Age Group</b>				
25 – 34	76.9 (10.6)	43.1 (8.4)	39.9 (7.7)	47.1
35 – 44	77.2 (9.1)	46.7 (8.7)	37.2 (10.4)	58.2
45 – 54	78.3 (6.7)	47.0 (10.4)	38.8 (8.0)	66.2
> 55	75.0 (8.5)	45.3 (4.0)	42.0 (1.0)	91.4
<i>F</i>	0.07	0.53	0.41	10.6*
<b>Gender</b>				
Male	72.2 (9.9)	45.2 (8.6)	35.7 (12.2)	69.3
Female	79.9 (8.3)	45.3 (8.5)	40.0 (6.6)	52.2
<i>t</i>	-2.16	-0.05	-1.47	2.13
<b>Education</b>				
College diploma/ university degree	77.3 (9.3)	45.3 (8.5)	36.7 (8.9)	56.6
Post-graduate degree	72.0 (7.1)	45.5 (6.4)	39.5 (2.1)	72.1
<i>t</i>	0.79	-0.04	-0.13	-0.67
<b>Primary clientele</b>				
Male offenders	76.7 (9.5)	44.5 (8.0)	38.1 (9.1)	58.3
Women offenders	79.7 (7.5)	46.0 (10.6)	44.0 (4.6)	43.7
Both men and women	79.0 (8.5)	57.5 (6.4)	41.0 (1.4)	60.5
<i>F</i>	0.19	0.10	0.51	0.95
<b>Previously worked for CSC in another capacity</b>				
No	80.7 (8.3)	45.8 (8.5)	38.0 (10.1)	47.4
Yes	75.4 (9.2)	45.1 (8.5)	39.0 (8.3)	61.6
<i>t</i>	1.69	0.23	-0.34	-1.57

*Note.* RLAQ = Revised Legal Attitudes Questionnaire. NFC = Need for Cognition Scale. PNS = Personal Need for Structure Scale. PFI = Personal Fear of Invalidity Scale.

<sup>a</sup> PFI results are pooled across 25 imputed datasets; this eliminates standard deviations.

\* $p < .002$  (Bonferroni correction: .05 / 21).

**Effects of parole officer cognitive style and legal authoritarianism on release recommendations.** Two multiple regressions were calculated to determine whether scores on the measures of cognitive style and legal authoritarianism were related to the dependent variables of percentage of vignettes in which release recommended and mean number of information domains accessed. Table 10 presents the standardized and unstandardized regression coefficients produced in these calculations. With respect to the percent of vignettes in which a grant recommendation was made, results were non-significant and non-predictive, as demonstrated by an adjusted  $R^2$  value between -.07 and .14,  $F(4, 39) = 0.15 - 2.59, ns$ . Similarly, scores on the four cognitive style and legal authoritarianism measures were also found not to be significantly predictive of the mean number of information domains accessed, as demonstrated by an adjusted  $R^2$  value of between .01 and .20,  $F(4, 39) = 1.08 - 3.40, ns$ .

Table 10

*Multiple Regression of Recommendation Making Variables on Cognitive Style and Legal Authoritarianism Measures*

Independent Variable	<i>B</i>	SE ( <i>B</i> )	95% C.I. for <i>B</i>		$\beta$
			Lower	Upper	
Percent of Vignettes in Which Grant Recommended					
Revised Legal Attitudes	-0.18	0.43	-1.02	0.66	-0.16 – -0.02
Need for Cognition	0.27	0.41	-0.54	1.08	0.08 – 0.13
Personal Need for Structure	0.02	0.47	-0.91	0.94	-0.05 – 0.08
Personal Fear of Invalidity	-0.31	0.26	-0.83	0.22	-0.47 – 0.23
			$R^2 = .02 - .23$		
			$R^2_{adj} = -.07 - .14$		
			$F = 0.15 - 2.59$		
Mean Number of Information Domains Accessed					
Revised Legal Attitudes	-0.07	0.04	-0.15	0.01	-0.38 – -0.28
Need for Cognition	-0.06	0.04	-0.14	0.02	-0.26 – -0.20
Personal Need for Structure	0.03	0.05	-0.06	0.12	0.09 – 0.18
Personal Fear of Invalidity	-0.02	0.02	-0.07	0.02	-0.42 – -.004
			$R^2 = .11 - .28$		
			$R^2_{adj} = .01 - .20$		
			$F = 1.08 - 3.40^a$		

*Note.* Analyses were conducted on multiply imputed data. Pooled results are reported where possible, and ranges otherwise.

All results non-significant. <sup>a</sup>For two of the twenty-five multiply imputed datasets, results were significant at  $p < .05$ . However, given that these patterns were not consistent across the group of multiply imputed datasets, and given conventional family-wise error rate corrections, these atypical results were not considered representative.

## Discussion

The purpose of this study was to examine the factors, both offender and recommendation maker, that influence the parole recommendations made by parole officers in an experimental context. Eight vignettes representing offenders being considered for parole were systematically varied in terms of gender (male or female), institutional adjustment (high or low), and criminal history (limited or extensive) while

otherwise being as similar as possible, especially in terms of the level of risk presented by the offender. In addition to viewing the vignettes, participants had the opportunity to access up to six additional information domains. They were then asked to make a recommendation to either grant or deny parole. In terms of parole officer factors, the influence of a number of cognitive style measures – specifically, need for cognition, personal need for structure, and personal fear of invalidity – and legal authoritarianism on parole recommendations was also examined.

Overall, the expected relationships of offender factors, case information accessed, and parole officer cognitive style and legal authoritarianism with parole recommendations were not found. While there was considerable variability in the rates at which parole was recommended, as had previously been found in research with parole board members (Conley & Zimmerman, 1982; Gobeil, 2006), hypothesized patterns explaining this variability were not found. For the offender-level variables, patterns were different than anticipated, while for parole officer cognitive style and legal authoritarianism variables, no relationships with parole recommendations were found.

That said, study findings must be considered tentatively given that responses to the study's experimental materials revealed an important problem. Despite the fact that the vignettes created for this study were verified with a member of the PBC at the time of their creation to ensure their appropriateness, parole officers reported that they were not representative of those encountered in their daily work. Across the eight vignettes, the mean representativeness rating was of only 36%. While vignettes corresponding to male offenders were perceived as more representative than those corresponding to female offenders (45% as opposed to 27%), likely because most respondents worked primarily

or exclusively with male offenders, the ratings for both genders were unacceptably low. The low ratings were unexpected considering both the consultation that occurred at the vignette development stage and that the vignettes were very similar to those developed by Serin (2005) which resulted in representativeness ratings ranging from 55% to 70% from parole board members (Gobeil, 2006). Regardless, the fact that representativeness ratings were so low means that the extent to which the results of this study can be generalized to the actual cases considered by parole officers is unknown. This is a significant limitation to the current research that must be kept in mind in considering its results.

That said, the study results are still informative in their own right. It was expected that each of the offender characteristics would be associated with the percentage of cases wherein the granting of release was recommended. In fact, a three-way interaction effect was found, in that the best-fitting GEE model to predict release recommendations included the interaction of offender gender, institutional adjustment, and criminal history. In other words, the patterns of effects associated with each of the manipulated case factors varied according to the levels of the other two case factors. Criminal history seemed to have a gendered effect, in that the magnitude of the difference in percentage of cases resulting in a grant recommendation across levels of criminal history was much less for women offenders than for male offenders. Moreover, in general, and surprisingly, institutional adjustment was inversely related to the percentage of grant recommendations, so that those cases with low institutional adjustment tended to receive a recommendation that release be granted. This pattern did not hold for male offenders with limited criminal history, for whom institutional adjustment was positively

associated with release recommendations, such that those with higher institutional adjustment were slightly more likely to receive a recommendation that parole be granted.

It seems most likely that this pattern of results was at least partially influenced by shortcomings in the vignettes themselves. In addition to not being as representative as desired, it may be that they failed to include sufficient differences between the levels of the manipulated case factors (perhaps especially for institutional adjustment). In addition, though an effort was made to control for risk in the offender vignettes (all vignettes explicitly stated that the offender presented a moderate risk to reoffend), the variations required as a function of the manipulated case characteristics may have introduced confounds, thereby introducing an additional case factor (risk) which was not included in analyses.

The disappointing representativeness ratings in the present study underscore the importance of anchoring future experimental research in the work actually conducted by parole officers. Other parole decision making studies relying on vignettes or mock cases typically haven't involved the assessment of representativeness or other verification of the experimental manipulation (e.g., Lindsey & Miller, 2011; Turpin-Petrosino, 1999). This study's results in this area, however, suggest that the equivalence of study materials to real decisional situations merits explicit exploration in all similar research. Others seeking to examine the offender factors influencing parole recommendations may benefit from pairing future similar studies with a review of actual documented parole recommendations and corresponding offender files; this would allow a more confident determination of which experimental findings parallel patterns in observed recommendation making and which may have been influenced by the experimental

paradigm. Contextualizing future research in terms of actual recommendations and offender file contents would be another means of exploring the validity of the vignettes or mock cases used.

In contrast to the complex relationship between case factors and release recommendations, case factors were not found to be related to information which parole officers accessed for each case. Overall, parole officers most frequently accessed information on the offender's release plan and mental health (accessed in approximately 54% of cases), followed, in rank order, by criminal history (52%), program information (48%), risk assessment (47%), and, in a somewhat distant last place, victim information (40%), which is in keeping with previous findings that parole decision-makers focus on limited information (e.g., Bottomley, 1973; Carroll et al., 1982; Gobeil, 2006; McCarthy & Langworthy, 1987; Turpin-Petrosino, 1999). Interestingly, however, the factors whose accessing was most strongly associated with the release recommendation did not parallel those most frequently accessed. Instead, as demonstrated in the best-fitting GEE model, release plan and program information were the only domains for which the accessing of additional information was significantly associated with the parole recommendation. More specifically, cases where information on program completion was accessed were less likely to result in a recommendation to grant parole and those where release plan information was accessed were more likely to result in a recommendation to grant parole.

Given that the information accessed was intended to simply replicate the information in the vignettes themselves without adding any information of substance, the fact that the accessing of *any* additional information domains was related to release recommendations was surprising. Though it is possible that these findings may also be

an artifact of problems with the vignettes (i.e., that additional information of substance was unintentionally communicated in these additional information domains), it is also possible that those participants who accessed those specific information domains differed in some way from those who did not, thereby influencing these results. Unfortunately, relatively small sample sizes did not allow for an examination of whether the effect of information access on release recommendations was influenced by parole officer demographic characteristics or scores on the cognitive style and legal authoritarianism measures. This may be a worthwhile area for future research.

Within the current study, examinations regarding the cognitive style and legal authoritarianism measures were limited to an examination of their direct association with release recommendations. Hypothesized relationships regarding the relationship of parole officers' legal authoritarianism and cognitive style (need for cognition, personal need for structure, personal fear of invalidity) with release recommendations were not supported. In multiple regressions, measures of these constructs were unrelated to either the percentage of cases resulting in a grant recommendation or the average number of additional information domains accessed. That said, these results may have been influenced by the small sample size available for regression analyses. Though Hair and colleagues (1998) indicate that a minimum ratio of 5 cases per predictor is sufficient, they indicate that a ratio of approximately 20 to 1 is preferable, particularly for small effects. The ratio of 10 cases per predictor for these participant-level analyses may therefore have contributed to the non-significant results.

Though post-hoc power analyses are often conducted when similar patterns of results are found, these were not computed in the present case. A number of authors have

argued that conducting post-hoc power analyses to examine a study's ability to detect significant effects can be quite misleading as they are heavily influenced by the observed *p*-values (Fogel, 2001; Hoenig & Heisey, 2001; Levine & Ensom, 2001). Nonetheless, given that the confidence intervals for the multiple regressions touching on parole officer-level analyses are relatively broad, it is evident that replication of these analyses using data from a larger sample of participants could lead to more confidence in results and shed greater light on whether parole officers' release recommendations are truly associated with their legal authoritarianism and cognitive style.

Though the present study failed to identify any significant relationships between either legal authoritarianism or the measures of cognitive style and release recommendations, the examination of these constructs was nonetheless informative. It was notable that parole officers' scores on need for cognition were significantly lower than were those previously obtained from a sample of students and from a sample of parole board members. Though this finding would need to be replicated with a larger, more representative sample of parole officers prior to drawing conclusions, if upheld, it could have important implications. Higher levels of need for cognition have been found to be associated with more successful problem-solving when faced with complex and multifaceted cognitive tasks (Nair & Ramnarayan, 2000), a greater tendency to use evidence to support decisions (Leary et al., 1986) and with a lesser tendency to make impulsive decisions (Kelly, 2005). These behaviours are ones that seem desirable in parole officers, both in general given the breadth of their tasks and specifically in terms of reaching release recommendations.

As such, it is premature to conclude that further investigation of the association of cognitive style and legal authoritarianism with parole officers' release recommendations is not merited. This is further underscored by the fact that the internal consistency of the scale used to assess legal authoritarianism was less than ideal. Indeed, in addition to expanding study sample sizes and ensuring adequate psychometric properties, there are a number of additional ways in which exploration of this area could be extended. Cavanoz and Campbell (2008) have suggested that the correct way to conceptualise need for cognition and personal need for structure is as an interaction resulting in four distinct cognitive style types. Though the sample size in the present study prevented the examination of interaction effects, this may be a worthwhile focus in later studies. In addition, other researchers have conceptualized need for cognition as having an indirect rather than direct effect on decision making. Salerno and McCauley (2009) found that mock jurors' need for cognition scores moderated the influence of data quality on their decisions; it is possible that a more complex model wherein cognitive style plays a moderating role rather than a direct role in explaining release recommendations may more accurately reflect parole officers' actual recommendation making processes.

Overall, given the limitations of the current analyses focused on cognitive style and legal authoritarianism and the fact that a considerable body of research in jury and other forensic decision making contexts do find that these factors are important (e.g., Butler & Moran, 2007a, 2007b; Martin & Cohn, 2004; Petrocelli & Dowd, 2009; Salerno & McCauley, 2009; Sargent, 2004; Shestowsky & Horowitz, 2004), it would be inappropriate to ascribe too much confidence to the present results. Further research is necessary and would allow for a better understanding of the role – if any – that these

factors play in the making of release recommendations. If such effects are identified, it may be useful for correctional authorities to be aware of them so that they may include a consideration of the influence of those factors in their training of parole officers – for example, as regards interventions to increase the relatively low scores for need for cognition. Recently, Petrocelli and Dowd (2009) conceptualized one type of cognitive style (need for cognition) as having both trait and state components, with the influence of the state component becoming more prominent with certain manipulations, including the means in which task instructions are conveyed. To draw a parallel to the making of parole recommendations, it may be that the guidance given to parole officers in formulating release recommendations could be adapted in order to promote greater “state” need for cognition, with its attendant increase in reliance on evidence and more successful problem-solving. Other researchers have recounted that certain cognitive style and legal authoritarianism measures are used in the selection of juries (Cramer, Adams, & Brodsky, 2009). If a sufficient body of research accumulates regarding the influence of these factors on the making of release recommendations, the factors may also eventually come to be used in the selection process for this type of forensic decision maker.

This broad conclusion – that further research in the area is necessary – applies to the interpretation of all of the analyses in this study. Despite the study hypotheses not being supported and representativeness ratings being sufficiently poor to render drawing firm conclusions from study results problematic, the study did contribute importantly to the understanding of parole officers’ making of release recommendations. The study demonstrated that inter-individual differences exist in the making of release

recommendations by parole officers, as is the case in parole decision making (e.g., Conley & Zimmerman, 1982; Gobeil, 2006) and other forensic decision making contexts (e.g., Graziano, Painter, & Tanaka, 1990; Kerr & Huang, 1986; van Koppen & ten Kate, 1984). Though the patterns of variance were not consistent with expectations, the very recognition of this variance serves to underscore the need for additional research aimed at understanding the factors underlying this variability. Research on parole decision making has allowed for the conclusion that the factors most influential of decisions are not necessarily those that should hold this position based on empirical evidence (Caplan, 2007; Feder, 1994, but see Luciani et al., 1996; Porporino & Motiuk, 1995); it is very likely that this conclusion applies to those influencing parole recommendations as well.

As such, in addition to the need for greater research, it seems that there is also a need for training for parole officers in how to reach appropriate, empirically-supported parole recommendations. This fact is what prompted the subsequent studies in this program of research. Given that findings from this study were inconsistent with expectations, however, they were not used to inform the training offered to parole officers as part of these latter studies.

## **Study 2: Evaluation of Training in the Use of the Structured Release Decision Making Framework**

Though the results of Study 1 must be considered tentative, they suggest that the considerable decision making variability identified amongst parole decision makers (Carroll & Burke, 1990; Conley & Zimmerman, 1982; Gottfredson & Ballard, 1966; Hoffman, 1972; Kinnevy & Caplan, 2008; Rogers & Hayner, 1968; Sacks, 1977; Scott, 1974; Wilkins & Gottfredson, 1973) also exists among parole officers making parole recommendations. The expected patterns explaining this variability, however, were not fully evident. Indeed, virtually all of the offender and parole officer factors expected to be related to parole recommendations were not systematically associated with these recommendations – though associations did exist, they did not conform to expectations. Although the study limitations previously reviewed may have contributed to these findings, it is also possible that this reflects a reality where the formulation of parole recommendations is influenced by factors other than those examined, perhaps in an idiosyncratic fashion that varies across parole officers. Given the very high level of concordance between parole officer recommendations and parole board member decisions, as well as the goal of the PBC to make high quality parole decisions (PBC, 2010), this variation could be problematic. In addition, if parole recommendations are not rooted in appropriate offender factors, it begs the question of whether the actual factors underlying these recommendations are empirically supported.

New CSC parole officers receive three weeks of training upon hiring, which includes release recommendation formulation and at least a brief review of the factors to be incorporated in making these recommendations. That said, Study 1 results suggest

that there likely continues to be room for improvement regarding parole officers' incorporation of the factors demonstrated to be appropriate for consideration in release recommendation formulation. As mentioned, both CSC and PBC's policies (CSC, 2009; PBC, 2011a) enumerate an extensive list of factors that are to be considered in reaching parole recommendations and decisions, but specific guidelines on how to weigh and incorporate these factors are lacking. CSC has recognized this need (B. Arsenault, personal communication, April 7, 2008); in addition, both CSC and the PBC are interested in making the parole recommendation and decision making processes used by CSC and the PBC more similar.

For these reasons, with CSC's support, this researcher and her advisor spear-headed the provision of training in risk assessment, case analysis, and the use of the Structured Release Decision Making Framework (Serin, 2004) to all of CSC's parole officers as part of their continuous development in 2009-10. The over-reaching goal of this training initiative was to increase the quality of the parole recommendations made by parole officers. As previously mentioned, this framework, which has been adopted by the PBC, guides parole officers and board members' professional judgment in terms of the consideration of factors demonstrated by research to be relevant to parole outcome. It positions its users, both at an individual and at an organizational level, to respond to criticisms regarding transparency, lack of consistency, and lack of reliability.

Providing training to all of CSC's parole officers was a significant endeavour. The development and refinement of training materials took several months, and a total of 1,213 parole officers received the training in three major waves – a training pilot wave, a “train-the-trainers” wave, and a national implementation wave. Given the breadth of the

training undertaking, the purpose of the second study in this program of research was to examine how training in risk assessment, case analysis, and in the use of the Structured Release Decision Making Framework was received by the parole officers. First, however, a more detailed description of the training's development, content, and implementation is necessary.

### **Training**

**Development.** The primary focus of the Structured Release Decision Making Framework training was to introduce parole officers to the framework and to allow them the opportunity to apply it and receive feedback. In order to provide context, however, the training also included a general review of risk assessment, case formulation, and offender change. The training was adapted from that created by Serin in 2005 for delivery to the PBC's members. The original version, several hours in duration, was expanded and modified to create a full day's training which reviewed contemporary risk assessment approaches; linked risk assessment to effective case management, enhanced confidence, and competencies in case analysis; introduced and allowed for the application of the Structured Release Decision Making Framework; and, increased competency in formulating release recommendations (Serin & Gobeil, 2009).

In keeping with accepted norms in the development of curricula for adult learners (e.g., Jarvis, 2006), the training incorporated multiple approaches. It was comprised of an extensive presentation, group and individual activities, and the use of an audience response system (i.e., "clickers"). The latter allowed training participants, by using handheld radio frequency units similar to a small remote control, to register responses to

prompts and questions that were then received via transmitter and presented, anonymously and in summary form, through Microsoft PowerPoint.

Lecturing was used to impart information, while hands-on activities were used to allow for consolidation of information, for the application of various risk assessment measures, and for increased competency and comfort in using the Structured Release Decision Making Framework. Given that case-based learning is recognized as a superior learning strategy when applied to realistic decision situations (Jarz, Keinz & Walpoth, 1997), the hands-on activities included the application of the Structured Release Decision Making Framework to a number of cases. Group activities were also included because discussion with peers has been demonstrated to increase understanding (Smith et al., 2009). In order to add variety, these activities and case studies were completed both on paper and on screen using the audience response technology.

The decision to incorporate the audience response system reflected research findings that their use is associated with higher participation rates and greater student enjoyment of the learning experience (Stowell & Nelson, 2007), as well as with greater concentration (Elliott, 2003). Some research also indicates that the use of these systems is associated with greater learning gains and better performance on tests (e.g., Crouch & Mazur, 2001; Dufresne, Gerace, Leonard, Mestre, & Wenk, 1996; Kennedy & Cutts, 2005; Shaffer & Collura, 2009); therefore, it was hoped that their use would increase learning in the current context.

**Content.** Both the presentation and the content of the training materials reflected key principles of adult learning as put forth by Knowles, Holton, and Swanson (1998), Zemke (2002), and Imel (1998). Of particular importance was the explicit inclusion in

the training materials of the provision of information on why the training was important and why the parole officers were being asked to learn the materials (an attempt to promote intrinsic motivation), as well as an acknowledgement that the parole officers' previous experience and expertise in the subject matter was already extensive and needed simply to be built upon (in hopes of increasing self-efficacy). Not only were these inclusions consistent with adult learning principles, but greater levels of both intrinsic motivation and self-efficacy have been shown, in a recent meta-analysis, to be associated with greater learning after participation in training (Blume, Ford, Baldwin, & Huang, 2010).

In addition, the training incorporated empirical research and theoretical writings from within the correctional field and elsewhere, policy and legislation requirements, and an awareness and acknowledgement of the operational realities within which parole officers work as well as the associated challenges. The training was intended to start from a common starting point – the purpose of risk assessment, which could be presumed to be familiar to all parole officers – and build systematically through the identified learning concepts relating to risk assessment. These concepts included types of risk and protective factors, with a discussion of specific factors in each area; the generations of risk assessment; an overview of risk assessment instruments and their predictive validity; and, case formulation. Questions presented early in the training allowed the facilitator to assess the level of knowledge of the participant group, and therefore the pace at which to cover this material, which could be more or less familiar to parole officers based on such factors as their level of experience, the area in which they worked (i.e., institution or community, security level of institution), and other factors.

This section of the training, in addition to acting as a review for certain participants and an introduction to the concepts for others, was intended to provide a rationale supportive of the use of the Structured Release Decision Making Framework. The next section of the training focused on the framework, including an overview of the advantages of its use, the history of its development and validation, an introduction to the domains and their assessment, and practice in its application.

The training was piloted prior to national implementation, thereby allowing an opportunity for refinements. Though the broad areas included in the training did not change, the specifics thereof evolved over time as a result of the researcher and her advisor's opinions of what did and did not work, as well as of feedback received from participants. The purpose of these changes was to minimize areas participants had identified as redundant with their existing knowledge, make more accessible areas identified as challenging to understand, and to make training more engaging. Changes included moving acknowledgement of the challenges and successes associated with parole officer work to the very beginning of the training, reducing the amount of statistical information, and adding highlighting or circles around key data in statistical tables in order to make clear the most important information.

Finally, in addition to the in-class training, participants were distributed take-home materials that complemented that covered within the training. Specifically, all participants were provided with a copy of the *Practice Manual for Use with Release Decision Making Worksheet* (Serin, Gobeil, & Sutton, 2009), which outlines the specifics on how to use the framework. This document includes a decision making flowchart, details of each of the framework domains (including a rationale for its inclusion, details

of its measurement, examples of mitigating and aggravating cases, and self-reference questions and questions for offender in assessing the domain), and three sample cases on which participants could practice. The three sample cases, within which both institutional and community cases were represented, also include completed frameworks and case analyses (completed by several experienced individuals), so that the participant could contrast their responses with those of experienced parole decision makers.

Interested participants were also invited to take home a copy of a document entitled *Understanding Parole Decision Making: History and Context for the National Parole Board* (Serin, 2004) which presents an overview of the history and reality of parole decision making at the time, as well as of relevant concepts from the general decision making literature.

**Implementation.** Training implementation occurred in three waves. The first wave was a pilot, and involved the delivery of the training to a group of newly hired parole officers who were completing their three-week Parole Officer Initial Training. Training was delivered in Miramichi, New Brunswick, in January 2009. This training session was intended to act as a preliminary examination of the appropriateness and accessibility of the training content, the facilitator's ability to cover the material in the allotted time, and the trainees' perceptions of the utility of the training.

The second wave was much larger and included five separate sessions. In this wave of training, the training participants were more experienced parole officers. Training was delivered in Ottawa, Ontario, and Cornwall, Ontario, in March 2009. These sessions were conducted to receive feedback from this more experienced group and from a larger number of individuals, to test the equivalencies of the French and English

versions of the training, to begin to anticipate challenges associated with the national training implementation, and, in the latter of these five sessions, to train the individuals who would subsequently be implementing the training in each of CSC's five regions.

The final wave was the largest, and involved delivery of the training to all federal parole officers in Canada who had not participated in one of the earlier two waves.

Training occurred in the context of the 2009-10 Parole Officer Continuous Development, from December 2009 to May 2010, and was delivered in 49 sessions plus ten one-on-one or small group sessions to accommodate individuals who missed the planned sessions.

Wave 1 and wave 2 training sessions were facilitated by the researcher's advisor (three sessions), by the researcher with the advisor's supervision (one session), and by the researcher alone (two sessions). During the national implementation (wave 3), training was facilitated by parole officers trained in the "train-the-trainers" session, with email and telephone support from CSC's Community Reintegration Operations and Institutional Reintegration Operations, the researcher, and her advisor.

**Quality Control.** In order to verify the quality of the training being delivered in wave 3 by those trained in wave 2, a number of quality control visits were undertaken. In most regions, two trained individuals presented the training. Each of the five regions was visited at least once by the researcher's advisor and/or a representative from one or both of the CSC branches involved, Community Reintegration Operations and Institutional Reintegration Operations. During visits, these individuals attended training and provided feedback to the trainers regarding both strengths and areas for improvement.

### **Training Evaluation**

To examine whether the training was effective, an evaluation was conducted; its results are reported here and in Study 3. Kirkpatrick and Kirkpatrick (2006) conceptualized a four-fold model of training evaluation. The first component is the examination of trainees' perceptions of training; the second, knowledge gains (in this case, greater knowledge regarding risk as it relates to parole and regarding the framework); the third, changes in behaviour (in this case, higher quality parole recommendations), and finally, actual outcomes in terms of "bottom line" (in this case, increased public safety). Examinations of participant perceptions of training are important because they allow for identification of areas that are not understood, that are covered too comprehensively, or otherwise require change. Further, some researchers have argued that the evaluation of trainee perceptions can appropriately be used as indicators of knowledge gains, changes in behaviour, and outcomes (Alliger, Tannenbaum, Bennet, Traver, & Shotland, 1997; Morgan & Casper, 2000). However, in a now somewhat dated meta-analysis, Alliger and Janak (1989) found that though training perceptions are significantly associated with knowledge gains and behavioural changes, the magnitudes of the relationships are surprisingly small ( $r = .07$  and  $r = .05$  respectively). A more recent meta-analysis found similar results; the researchers concluded that trainees' overall training perceptions were weakly associated with behavioural change ( $r = .07$ ; Blume et al., 2010). As such, the results of Study 2, which focuses on trainee perceptions, will be considered together with those of Study 3, which will examine whether training in the use of the Structured Release Decision Making Framework led to changes in behaviour. Together, these studies will allow for a more

comprehensive understanding of the impact of training, if any, on parole officers and their formulation of conditional release recommendations.

### **Study Overview**

As briefly mentioned, the objective of this study was to examine the participants' perceptions of the training. By asking parole officers their thoughts on the training, it was possible to improve the training in subsequent waves, both by making changes to content and delivery and by knowing which areas could be covered more quickly or required more detailed explanation. In addition, examining parole officers' perceptions of the training represented a first step in evaluating the training's success.

Given the exploratory nature of this study, no hypotheses were formulated.

Instead, the following questions were posed:

1. What did participants consider as strengths of the training?
2. What did they consider as weaknesses of the training?
3. What would they like to see changed?

Questions were focused on training content, delivery, and "fit" (or the extent to which the training was pertinent to the participants' knowledge and daily tasks).

### **Method**

#### **Sample**

The research sample was comprised of training evaluations completed by CSC parole officers who participated in training in the use of the Structured Release Decision Making Framework. The evaluations received from trainees in each of the three waves were analysed separately.

The first group, the training pilot group or wave 1, composed of newly hired parole officers, resulted in a total of 22 evaluations. The second group, the “train-the-trainers” group or wave 2, composed of participants in one of five sessions conducted with more experienced parole officers, resulted in 125 evaluations. Finally, the third group, the national implementation group or wave 3, resulted in a total of 314 evaluations. While virtually every training participant in the first two groups completed evaluations, 314 evaluations received from the national implementation group represented only 26% of the total of 1,213 parole officers who participated in this wave.

### **Procedure**

For waves 1 and 2, paper evaluation forms were handed out at the end of the training session and returned without identifying information. For wave 3, the evaluation was completed online using a secure website available to training participants from any location. During the train-the-trainers sessions, the importance of having wave 3 trainees complete this evaluation was underscored; however, it is impossible to know the extent to which the request to complete the evaluation was communicated. It is possible that a failure to convey the request or to present its importance contributed to the relatively low response rate. Alternatively, this response rate may be due to the fact that parole officers in this wave were asked to complete the evaluation online after the training rather than during the training itself; it may be that they got busy, forgot to do so, or simply decided against completing the online evaluation.

Authorization for this study was obtained from CSC’s Director of Community Reintegration Operations in the context of an evaluation of the success of the training – as such, no informed consent forms were completed directly by participants, but nor were

the identities of trainees associated with their evaluations. This procedure was approved by the Research Ethics Board of Carleton University as well as by CSC's Research Branch.

### **Materials**

The training evaluation materials were available in both English and French and can be seen in Appendix H. Trainees in waves 1 and 2 received evaluation forms that were very similar save for the inclusion of a single question. The form included ten (wave 2) or eleven (wave 1) questions scored on a 5-point Likert-type scale ranging from *strongly agree* to *strongly disagree* and six open-ended questions. The qualitative questions were categorized in three domains: training content (e.g., "The training content was organized and easy to follow"), training delivery (e.g., "Training was engaging"), and training "fit" (e.g., "The training was appropriate to my level of knowledge"). The evaluation form used in wave 1 included an additional question regarding the extent to which the training session complemented the others in the Parole Officer Initial Training; this question was omitted for wave 2 given that it was irrelevant. The open-ended questions asked which components of the training were most and least useful and whether there were topics or activities the participant would suggest adding to the training, solicited ideas for improvement of the training, and allowed for additional comments.

The evaluation completed by wave 3 trainees included 28 quantitative questions scored on a 5-point Likert-type scale ranging from *strongly agree* to *strongly disagree*. An additional category, *not applicable*, was also available. This response option was included as a means of allowing for item non-response because the evaluation website

did not allow trainees to proceed without answering each question. Questions focused on training program materials (e.g., “I felt it was easy to follow the material contained in the Structured Release Decision Making Training Program”), the training program overall (e.g., “Overall, I think the Structured Release Decision Making Training Program met the stated objective”), and the facilitator (e.g., “In general, the facilitator[s] were well prepared and organized”).

### **Analytic Strategy**

Both the training and the evaluation approach were somewhat different within each of the three waves. As such, each wave was analysed separately.

**Quantitative data.** Quantitative data analyses were descriptive in nature and no inferential statistics were required. For each question, frequencies were calculated in order to allow examination of the distribution of the difference response options.

**Qualitative data.** Qualitative data were transcribed verbatim from the evaluation forms used in waves 1 and 2 into Microsoft Word documents. Responses tended to be quite short. Given the relatively small amount and straight-forward nature of the qualitative data, a qualitative data analysis software package was not used; instead, the data were manually organized within the documents. The data were analysed using thematic analysis, a flexible approach that does not require the implicit theoretical assumptions of other qualitative data analysis approaches such as grounded theory or discourse analysis (Braun & Clarke, 2006). This approach allows for the identification of patterns within the data but does not require consideration of how those patterns relate to existing theories. This approach was selected as it was anticipated that the results of the analysis would be relatively atheoretical.

Analysis proceeded in steps. First, the data were read several times in order to begin to become familiar with the different responses and to anticipate themes. Secondly, the data were sorted into broad preliminary themes (“positive,” “negative,” “things to change or add”). Within each category, data were further sorted and themes and sub-themes were identified based on commonalities. Counts of unique respondents falling into each theme and sub-theme were computed.

## Results

### Data Entry and Screening

Data entry was required only for the data stemming from waves 1 and 2 as wave 3 was completed online and the data from this wave were downloaded and imported directly into the statistical analysis software. Two quantitative questions (representing two unique respondents) from the evaluations in wave 1 and nine (representing five respondents) from the evaluations in wave 2 had multiple responses (e.g., the respondent circled both *strongly agree* and *agree*). In order to ensure that the trainees’ opinions were not overstated, the more negative response was retained. Additionally, for a small number of trainees’ evaluations, the quantitative and qualitative responses were inconsistent – that is, while the qualitative responses were very positive, the quantitative responses were predominantly *disagree* or *strongly disagree*. Indeed, it emerged in one of the wave 2 sessions that the evaluation form’s Likert-type scale was structured in the opposite direction of ones which the parole officer typically used in the course of their work. However, given that it was impossible to determine if the inconsistent data were errors, and also in order, again, not to overstate opinions, the data were entered without correction.

Quantitative data were assessed for out-of-range and missing data. When wave 1 and wave 2 data were out-of-range, the paper-and-pencil evaluation forms were verified and the electronic data were corrected. No wave 3 data were out-of-range. In wave 1, two questions had one (of 22) missing response each and a third had three missing responses. For wave 2, one question had one missing response (of 125). For wave 3, where the online response mechanism did not allow for trainees to proceed without responding to questions, only the last two items had missing data (indicating trainees had terminated the evaluation without completing it). The first of these questions had three missing responses (of 314) and the second had nine missing responses. When the *not applicable* option (included as a means of allowing for non-response) was also considered, 23 of the 38 items had at least one missing response. Most of these (20 of 23) were missing one percent or less of responses (i.e., three responses or fewer). Of the remainder, one was missing six responses, one was missing nine responses, and the last was missing 15 (of which six were *not applicable* responses and nine were actually missing).

Of these, the only items missing more than 5% of data, the threshold identified by Tabachnik and Fidell (2007) where missing data becomes serious, were the item in wave 1 missing three responses (“The training complemented the other sessions presented”) and the item in wave 3 missing 15 responses (“The facilitator[s] provided feedback that was timely, specific, and helped me identify areas in need of improvement”). Despite reaching this threshold, given the simple analytic strategy used, it was decided that each analysis would proceed with what data were available and no imputation methods would be used.

**Wave 1: Training Pilot Group**

Overall, wave 1 trainees' evaluation feedback was quite positive. All quantitative questions were positively worded, and for each of these questions, a maximum of one participant disagreed or strongly disagreed (see Table 11). The percentage of participants who strongly agreed with each quantitative evaluation item ranged from a low of 59% ("The training content was organized and easy to follow") to a high of 100% ("The presenters were knowledgeable"). When considering agree and strongly agree responses together, about a third of the items had 100% agreement, and none had less than 85%.

Trainees evaluated the items measuring training delivery most positively, and their evaluations of training content and training "fit" were roughly equal. Within these categories, however, there was considerable variation. A somewhat smaller percentage of trainees strongly agreed that the training met their expectations, was organized and easy to follow, complemented the other sessions provided, and was appropriate to their level of knowledge.

Table 11  
*Wave 1 Trainees' Responses to Quantitative Evaluation Items*

Item	Percent Endorsing Response				
	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
<b>Training Content</b>					
The training met my expectations. <sup>a</sup>	76	10	14	-	-
The content of the training was relevant to the work I do	82	14	5	-	-
The training content was organized and easy to follow.	59	36	-	5	-
The materials distributed were pertinent and useful.	82	18	-	-	-
<b>Training Delivery</b>					
The presenters were knowledgeable.	100	-	-	-	-
The presentation was interesting and practical.	86	14	-	-	-
Training was engaging.	96	5	-	-	-
<b>Training "Fit"</b>					
The training complemented the other sessions provided. <sup>b</sup>	63	26	11	-	-
The training was appropriate to my level of knowledge. <sup>a</sup>	71	19	5	-	5
I will be able to apply the knowledge I learned.	77	18	-	5	-
The training will help me do my job better.	86	9	5	-	-

*Note.* Percentages may not sum to 100 due to rounding.  $N = 22$  for all items except those marked with a superscript.

<sup>a</sup> $N = 21$ . <sup>b</sup> $N = 19$ .

Trainees' qualitative feedback was generally consistent with their quantitative responses. All of the wave 1 trainees identified at least one positive or useful component

of training in their written comments. Many made broad positive statements and contrasted the training session with the others offered as part of the Parole Officer Initial

Training:

P9: This was the best day of training! Very engaging.

P16: Extremely interesting. By far the most useful and interesting training in three weeks.

As can be seen in Table 12, almost two-thirds of trainees (60%) identified the applied aspect of the training as a positive. In numerous cases, trainees wrote only the words “application” or “applied” and it was impossible to infer with confidence exactly what was intended; however, in 14% and 9% of cases respectively, trainees specifically mentioned applying the framework and applying the risk assessment tools (as part of the review of risk assessment conducted earlier in the training). The second most frequently cited positive was the framework. Over a quarter (27%) mentioned finding the framework as a whole positive or useful, while 9% appreciated the one-page framework worksheet and 5% remarked on the practice manual. Finally, facilitation, use of the audience response technology, discussions, and other themes (group work, statistics) were also mentioned.

Table 12  
*Wave 1 Trainees' Qualitative Responses: Positive Themes*

Theme	Endorsement Rate	
	<i>n</i> / 22	%
Application	13	60
Applying the framework	3	14
Applying risk assessment instruments	2	9
Application (not specified)	8	36
Framework	9	41
Framework as a whole	6	27
Framework worksheet	2	9
Practice manual	1	5
Facilitation	3	14
Use of "clickers"	3	14
Discussions	2	9
Other	2	9

*Note.* Many participants endorsed more than one theme.

Nine of the 22 trainees (41%) identified at least one thing that they found negative or less useful about the training. Most of these trainees (7 of 9) cited the inclusion of too many statistics as a negative:

P7: [In response to "What component of the training session did you find least useful?"] Seeing actual breakdown of research studies. Not everyone has a background using stats.

P10: I haven't done stats in years and it was a little difficult trying to remember what everything meant!

Three trainees each identified another area they found negative or less useful. These were: the timing of this session relative to the others (the trainee would have preferred this session be offered earlier), the inclusion of background information on risk

assessment, and the level of presentation (which was perceived as too advanced for new parole officers).

Finally, about three-quarters (73%) of trainees identified areas that could be changed if the training were offered again (see Table 13). A number of trainees suggested more exposure to the training material, either by extending the length of the training session or by adding case studies or practice time. A small number (14%) suggested that changes be made to the framework, primarily to language (e.g., to use the word “neutral” instead of “no impact”). About a quarter (23%) suggested that specific topics be added to the training, including information on violent offenders, a video recording of a psychological assessment, or more information on assessment tools. In reviewing this feedback, it seemed possible that some participants perceived the evaluation item to have focused on the entire Parole Officer Initial Training within which this training was offered, as some of the suggested areas are not directly relevant to the material or themes covered.

Table 13  
*Wave 1 Trainees' Qualitative Responses: Themes Regarding Areas to Change*

Theme	Endorsement Rate	
	<i>n</i> / 22	%
Make training longer	5	23
Add topics to training (not related to framework)	5	23
Review of violent offenders	2	9
Other	3	14
Add more case studies	4	18
Makes changes to framework	3	14
More clickers	2	9
More practice	2	9

*Note.* Many participants endorsed more than one theme.

**Wave 2: Train-the-Trainers Group**

Wave 2 trainees' evaluation responses were also quite positive. Three-quarters or more of trainees agreed or strongly agreed with each evaluation item – indeed, for many items, the rate of agreement was 90% or more. That said, relative to those in wave 1, smaller proportions of wave 2 trainees strongly agreed with each of the items (see Table 14). Nonetheless, the evaluation items with which higher proportions of wave 1 trainees strongly agreed tended to also be the ones with which higher proportions of wave 2 trainees agreed or strongly agreed. For instance, the item asking about the extent to which the presenters were knowledgeable was the one with which the largest proportion of wave 2 trainees agreed or strongly agreed. These results demonstrate that there was some parallelism in the responses of the trainees from each wave.

Table 14  
*Wave 2 Trainees' Responses to Quantitative Evaluation Items*

Item	Percent Endorsing Response				
	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
<b>Training Content</b>					
The training met my expectations. <sup>a</sup>	31	44	21	5	-
The content of the training was relevant to the work I do	62	31	4	2	-
The training content was organized and easy to follow.	47	42	7	3	-
The materials distributed were pertinent and useful.	46	48	4	1	1
<b>Training Delivery</b>					
The presenters were knowledgeable.	80	18	1	-	2
The presentation was interesting and practical.	54	35	8	2	1
Training was engaging.	56	34	6	3	1
<b>Training "Fit"</b>					
The training was appropriate to my level of knowledge.	48	34	11	6	1
I will be able to apply the knowledge I learned.	51	40	6	2	1
The training will help me do my job better.	34	46	17	3	-

*Note.* Percentages may not sum to 100 due to rounding.  $N = 125$  for all items except that marked with a superscript.

<sup>a</sup> $N = 124$ .

Conversely, there were some questions for which the response patterns of wave 1 and wave 2 trainees differed. For instance, fewer than a third (31%) of wave 2 trainees strongly agreed that their training met their expectations (compared to 76% of wave 1

trainees). Notably, this question was the one with which the largest percentage of trainees indicated they neither agreed nor disagreed. This finding may partially be explained by certain qualitative comments, which suggest that participants were unclear on what was to be expected of the training, perhaps indicating that the letter of invitation to participate sent to potential trainees was unclear:

R109: Ce n'était pas du tout ce que était prévu dans l'invitation à participer à cette session. (This was not at all what was described in the invitation to participate in this session.)

R56: Je ne savais pas à quoi m'attendre de cette formation mais je croyais avoir plus d'outils afin de mieux faire mes contrôles de qualité. (I didn't know what to anticipate of this training but I thought I would have more tools to better complete my quality control.)

Similarly, wave 2 trainees were much less likely than their wave 1 counterparts (34% vs. 86%) to strongly agree that the training would help them do their job better. This latter finding is likely attributable to the fact that wave 2 was comprised of more experienced parole officers.

In their qualitative responses, 116 of the 125 (93%) wave 2 trainees identified a positive or useful component of training (see Table 15). As was the case with the quantitative responses, the qualitative responses were similar to those of wave 1. Again, the applied aspect of training was most frequently mentioned (by 42% of trainees in wave 2 vs. 60% in wave 1), followed by the framework (by 28% vs. 41%), facilitation (by 15% vs. 14%), and the use of the audience response technology (by 14% of each wave).

Table 15  
*Wave 2 Trainees' Qualitative Responses: Positive Themes*

Theme	Endorsement Rate	
	<i>n</i> / 125	%
Application	52	42
Applying the framework	10	08
Applying risk assessment instruments	1	1
Application (not specified)	43	34
Framework	35	28
Framework as a whole	13	10
Framework worksheet	7	6
Approach to decision-making	6	5
Identification of domains	5	4
Definition of aggravating and mitigating factors	3	2
Practice manual	2	2
Other	5	4
Facilitation	19	15
Openness	4	3
Dynamism	4	3
Knowledge	3	2
Organization	1	1
Facilitation (not specified)	9	7
Use of "clickers"	18	14
Other	34	27
Review of risk assessment	9	7
Discussions	7	6
Working with other parole officers	3	2
Better understanding of parole decision-making	3	2
Consistency between CSC and PBC	2	2
Statistics	2	2
Other	9	7

*Note.* Many participants endorsed more than one theme.

Wave 2 trainees identified as useful some components of the framework not explicitly noted by those in wave 1. For instance, six trainees cited the overall decision-

making approach embodied by the framework as helpful. One particularly appreciated the “reminder to start with risk assessment and build from there” (R93).

Several trainees also made comments on the use of the audience response technology. It seems that trainees’ perceptions align with what is known about the utility of these instruments in facilitating learning:

R5: The level of engagement afforded by the use of the audience response gadgets helped to retain the information being provided.

R26: [In response to, “What component of the training session did you find most useful?”] Clickers! Very engaging.

As can be seen in Table 16, more than half (57%) of trainees were able to identify an area they perceived as negative or less useful. Though statistics were still cited as a negative by a quarter (25%) of wave 2 trainees, this percentage was lower than that in wave 1 (41%), suggesting that while the reduced emphasis on statistics in wave 2 of training may have represented a perceived improvement over wave 1, the reduction was not sufficient for some of the trainees’ liking.

Table 16  
*Wave 2 Trainees' Qualitative Responses: Negative Themes*

Theme	Endorsement Rate	
	<i>n</i> / 125	%
Statistics	31	25
Review of risk assessment	24	19
Framework components	5	4
Case studies	5	4
Too little detail	4	3
Too unrealistic	2	2
Too few	1	1
Too many	1	1
Other	14	11
Too much information for time allotted	3	2
Dynamic Risk Assessment for Offender Re-Entry	2	2
Other	9	7

*Note.* Many participants endorsed more than one theme.

Nearly one-in-five (19%) wave 2 trainees also cited the section of the training focused on reviewing risk assessment as a less useful part of the training. In contrast, only one (5%) wave 1 trainee mentioned this concern. Specifically, a number of participants expressed that the review of risk assessment within the training was too comprehensive:

R85: Review of all statistical/actuarial tools not necessary.

R27: Take away the first section. Do “The SIR [Statistical Information on Recidivism; actuarial risk of recidivism scale used by CSC] works, use it” then move on to the meat.

As mentioned earlier, however, 7% of wave 2 trainees cited the review of risk assessment as a positive component of training. In response to a question asking which component was most useful, one trainee answered, “the info on the reliability of tools such as the SIR

[Statistical Information on Recidivism; actuarial risk of recidivism scale used by CSC], LSI [Level of Service Inventory; actuarial risk assessment instrument], etc in predicting recidivism and the need to use the RIGHT tool” (R94). Another trainee offered a possible explanation for this discrepancy, suggesting that the review of risk assessment constituted a “long intro for more experienced POs [parole officers]. May be useful to new employees” (R31). Those who most appreciated this component of training may have been newer or have previously received less training in the area.

Trainees also indicated that certain sections of the framework were less useful, especially the review of its development, and that case studies lacked realism, included insufficient detail, or were not present in an appropriate number. The trainees (many of whom were involved in this wave as train-the-trainer participants) also mentioned concerns that there was too much material for them to adequately cover when delivering the training.

Finally, over three-quarters (78%) of trainees identified areas where change could be made to the training (see Table 17). These included a wide variety of suggestions, with those pertaining to case studies being made by the largest proportion (41%) of trainees.

R28: More case studies involving ambiguous cases that often create problems to accurately assess.

R36: More information provided on cases.

R37 : Discuter d'un cas en profondeur. (Discuss one case in detail.)

Trainees often suggested that the case studies be more detailed or more realistic. Many suggested that including more case studies would be helpful, though some felt that fewer would be preferable.

Table 17  
*Wave 2 Trainees' Qualitative Responses: Themes Regarding Areas to Change*

Theme	Endorsement Rate	
	<i>n</i> / 125	%
Makes changes to case studies	51	41
Make case studies more detailed	22	18
Have more case studies	14	11
Have fewer case studies	4	3
Use real/more realistic cases	10	8
Add cases with specific characteristics	5	4
Do case studies as a group	1	1
Sample report/A4D/content guidelines	15	12
Include a sample report/A4D	11	9
Address SRDMF and existing content guidelines	3	2
New report content guidelines required	1	1
Additional focus on specific training components	13	10
More focus on risk assessment	5	4
More focus on recidivism	2	2
Other	7	6
Additional focus on topics unrelated to SRDMF	10	8
Protective factors	3	2
Other	7	6
More practice	11	9
Make changes to framework	10	8
More detail required in specific areas	6	5
Other	5	4
Comments relating to eventual training delivery	7	6
Add a training agenda/schedule	3	2
Add quality control package	2	2
Other	5	4
Make the training longer	7	6
Remove portions of training	6	5
Less focus on risk assessment	3	2
Other	3	2

(continued)

Table 17 (continued)

Theme	Endorsement Rate	
	<i>n</i> / 125	%
Include more 'clicker' questions	4	3
Other	24	19
More group work	9	7
Have different institutional-community balance	4	3
Training facilities-related comments (e.g., heat)	4	3
Provide more documentation to bring home	2	2
Other	8	6

*Note.* Many participants endorsed more than one theme. "A4D" = Assessment for Decision. "SRDMF" = Structured Release Decision Making Framework.

The second most frequently made suggestion (12%) was to include a sample document written using the Structured Release Decision Making Framework as a guideline and/or to address how the framework and various content guidelines would be aligned:

R10: If possible, provide example of written assessment where the Structured Decision Making Model is incorporated.

R11: [In response to, "Where there any topics you would have liked to see addressed that were not?"] How to fit the structured decision making model into our specific report formats.

Trainees also indicated that they would appreciate a more detailed review of certain training components, including recidivism and risk assessment (though some also suggested a reduction in the focus on risk assessment). Some also made suggestions for improvement to the framework itself, typically that detail be added to specific sections. In this regard, some trainees suggested that more detail be provided on how to rate domains or that better definitions be provided of certain words (e.g., "dishesinbitors"). Others simply requested that the training "go into more detail in each area" (R1).

Notably, while 23% of wave 1 trainees indicated that the training needed to be longer to allow all the information to be covered, only 6% of wave 2 trainees echoed this sentiment. That said, wave 2 trainees expressed concern both about the length of the training they received, which some felt was too short, and about being able to deliver all the material in the time allotted to them (e.g., “A lot of information to be delivered in six hours,” R1).

Finally, a small number of additional comments were made by wave 2 trainees which were not categorized as positive, negative, or as an area requiring change. Three percent of trainees commented that they felt that the training was simply a reiteration of previously known information, perhaps of limited utility:

R64: The information is nothing new and realistically it does not provide a concrete method to determining the best decision – this continues to be completely subjective.

R78: This is geared more toward new POs [parole officers]. It is the same thing we do, just in a different package.

This critique was not unexpected as it is, in fact, true that the material simply represents a summary of best practices. Doubtless, for those who already adhere consistently to these practices, the training was of less utility. Nonetheless, the training was developed originally precisely because not all parole officers (nor Board members) do adhere to those best practices. Indeed, there may be a disconnect between what parole officers think or say they do and what they actually do, which underscores the importance of study 3.

**Wave 3: National Implementation Group**

The final wave of trainees, wave 3, completed only quantitative questionnaires. Table 18 presents the trainees' responses to the evaluation items touching on the training program materials. All in all, the training materials seemed to be positively perceived, and most trainees agreed or strongly agreed with the items in this domain. Specifically, between 77% and 90% of trainees agreed or strongly agreed with each item. The two items with which the lowest percentage of trainees indicated agreement – “I felt motivated by the training material” and “The training material prepared me to be successful in analyzing cases and writing reports” – were the ones that were most reflective of a sense of readiness to take on a new task or to improve in the performance of a task. The slightly lower rates of agreement associated with these questions may be reflective of trainees' sense that they already were motivated and successful.

Table 18  
*Wave 3 Trainees' Responses to Quantitative Evaluation Items on Training Program Materials*

Item	Percent Endorsing Response				
	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
The training material was interesting.	32	58	8	1	1
I felt motivated by the training material.	21	56	17	5	1
It was easy to follow the material.	21	64	7	6	1
The training material was easy to understand. <sup>a</sup>	22	62	8	7	1
I did not feel overwhelmed by the training material. <sup>b</sup>	30	59	8	3	0
The training material prepared me to be successful in analyzing cases and writing reports. <sup>b</sup>	19	58	15	8	1
The training material provided me with knowledge and skills that will be useful on the job. <sup>a</sup>	26	63	10	2	1
The training material has practical value. <sup>a</sup>	30	56	12	2	1

*Note.* Table entries of "0" represent cases where at least one trainee endorsed the response but the number was too low to be rounded to one percent. Percentages may not sum to 100 due to rounding.  $N = 314$  for all items except those marked with a superscript.

<sup>a</sup> $N = 313$ . <sup>b</sup> $N = 312$ .

Trainees were also asked to rate their agreement on a series of items related to the training as a whole. Again, results were predominantly positive, with between 74% and 92% of trainees agreeing or strongly agreeing, and no more than 10% disagreeing or strongly disagreeing with each item (see Table 19). Given the qualitative feedback received in waves 1 and 2, the fact that the item querying the value ascribed by trainees to the use of the audience response technology within training received the highest rate of

agreement was not surprising. Instead, these results suggest that wave 3 trainees appreciated the inclusion of these learning aids as much as did those in waves 1 and 2.

There were two other items with which 90% of trainees agreed: “Overall, I think the training met the stated objective” and “The different types of learning activities enhanced my comprehension of key content areas.” Findings with respect to the latter item are particularly positive, in that they demonstrate that attempts to vary the learning approaches used in training, and thereby facilitate learning, were perceived by trainees as helpful.

On the other hand, the item, “I feel the quality of my work on the job will improve as a result of completing this training,” was agreed with by the lowest percentage of participants. Again, amongst the evaluation items assessing the training, this one seemed most related to the idea of improved performance. It is possible, then, that some trainees did not agree with this statement because they already felt that the quality of their work on the job was at a high level. This interpretation is supported by the differences in responses to a similar question by trainees in waves 1 and 2. When asked to indicate whether the training would help them to perform their job better, 86% of the new parole officers comprising wave 1 compared to 34% of the more experienced parole officers in wave 2 strongly agreed.

Table 19  
*Wave 3 Trainees' Responses to Quantitative Evaluation Items on the Training*

Item	Percent Endorsing Response				
	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
Overall, I think the training met the stated objectives. <sup>c</sup>	24	66	7	2	0
The training was well-structured.	25	62	8	4	1
The training flowed logically.	25	64	5	5	2
Overall, I felt that the training content was not too difficult to learn. <sup>a</sup>	31	55	5	8	1
The different types of learning activities enhanced my comprehension of key content areas. <sup>d</sup>	35	55	7	2	2
I felt able to self-evaluate my learning through the different learning activities. <sup>c</sup>	24	62	12	2	1
I felt that the pace of the training was just right. <sup>b</sup>	25	58	8	7	2
I feel that the quality of my work on the job will improve as a result of completing this training. <sup>b</sup>	17	57	18	6	2
I feel motivated to use what I have learning in the training on the job. <sup>d</sup>	22	58	13	5	2
In general, I am satisfied with the following training elements:					
Length <sup>a</sup>	23	62	5	7	3
Quality <sup>a</sup>	25	62	9	2	2
Content <sup>a</sup>	23	62	9	4	2
Time I invested <sup>c</sup>	25	61	8	5	2
The "clickers" were a valuable part of the training. <sup>e</sup>	52	40	5	3	1

*Note.* Table entries of "0" represent cases where at least one trainee endorsed the response but the number was too low to be rounded to one percent. Percentages may not sum to 100 due to rounding.  $N = 314$  for all items except those marked with a superscript.

<sup>a</sup> $N = 313$ . <sup>b</sup> $N = 312$ . <sup>c</sup> $N = 311$ . <sup>d</sup> $N = 310$ . <sup>e</sup> $N = 305$ .

The last category of evaluation items, those focused on the training facilitator, received the highest rate of agreement (see Table 20). Between 93% and 96% of trainees agreed with each item. Though there was little range amongst the rates of agreement for these items, the item, “The facilitator(s) provided feedback that was timely, specific, and helped me identify areas in need of improvement,” was agreed with by the fewest trainees.

Table 20  
*Wave 3 Trainees' Responses to Evaluation Quantitative Items on Training Facilitator*

Item	Percent Endorsing Response				
	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
The facilitator(s) were well prepared and organized.	55	41	1	2	0
The facilitator(s) communicated in a clear and concise manner.	54	42	2	1	1
I felt the facilitator(s) possessed a lot of practical knowledge.	53	42	3	2	1
The facilitator(s) created and maintained a positive learning environment.	54	41	3	2	1
The facilitator(s) served as positive and professional role model(s). <sup>a</sup>	56	40	2	2	-
The facilitator(s) provided feedback that was timely, specific, and helped me identify areas in need of development. <sup>b</sup>	49	44	4	2	1

*Note.* Table entries of ‘0’ represent cases where at least one trainee endorsed the response but the number was too low to be rounded to one percent. Entries of ‘-’ represent cases where no trainees endorsed the response. Percentages may not sum to 100 due to rounding.  $N = 311$  for all items except those marked with a superscript (all items had at least 3 missing responses).

<sup>a</sup> $N = 308$ . <sup>b</sup> $N = 299$ .

### Discussion

Overall, across all three waves, participants' perceptions of training were positive. For each item, a minimum of approximately three-quarters of the parole officers in each wave agreed or strongly agreed. Moreover, patterns of response were similar across waves, though wave 1, which was composed of new parole officers without hands-on experience, consistently provided the most positive evaluations. This may be because, relative to more experienced parole officers, they had less pre-training knowledge regarding the topics covered. It may also have been due to greater intrinsic motivation, which has been showed to be associated with trainees' perceptions of training (Ruona, Leimbach, Holton, & Bates, 2002); presumably new parole officers are eager to take on their new jobs and to learn about their responsibilities, and therefore are more motivated.

Parole officers' perceptions regarding the positive features of the training suggest that the training was successful in adhering to principles of adult learning such as the inclusion of multiple learning techniques and opportunities to practice (e.g., Knowles et al., 1998; Zemke, 2002). Indeed, parole officers cited the applied or hands-on nature of the training, the group work, the variety of learning approaches used, and the use of the audience response technology as particularly appreciated aspects of the training. In fact, the item querying the use of the audience response technology was the one with the most positive responses in wave 3 (the only study in which it was included); this is in keeping with previous findings that their use increases enjoyment of the learning experience (Stowell & Nelson, 2007). Given that their use has also been shown to be associated with greater learning gains (e.g., Crouch & Mazur, 2001; Dufresne et al., 1996; Shaffer & Collura, 2009), this finding is very promising.

Participants also cited the facilitators' level of knowledge and presentation style as positive training aspects. This result was encouraging given that a number of trainer characteristics, such as effectiveness in conveying information (Towler & Dipboye, 2006), as well as expressiveness and organization (Towler & Dipboye, 2001) have been found to be associated with training participants' post-training knowledge gains. At minimum, participants' responses to these questions suggest that trainer characteristics likely did not negatively impact training outcomes.

Unfortunately, just as there were similarities across waves in the areas cited as positives of training, there was also some consistency in terms of the areas that were less appreciated, indicating that improvements after the pilot were not sufficient to fully appease concerns in each area. The most frequently cited negative of training was the breadth of statistics presented. About two-in-five participants in wave 1 indicated that the training included too many statistics. In order to address this concern, prior to moving on to wave 2, the training was modified to include fewer statistics and to make clear, among the statistical information remaining, what was of most importance. However, at wave 2, a quarter of participants still cited the number of statistics as a negative, suggesting that at least some of the parole officers would have appreciated if even fewer statistics were included. Nonetheless, a small number of participants in wave 2 reported finding the statistics to be a positive. Though this suggests that it may have been difficult or impossible to identify just the right amount of statistics to include, those who felt statistics were over-represented far outnumbered those who appreciated them.

Participants also suggested that improvements could be made to the training regarding the case study materials. In wave 1, a single case study was presented, and

participants suggested that more be added. Given that this was consistent with adult learning principles regarding the provision of opportunity to practice applying skills (e.g., Knowles et al., 1998), the training was modified to include a larger number of case studies in wave 2. However, the addition of further case studies came at the cost of their level of detail, as there was not sufficient time to cover four or five cases as comprehensively as had been the single case in wave 1. The new case studies prompted a number of suggestions from wave 2 participants, who indicated that they felt that the case studies lacked detail and were not realistic. Nonetheless, many wave 2 participants suggesting including still more case studies, though a smaller number indicated that they would have preferred to review fewer cases – or a single case – in greater detail. There clearly remained room for improvement with respect to efforts to strike a compromise between practice opportunities and the detail which is required for realism.

More detailed case studies would have increased the similarity between the training environment and the environment in which the parole officers were expected to apply their knowledge and skills later. As such, in addition to being associated with more positive reactions from the parole officers, such an approach may also have increased the extent to which the training resulted in behavioural change. Researchers have found that the extent to which learning results in behavioural change is influenced by the similarity of the training and actual situations (Ford & Weissbein, 1997). For the same reason, it would likely have been advantageous to enact the suggestion provided by wave 2 participants to add a sample report written using the framework guidelines, as this would also have provided an opportunity to narrow the gap between the learning and applied context.

Unfortunately, though a number of these suggestions may have resulted in increases in the extent to which the training was positively received, as well as its effectiveness, it was not possible to make changes to the training after the train-the-trainers had begun (i.e., wave 2). As such, these patterns of results demonstrate that the overall training initiative could have been strengthened by including one or more additional pilot iterations, so that responses to changes made in response to each iteration could have evaluated prior to broader implementation. Nonetheless, however, the training was viewed positively by the majority of participants.

A final interesting pattern of results was regarding the questions on the extent to which parole officers felt the training would help them perform their jobs better. Because this was a quantitative question, responses were available for all three waves. While the majority of respondents from each wave agreed or strongly agreed with this statement, the percentage who did so was considerably greater amongst the new parole officers in wave 1 (95%) than amongst their more experienced peers in waves 2 and 3 (80% and 74% respectively). In fact, in wave 3, this was the question that received the lowest rate of positive endorsement. This is concerning because the association of participants' evaluations of the utility of training with behavioural change on the job is about twice as great as that for the association of participants overall perceptions of training (Blume et al., 2010). It is therefore disappointing that the utility questions did not receive higher ratings.

In interpreting results, it is important to recall the differences in the data as well as in the parole officers represented in each wave. While there was virtually complete data in waves 1 and 2, evaluation forms were completed by only about a quarter of wave 3

participants. Though this response rate was likely due to the fact that wave 3 participants were asked to complete their evaluations after rather than during the training sessions, the impact on the generalizability of wave 3 results must be kept in mind. That said, the overall consistency of themes across waves suggest that any differences between respondents and non-respondents, if present, are likely not large.

Still, perceptions of a number of constructs were somewhat more negative in wave 3 than in the other waves. One possible explanation is that the participants in wave 2 (also comprised of experienced parole officers and therefore the most appropriate comparison for wave 3) were almost all volunteers, while training in wave 3 was mandatory. The groups may therefore have differed in terms of their interest or motivation. Indeed, both voluntary participation in training and motivation to learn have moderate positive relationships with training success (Blume et al., 2010; Ruona et al., 2002).

In addition to group differences, there were certainly individual differences not captured in the present research. For example, training participants who worked in the community as opposed to an institution, or at a maximum security institution rather than minimum or medium, would have had different previous experiences with offenders, their risk, and its manageability. Factors such as the parole officer's gender, previous work experience, and academic background could all also have impacted their perceptions of the training and the feedback they provided. Future researchers would likely be able to achieve a better understanding of their training's strengths and weaknesses if they collected and analyzed data on these and other training participant characteristics.

In general, participant perceptions of training, like those reported here, are the most common types of training evaluations (Western Oregon University, 2007), likely because of the ease with which they can be obtained. However, such examinations touch on only the first of Kirkpatrick and Kirkpatrick's (2006) components of training evaluation. Though examining parole officers' perceptions was informative and allowed for refinement of the training materials after the first wave, as previously mentioned, it did not allow for explicit consideration of the other three levels of evaluation of training Kirkpatrick and Kirkpatrick (2006) suggest: knowledge gains, changes in behaviour, and actual outcomes.

Overall, though training perceptions are valuable in their own right, meta-analytic findings (Alliger & Janak, 1989; Blume et al., 2010) suggest they are likely inappropriate proxies of knowledge gain and behavioural change. Moreover, Brinckerhoff (2001, cited in Steier, 2010) has argued that behavioural change is a more important measure of the effectiveness of training than trainee perceptions. Similarly, Goldstein and Ford (2002) argue that the transfer of learned material to the work context must be the primary goal of all training efforts. Given the ultimate goal of the training – to increase the quality of parole recommendation making – more direct examinations of training success were required. This was the purpose of Study 3.

### **Study 3: Risk Relevance of Pre- and Post-Training Parole Recommendations**

Although it was promising that, overall, parole officers perceived training in the use of the Structured Release Decision Making Framework as interesting, informative, and useful to their daily work, given findings regarding the weak association between positive perceptions, knowledge gains, and behavioural change (Alliger & Janak, 1989; Blume et al., 2010), in and of itself the evaluation of the training reported in Study 2 was not sufficient for conclusions to be drawn regarding the impacts of the training on the manner in which parole officers formulate recommendations. To address this issue, a review of changes in parole officers' behaviours – that is, the way they wrote their actual recommendations both prior to and after participation in the training – was required.

To this researcher's knowledge, parole recommendations formulated by parole officers have rarely been studied (c.f., Ruback, 1981; Samra-Grewal et al., 2000), except as relates to rates of concordance with eventual parole decisions (e.g., Carroll et al., 1982; Carroll & Burke, 1990; Metchik, 1988). As such, there is no accepted definition of a high quality parole recommendation, though presumably CSC focuses on adherence to policy in its quality control. In the area of parole decision making, however, the quality of parole decisions has traditionally been defined according to offenders' performance after the decision. In other words, if a parole board decided to grant an offender conditional release and the offender did not subsequently return to custody, this was considered a good decision. Though it might be appealing to interpret this as an examination of actual outcomes according to Kirkpatrick and Kirkpatrick's (2006) model, the uniqueness of parole recommendation and decision making makes this problematic.

### **An Alternate Indicator of Parole Decision Quality**

It is common that an offender's life circumstances change importantly after release. In such cases, the original release decision may in fact have been an appropriate, but the offender's risk state (Douglas & Skeem, 2005) may have changed in the subsequent period of time. In such cases, responsibility for noting and managing changes in imminent risk is in the hands of the supervision authority rather than those of the individuals who made parole recommendations or decisions. Holding a parole recommendation or decision maker responsible for subsequent re-offending in such cases presupposes an unrealistic level of foresight on the part of decision makers.

Given the above, it has been argued that "recidivism is a shaky barometer of [parole] decision making skill" (Kastenmeier & Eglit, 1973, p. 506). It is therefore important to widen the scope of research in this area by using alternate indicators of quality parole decision making. One indicator, not yet used in parole decision making but previously used to examine psychologist and parole officer reports submitted to the PBC (Hanby et al., 2008), is *risk relevance*. This construct refers to the extent to which a report is rooted in information empirically demonstrated to be related to risk. In other words, a highly risk relevant recommendation or decision is one which flows seamlessly from a review of the established static and dynamic indicators of risk particular to that offender. A recommendation or decision that has limited documented support and/or is rooted in information not empirically demonstrated to be related to risk would be considered less risk relevant.

Use of the structured framework lends itself well to the formulation of highly risk relevant recommendations and or decisions. When following the framework, the

recommendation or decision maker is directed towards those factors demonstrated by research evidence to be associated with parole outcome and recidivism. For decision makers wishing to write parole decisions which are highly risk relevant, all that is needed is consideration and explicit discussion of each of the factors flagged for consideration in the framework. In other words, decision makers who closely adhere to the structured decision making framework will arguably write a more risk relevant recommendation or decision. On the other hand, those who do not use the framework to guide their decision making will compose decision rationales of varying risk relevance, depending on their knowledge of decision making, parole, and recidivism, as well as their interpretation of the idiosyncrasies of a particular case. As such, for the purposes of this study, a high quality parole recommendation was defined as one that was well-supported by factors empirically demonstrated to be relevant to post-release outcome – that is, one that was risk relevant.

### **Study Overview**

This final study involved the comparison of the risk relevance of a sample of parole recommendations formulated prior to and after training in the use of the Structured Release Decision Making Framework. Because it was expected that parole officers would vary in terms of their approaches to recommendation making prior to training – and, particularly, the extent to which these were rooted in research findings – parole officers' knowledge regarding risk and factors relating to post-release outcome was also measured and included in analyses. Finally, subjective measures of the extent to which the recommendations were perceived to be well-supported and convincing and of whether the coder agreed with the recommendation were also included.

## Hypotheses

Given that training in the use of the Structured Release Decision Making Framework was well-received, it was expected that it would be incorporated by parole officers in their formulation of recommendations. The following hypotheses were tested:

- H. 1:* Participation in training on the use of the Structured Release Decision Making Framework was expected to be associated with increases in the risk relevance and subjective measures of support and agreement with parole recommendations. As such, it was predicted that risk relevance, support, and agreement with recommendations written by parole officers after completion of the training would all be significantly greater than that of recommendations written by the same parole officers prior to training.
- H. 2:* It was predicted that the risk relevance, support, and agreement with parole officers' assessments for decisions would be positively associated with their pre-training knowledge questionnaire scores. This was expected to be the case both for the assessments completed prior to training and those completed after training.
- H. 3:* It was expected that participants' pre-training level of knowledge would be associated with the magnitude of the change in risk relevance, support, and agreement with recommendations from prior to until after the training, with greater pre-training knowledge allowing less room for improvement. Specifically, the magnitude of the pre- to post-training differences in risk relevance, support, and agreement scores of the participants' recommendations were expected to be negatively associated with scores on the pre-training knowledge questionnaire.

## **Method**

### **Sample**

The study sample included selected assessment for decisions (the documents in which parole recommendations are documented) for a sample of 131 parole officers who participated in the Structured Release Decision Making Framework training and completed a knowledge questionnaire in the context of this training. The intention was to examine three pre-training and three post-training assessments for decision for each parole officer, but that only proved possible for 77 (58.8%) of the parole officers. For the remaining 54 parole officers, as many assessments for decision as were available at each time point, up to a maximum of three, were considered. In total, 707 assessments for decisions (an average of 5.4 per parole officer across both time points) were included in the study.

### **Procedure**

Again, authorization for this study was obtained from CSC's Director of Community Reintegration Operations as part of an examination of the success of the training. This individual authorized that examinations be conducted so long as analyses of data did not include any identifying information.

Online knowledge questionnaires were completed by parole officers prior to their participation in the Structured Release Decision Making Framework Training. Though all participants were meant to complete this knowledge questionnaire, not all facilitators conveyed this information to the training participants, and a total of 217 participants completed the questionnaire. An attempt was made to retrieve assessments for decision for each of these 217 training participants. The exact date of each parole officer's training

participation was obtained and CSC's computerized data management system was verified for the presence of assessments for decision relating to day or full parole written by these parole officers prior to and after participation in training. Any assessments for decision saved within 10 days of the training were eliminated in order to ensure that any assessments that were begun prior to training but completed after were not included. For any parole officer who had at least two pre-training and two post-training assessments, a list of assessments for decision was retrieved.

There were a total of 132 parole officers for whom at least two pre-training and two post-training assessments for decision in the relevant area could be identified. For most ( $n = 116$ ; 88%), six assessments could be identified; for the remainder, only five could be. In total, 776 assessments for decisions were identified. The Offender Management System was used to access the offender files corresponding to each of these assessments for decision and they were printed and labeled as having been written prior to or after training.

In order to ensure that the researcher not be aware of the parole officers' identities during analyses, these were then given, with the approval of CSC representatives, to security-cleared and authorized research assistants who manually blacked out all identifying parole officer and offender information on the documents. The research assistants also ensured that each parole officer was assigned a unique identifier, and that this identifier appeared on each of that parole officer's assessments as well as in the knowledge questionnaire database. This procedure ensured that the assessments for decision written by each parole officer were associated with one another, as well as associated with that same parole officer's knowledge data. All documents and databases

including information which might identify the parole officers or the offenders were then deleted from the researcher's files.

Coding of each of these 776 assessments was then undertaken. During the coding process, it was realized that there were some assessments for decision that, though recorded as being related to day parole or full parole decisions, were not appropriate for inclusion in analyses (e.g., very brief assessments recommending small changes, such as the granting of an exemption to allow an offender to travel or the lifting of a special condition). These 69 documents were therefore omitted from the study sample and the final sample was comprised of 707 assessments for decision representing 131 parole officers. In total, of the 131, 77 (58.8%) had all six assessments for decision, 35 (26.7%) had five, 15 (11.5%) had four, and 2 (1.5%) each had only three or two.

The documents were coded by a research assistant with graduate level psychology training and extensive experience in the correctional realm. Coding was conducted to assess the extent to which factors relevant to risk – and included as components of the Structured Release Decision Making Framework – were incorporated into the assessment. A total of 72 assessments (10% of the full sample) were also coded by a second individual (the researcher) in order to allow for examinations of inter-rater reliability.

### **Materials**

The knowledge questionnaire was available in both English and French, and participants chose their preferred language when completing the questionnaire online. Electronic data collection was used to facilitate participant responding and prevent data recording errors.

**Knowledge questionnaire.** This questionnaire was developed by Serin (2009) specifically for this context (see Appendix I). The purpose of the questionnaire was to examine the extent to which parole officers who were completing the Structured Release Decision Making Framework training had knowledge of risk assessment research, including specifics on some common risk assessment instruments and their limitations, specific indicators (and non-indicators) of risk, and the relative contribution of various types of risk factors and risk assessments. The questionnaire was composed of 15 true or false questions and 15 five-option multiple choice questions. In sum, total scores on the knowledge questionnaire could range from 0 to 30. Sample items include “Clinical overrides of statistical risk estimates, when used by experienced parole officers, always improve the accuracy of risk assessment [false],” and:

The requirement to use professional discretion is an important consideration for parole officers. Which is not correct?

- a. It should be judiciously and sparingly used.
- b. It should be supported with a clear rationale.
- c. Its use should be limited in scope (e.g., not make a high-risk offender a low-risk case).
- d. It should only be used by experienced parole officers [correct].
- e. It should not be based solely on the interview with the offender.

**Risk relevance coding form.** The coding form used in this study was based on one used to examine assessments for decision written by parole officers and reports written by psychologists by Hanby and her colleagues (2008). The structured form guides the systematic coding of descriptors of the case being assessed and the recommendation being made, the types of assessment of risk being considered and the manner in which these are communicated, the presence and depth of discussion of a

number of indicators of risk, and two subjective items regarding the quality of the assessment (see Appendix J). Sample component items are “Does the report consider results of interventions, such as programs or psychology?”, and “Based on the PO’s [parole officer’s] analysis, do you agree with his/her recommendation?”

In keeping with the approach used by Hanby and her colleagues (2008), in addition to the individual items, a composite score was calculated to reflect the group of items measuring risk relevance. This composite score included thirteen items rated as *not mentioned*, *mentioned superficially*, or *discussed comprehensively*. Half points were accorded for items scored as *mentioned superficially*, and, because three items could be scored as *not applicable*, the summed scores were divided by the number of items which received a rating other than *not applicable*, resulting in a risk relevance score of between 0 and 1. To increase ease of understanding, this was then multiplied by 10 to result in a score between 0 and 10.

In examinations using the original coding form, inter-rater agreement for the form’s items varied from  $\kappa = .14$  to  $\kappa = 1.00$ , median  $\kappa = .74$  (Hanby et al., 2008). In the present study, inter-rater agreement could not be calculated for six items due to 100% agreement. For the remainder, kappa values ranged from  $\kappa = .37$  to  $\kappa = 1.00$ , median  $\kappa = .78$ . Though early authors in the area indicated that kappa values as low as .20 represented fair agreement (Landis & Koch, 1977), a more recent standard is a kappa of at least .60 and sometimes higher than .70 (Elliott & Woodward, 2006). In the present case, the inter-rater reliability of 7 of the 23 variables was below  $\kappa = .60$ . Five of these variables were ones used in computing the risk relevance score; the other three were

whether the assessment included an indication of level of risk;<sup>9</sup> whether it includes a time period for which the risk assessment is valid; and whether it includes a clear indication of the impacts if re-offence occurs.

Though variables with low inter-rater reliability are often eliminated from analyses, discussions between the research assistant and the researcher revealed that in at least some cases, the same information was being considered but coded under different items in the coding scheme. As such, correlations between the total risk relevance scores computed from each rater's individual items were also calculated, and were found to be strong ( $r = .88$ ), suggesting that the overall scores in each domain were similar for each coder. Given these strong correlations, the fact that kappa is considered a conservative measure of inter-rater agreement (Hsu & Field, 2003), and the fact that all data used for the remaining analyses in this study were coded by the research assistant (i.e., analyses did not combine data coded by more than one person), the variables with low kappas which were integrated into the composite risk relevance score were retained. The other three variables with unsatisfactory kappas were eliminated from analyses.

For analyses, the risk scores of all assessments for decision completed by each parole officer prior to training were considered together, as were those completed after training. The rationale for including up to three assessments at each time point was to, hopefully, minimize the impact of any atypical assessments on the study results. This approach should minimize the possibility of concluding that changes between assessments are due to the training when they simply represent normal intra-individual variability (Singer & Willett, 2003).

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<sup>9</sup> This question (3A) was very similar to another (4C) which inquired on the manner in which risk was conveyed and included "risk rating" as an option. Despite the similarity, this latter question had satisfactory inter-rater reliability and was therefore retained.

For the risk relevance scores, which were aggregations, it was possible to simply average across the pre- and post-training scores for each parole officer. The subjective items, however, were not interval data and therefore could not be averaged in the same way; the consideration of these items was further complicated by the fact that not every parole officer had three assessments at each time point. One question, whether the coder agreed with the recommendation (*agree*), was coded simply as *yes* or *no*; therefore, the proportion of the coded assessments in which the coder agreed (multiplied by 100 for ease of interpretability) was used. As will be detailed in the subsequent section, however, it was necessary to recode this variable dichotomously (agree in all cases or not) in the data screening process. For the final item, the extent to which the coder felt the recommendation was supported by the rationale presented in the assessment (*supported*), which was coded as *poorly*, *moderately*, and *well*, an aggregation method that preserved the categorical nature of the data was used.<sup>10</sup> A series of composite ordinal categories were derived. A scheme was developed wherein all completed assessments at a particular time point receiving a score of *poorly* was the lowest category and all assessments receiving a rating of *well* was the highest category, with intermediate categories being derived based on approximate equivalencies and distributions of data (see Appendix K). Categories ranged from 1 to 7.

### **Analytic Strategy**

First, descriptive statistics (means and standard deviations for continuous data, frequencies for categorical data) were used to describe participants' results on the knowledge questionnaire and with respect to risk relevance and quality. To examine

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<sup>10</sup> In an attempt to ease interpretation, a second approach was also attempted: though the data are not interval data, they were treated as such and averaged, yielding a score from 0 to 2. However, this approach was not retained as results conducted using both approaches yielded slightly different results.

changes in the total risk relevance scores based on assessments for decision completed prior to and after training participation, paired samples t-tests were conducted; to compare the related dichotomous items (*agree* at each time point), a McNemar change test was used; and, to compare the related ordinal items (*supported* at each time point), a Wilcoxon signed ranks test was used.

To examine the association of scores on the knowledge questionnaire with the coded risk relevance and quality scores, correlations of the knowledge score with risk and quality scores from both prior to and after training were computed. Finally, to examine whether the degree of change from prior to until after training was associated with the knowledge questionnaire score, the difference between the risk relevance scores at pre- and post-training were correlated with scores on the knowledge questionnaire. To assess the same relationship with the dichotomous coded measure (*agree*), a three-level ordinal variable (agreement decreased over time, remained the same, or increased) was created and a Spearman's rho correlation was calculated. A Spearman's rho correlation was also calculated for the ordinal *supported* item.<sup>11</sup>

## Results

### Data Entry and Screening

The unique identifier assigned by the research assistants was used to match the data from the knowledge questionnaire downloaded from the database storing electronically submitted data to that corresponding to the manually-entered data from the risk relevance coding forms. All data were verified for illogical, out-of-range, and missing values; none were identified for the knowledge questionnaire. For the risk

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<sup>11</sup> The Spearman's rho correlations required the interval-type knowledge questionnaire data to be treated as ranked data.

relevance of assessments for decision, illogical and out-of-range values were verified against the original coding sheets and corrected.

A number of items were included in the risk relevance coding forms solely as descriptors (e.g., offender gender, type of assessment being conducted); given that these were used only in descriptive analyses, they were not aggregated across time points for each parole officer. As such, they remained in dichotomous form. These variables were assessed for even distributions. Though a number were identified as having uneven distributions (e.g., whether an estimate of short-term risk was provided; whether an estimate of long-term risk was provided), because the variables were not being used in inferential analyses, no corrections were made.

Of the remaining variables, the distribution of the ordinal *supported* variables was examined and found to be relatively even. Continuous variables were examined for normality and for outliers. No outliers were detected, but a number of variables were skewed and/or kurtotic. Both the pre- and post-training *agree* variables were severely negatively skewed. A number of transformations were attempted, but none resulted in satisfactory skewness or kurtosis values. The variables were therefore dichotomized; given that in the vast majority of individual assessments, the coder agreed with the parole officer's recommendation, the new variable represented whether or not the coder consistently agreed with *all* of each parole officer's recommendations at that time point. Neither of these two recoded variables was unevenly split. In addition, none of the cell frequencies in a contingency table involving this variable at each time point was less than five.

A third variable, the knowledge questionnaire score, was also found to be negatively skewed. An inverse square root transformation eliminated non-normality. However, because this transformation considerably reduced ease of interpretation, analyses involving this variable were computed both with the original and the transformed knowledge questionnaire scores. Given that patterns of findings for both were very similar, analyses involving the untransformed variable are reported. The difference between risk relevance from pre- to post-training also met the normality assumption. Based on bivariate scatterplots and the calculation of Levene's test, all continuous variables were also determined to be linear, homosedastic, and to have homogeneous variance. A summary of the variables and their distributions is presented in Appendix L.

### **Descriptives**

**Assessments for decision.** Of the completed assessments for decision, almost all featured a male offender (95.2% and 96.3% of those completed before and after training, respectively); these numbers are in keeping with the fact that only a slightly larger percentage – 6.1% in 2010-11 (Public Safety, 2011) – of CSC's offenders are women. Overall, almost three-quarters of assessments for decisions (72.4% and 75.6% of those completed before and after training, respectively) were written with respect to an incarcerated offender being considered for release. About 15% (15.4% and 15.2% at pre- and post-training respectively) were offenders in the community, being considered for parole continuation or a more liberal type of parole. The remainder (12.3% and 9.3% respectively) were written regarding offenders whose release had been suspended who were appearing before the board for a decision to either cancel the suspension or revoke

conditional release. Table 21 presents the breakdown of recommendations formulated in each of the types of assessments for decision.

Table 21  
*Percentage of Recommendations of Each Type*

Recommendation	Pre-Training	Post-Training	Total
Offenders in the institution			
Grant parole	47.5	38.5	42.9
Deny parole	43.0	51.1	47.1
Grant a less liberal form of parole	9.4	10.4	9.9
<i>n</i>	(265)	(278)	(543)
Offenders in the community			
Grant more liberal parole	29.3	26.1	27.6
Maintain current conditional release	70.7	73.9	72.4
<i>n</i>	(41)	(46)	(87)
Suspended offenders			
Cancel suspension	20.0	15.63	18.2
Revoke conditional release	80.0	84.38	81.8
<i>n</i>	(45)	(32)	(77)

The risk relevance coding form also included a number of indicators regarding the way in which risk was communicated and conceptualized. As can be seen in Table 22, in almost two-thirds of cases, risk was conveyed as an overall rating (e.g., low, medium, high). In nearly as many cases – just over half – risk was conveyed as a frequency (e.g., 2 out of 3 similar offenders will re-offend); this is not surprising considering that the Statistical Information on Recidivism – Revised 1 (Nuffield, 1982), the scale used by CSC to assess risk of re-offence within three years of release for non-Aboriginal male offenders, produces this type of result. The percentages of cases wherein risk was

communicated as a percentage (e.g., 30% chance of re-offence) or temporally delimited were much lower.

With respect to risk management, slightly over half of cases included a mention of whether risk was manageable or assumable. Considerably more, however, included mention of strategies to manage risk and made recommendations regarding special conditions. These recommendations were almost always framed as a risk management strategy, but not always.

Table 22  
*Risk Communication and Conceptualization*

Risk Indicator	Percentage of Assessments		
	Pre-Training ( <i>n</i> = 351)	Post-Training ( <i>n</i> = 356)	Total ( <i>N</i> = 707)
<b>Risk communication</b>			
Conveyed as rating	62.1	66.9	64.5
Conveyed as frequency	55.0	53.7	54.3
Conveyed as probability	6.8	7.6	7.2
Short term risk (< 3 months)	1.1	3.9	2.6
Long term risk (>1 year)	4.3	5.1	4.7
<b>Risk management</b>			
Statement on manageability	50.7	59.3	55.0
Strategies to manage risk mentioned	83.2	87.4	85.3
Recommendation made regarding special conditions	86.3	86.0	86.1

**Dependant variables.** Overall (across both time points), the mean risk relevance score was of 5.7 (*SD* = 1.3) out of 10. Again across both time points, the median support rating was of 4 (of a possible range of 1 to 7), and the coder consistently agreed with the parole officers' recommendations 77% of the time.

Not surprisingly, the dependent variables were inter-correlated. Risk relevance scores were strongly positively correlated with ratings of the extent to which recommendations were well-supported,  $r_s = .73, p < .001$ , and less strongly positively associated with whether or not the coder agreed with the parole officer's recommendations,  $r_{rb} = .28, p < .01$ . In addition, the extent to which recommendations were perceived to be convincing and well-supported was moderately associated with whether or not the coder agreed with the recommendations,  $r_{pb} = .32, p < .001$ .

### **Pre- to Post-Training Differences**

The mean risk relevance score at pre-training was of 5.5 ( $SD = 1.5$ ), while that at post-training was of 5.7 ( $SD = 1.5$ ). These two mean scores did not differ significantly,  $t(130) = -1.17, ns$ . More detailed examination revealed that the items comprising the risk relevance score also generally did not seem to differ by time point (see Table 23). Even amongst those items which seemed to differ the most from pre- to post-training (e.g., the percentage of assessments including a score from an unspecified risk instrument), differences were not large.

Table 23  
*Ratings of Risk Relevance Items*

Risk Relevance Item	Pre-Training	Post-Training	Total
Includes score from actuarial risk instrument?	74.1	75.8	75.0
Includes score from structure professional judgment risk instrument?	17.1	19.9	18.5
Includes score from a risk instrument of unspecified type?	44.2	50.0	47.1
<b>Criminal history</b>			
Not mentioned	7.8	5.3	6.6
Mentioned superficially	25.9	31.5	28.7
Discussed comprehensively	66.1	63.2	64.6
<b>Previous community supervision history</b>			
Not mentioned	30.8	29.2	30.0
Mentioned superficially	24.5	19.9	22.2
Discussed comprehensively	19.1	18.5	18.8
Not applicable	25.6	32.3	29.0
<b>Self-regulation problems</b>			
Not mentioned	14.5	11.8	13.2
Mentioned superficially	32.5	37.4	34.9
Discussed comprehensively	53.0	50.8	51.9
<b>Responsivity</b>			
Not mentioned	25.4	24.2	24.8
Mentioned superficially	29.1	30.9	30.0
Discussed comprehensively	28.8	26.1	27.4
Not applicable	16.8	18.8	17.8
<b>Institutional/community adjustment</b>			
Not mentioned	18.8	23.6	21.2
Mentioned superficially	29.9	26.7	28.3
Discussed comprehensively	51.3	49.4	50.4

(continued)

Table 23 (continued)

Risk Relevance Item	Pre-Training	Post-Training	Total
<b>Results of interventions</b>			
Not mentioned	29.1	28.4	28.7
Mentioned superficially	13.7	14.6	14.1
Discussed comprehensively	34.8	31.7	33.2
Not applicable	22.5	25.3	23.9
<b>Evidence of offender change</b>			
Not mentioned	23.9	23.6	23.8
Mentioned superficially	23.4	25.3	24.3
Discussed comprehensively	52.7	50.8	51.8
<b>Release plan</b>			
Not mentioned	15.7	17.1	16.4
Mentioned superficially	62.4	61.2	61.8
Discussed comprehensively	21.9	21.6	21.8
<b>Protective factors (or lack thereof)</b>			
Not mentioned	31.1	29.5	30.3
Mentioned superficially	43.3	43.8	43.6
Discussed comprehensively	25.6	26.7	26.2
<b>Case-specific factors relevant to risk</b>			
Not mentioned	15.1	20.5	17.8
Mentioned superficially	35.0	30.1	32.5
Discussed comprehensively	49.9	49.4	49.9

*Note.* Chi-square tests of independence did not reveal any statistically significant differences between pre- and post-training frequencies for each item.  
*N* = 131.

Turning to the subjective measures of quality, a McNemar's change test demonstrated that there was no difference from pre- to post-training in the extent to which the coder consistently agreed with recommendations,  $\chi^2(1, N = 131) = 0.00, ns$ . On average, the coder agreed with all of the recommendations made by 86% of parole

officers at both pre- and post-training.<sup>12</sup> A Wilcoxon signed ranks test, however, revealed that parole officers were rated as providing significantly more support for their recommendations after training than before,  $W = -565.5, p < .05$ . The difference was nonetheless small, as the median category at each time point was 4.<sup>13</sup>

### **The Role of Pre-Training Knowledge**

Scores on the 30-item knowledge questionnaire ranged from 15 to 29. The average score was of 24.6 ( $SD = 3.0$ ), with a median score of 25. As a first step in examining the relationship between these scores and the measures of risk relevance and subjective quality, correlations with each were calculated. As can be seen in Table 24, higher scores on the knowledge questionnaire were associated with more risk relevant assessments for decision. In addition, knowledge scores were also associated with the coder's consistent agreement with the parole officer's recommendation prior to training (but not after training) and with the coder's perception of the extent to which the parole recommendations were supported at both time points. Correlations were of low to moderate magnitude. In other words, those who scored higher on the knowledge questionnaire wrote slightly more risk relevant assessments for decision that were, generally, seen as being better supported and more convincing.

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<sup>12</sup> The 86% at each time point did not represent the same individuals.

<sup>13</sup> This similar median is at least partially explained by considering that nearly a third (30.5%) of parole officers' assessments for decision were assigned this rank (see Appendix K)

Table 24  
*Correlations of Pre- and Post-Training Coded Measures with Pre-Training Knowledge Score*

Coded Measure	Correlation	
	Pre-training	Post-training
Risk relevance	.21**	.18*
Agree with recommendation	.24**	-.02
Recommendation supported	.25**	.19*

*Note.* Pearson's correlations were calculated for risk relevance; point biserial correlations were calculated for agreement; and, Spearman's rho were calculated for level of support.

*N* = 131.

\*  $p < .05$ . \*\*  $p < .01$ .

This pattern of findings demonstrates that the assessments for decisions of those with higher pre-training knowledge were of higher quality than were those of the parole officers with less pre-training knowledge, but that this association waned very slightly by post-training. One possible explanation is that the quality of the assessments for decision written by those with lower pre-training knowledge scores improved from pre- to post-training, while those written by their counterparts with greater pre-existing knowledge did not. In other words, it is possible that only parole officers with relatively low pre-training knowledge showed gains in the quality of their assessments for decision (i.e., a ceiling effect prevented gains for those with higher baseline knowledge). However, this interpretation is not supported by the earlier analyses that revealed no differences in the percentage of recommendations with which the coder agreed prior to and after training and only very small differences in the extent to which recommendations were perceived to be supported.

A series of follow-up analyses were conducted to examine whether an association exists between the magnitude of change in each of the three coded measures from pre- to

post-training and knowledge scores. As can be seen in Table 25, no such associations were found. In other words, there was no greater or less change in these measures associated with participants' pre-training knowledge.

Table 25  
*Correlations of Change on the Coded Measures with Pre-Training Knowledge Score*

Coded Measure	Correlation
Risk relevance	-.03
Agree with recommendation	-.13
Recommendation supported	-.04

*Note.* Pearson's correlations were calculated for risk relevance; Spearman's rho was calculated for the other two coded measures.

*N* = 131.

All results non-significant.

### **Additional Analyses**

**Type of assessment for decision.** During the coding process, it was the coder's perception that the assessments for decisions written about offenders being considered for release or more liberal parole were better written than those featuring offenders who had been suspended. A series of additional analyses were therefore conducted to examine if this perception was correct.

Given that about half of the parole officers completed more than one type of assessment for decision, but virtually none had completed one of each type at each time point, these analyses were conducted using assessments for decision rather than parole officers as the unit of analysis. It was necessary to treat each parole officer's assessments as independent observations; however, this approach influenced results because it failed to reflect the clustering of variance amongst observations from the same parole officer. The result was that statistical analyses were more likely to detect a significant result than

they would have been had analyses reflected non-independence. As such, a conservative alpha level ( $p < .001$ ) was used in interpreting findings.<sup>14</sup>

As can be seen in Table 26, assessments for decision of each type appeared to differ somewhat in terms of their risk relevance and the extent to which the coder felt the recommendation was well supported. A one-way ANOVA showed that the types of assessments for decision differed significantly in terms of their risk relevance,  $F(2, 704) = 29.56, p < .0001$ . Post hoc comparisons using Tukey's honestly significant difference criterion demonstrated that assessments for decision written regarding suspended offenders tended to be of significantly lower risk relevance than were those written for offenders in the institution or for those in the community being considered for a more liberal type of parole. Scores for these latter two groups did not significantly differ.

Table 26

*Coded Measures' Measures of Central Tendency, by Type of Assessment for Decision*

Coded Measure	Measure of Central Tendency		
	Offenders in the Institution ( $n = 523$ )	Offenders in the Community ( $n = 108$ )	Suspended Offenders ( $n = 76$ )
Risk relevance	5.8 (1.6)	5.8 (1.9)	4.3 (1.7)
Recommendation supported	2	2	1

*Note.* For the continuous measure, risk relevance, means and standard deviations are reported. For the *supported* measure, medians are reported. Unlike previously reported analyses, which aggregated across assessments at each time point, the present analyses were conducted with a single assessment as the unit of analysis. As such, scores on the *supported* measure ranged from 1 (poorly supported) to 3 (well supported) rather than from 1 to 7.

<sup>14</sup> Generalized estimating equations (as were used in Study 1) would have been another way of analyzing these data that explicitly recognized the non-independence of observations from the same participant. However, generalized estimating equations, while well-suited to binary and to continuous dependent variables, are more poorly suited to ordinal outcome data because dummy coding of dependent variables makes interpretation of results challenging (O'Hara Hines, 1997). Therefore, it was decided not to use generalized estimating equations for the *supported* variable. In the interest of using the same approach for related analyses, it was then decided not to use generalized estimating equation for any of the variables and instead, this somewhat less ideal but more intuitively understandable approach was used.

A Kruskal-Wallis test was used to examine differences in the median *supported* score by type of assessment type. In interpreting this finding, it is important to recall that given that this is the *supported* score per individual assessment for decision (rather than across up to three assessments for a given time point), the range in possible scores is from 1 (*poorly supported*) to 3 (*well supported*), rather than 1 to 7. Significant difference emerged between the different types of assessments,  $\chi^2(2, N = 707) = 52.32, p < .0001$ . A series of follow up Mann-Whitney U-tests were conducted (with a corrected family-wise significance level) to evaluate pairwise differences. Results confirmed what is apparent in Table 26; the median *supported* scores of assessments featuring offenders in the institution and offenders in the community were both higher than those of assessments featuring suspended offenders ( $z = 6.69, p < .0001$ , and  $z = 6.24, p < .0001$  respectively). The typical *supported* scores of assessments featuring offenders in the institution and offenders in the community did not differ significantly,  $z = 2.84, ns$ .

Finally, a chi-square test of independence did not reveal any significant differences in the percentage of assessments for decision with which the coder agreed for each type of assessment for decision,  $\chi^2(2, N = 707) = 1.90, ns$ . Rates of agreement were of 84% for assessments for decision featuring offenders in the institution, 93% for those featuring offenders in the community, and of 93% for those featuring suspended offenders.

In sum, the patterns of results supported the coder's perception that release-focused assessments for decision were of better quality than were suspension-focused ones. These patterns can readily be explained when considering the nature of the measures themselves and the types of assessments for decision. Assessments written

regarding offenders who have been suspended tend to focus on a single behaviour or limited pattern thereof (e.g., breach[es] of conditions, new offence[s]). It is therefore logical that these assessments include consideration of relatively few of the areas reflected in the risk relevance form (i.e., explaining lower risk relevance scores), and are therefore considered less well supported.

**Correlates of recommendation.** Another series of supplemental analyses were conducted to examine the relationship between the coded measures and parole officers' recommendations at the level of each individual recommendation. Because the possible recommendations differed by type of assessment, separate analyses were conducted for each assessment for decision type. The correlation of each of three coded measures with recommendation was examined. Again, these analyses did not account for non-independence and therefore a conservative level of significance ( $p < .001$ ) was used.

As can be seen in Table 27, results differed by type of assessment for decision. While assessments for decision associated with positive recommendations were generally assessed as being more risk relevant than those associated with negative recommendations, this difference only reached the modified level of statistical significance when considering suspended offenders. For the small number of assessments for decision written for suspended offenders, those culminating in a recommendation to revoke parole were assessed as significantly less risk relevant.

Table 27  
*Mean (SD) Risk Relevance Rating, by Parole Recommendation*

Type of Assessment	<i>n</i>	Recommendation <sup>a</sup>		<i>t</i>
		Positive	Negative	
Offenders in the institution	523	5.7 (1.6)	6.0 (1.6)	2.27†
Offenders in the community	108	5.6 (2.0)	5.9 (1.8)	1.05
Suspended offenders	76	5.7 (1.3)	3.9 (1.6)	3.92***

<sup>a</sup>The specifics of the recommendation differed by type of assessment for decision. For those featuring offenders being considered for conditional release, a recommendation to grant (including granting the less liberal type of release) was considered positive while a recommendation to deny was considered negative. For assessments featuring offenders in the community being considered for more liberal parole, a positive recommendation was that the more liberal parole be granted while a negative recommendation was that the current type of conditional release be maintained. Finally, for suspended offenders, a recommendation to cancel the suspension was considered positive while a recommendation to revoke was considered negative. †  $p < .05$ . \*\*\*  $p < .001$ .

In contrast, there were no statistically significant differences in the assessed level of support for positive and negative recommendations of each type (see Table 28). That said, the failure to find a difference for suspended offenders may have been due to statistical power, as the percentage of those with negative recommendations assessed as being poorly supported was more than twice that of those with positive recommendations.

Table 28  
*Level of Support, by Assessment Type*

Type of Assessment	<i>n</i>	Level of Support (%)			$\chi^2$
		Poor	Moderate	Good	
Offenders in the institution					
Positive recommendation	265	15.5	64.5	20.0	3.09
Negative recommendation	258	12.4	61.6	26.0	
Offenders in the community					
Positive recommendation	43	16.3	51.2	32.6	4.86
Negative recommendation	65	4.6	66.2	29.2	
Suspended offenders					
Positive recommendation	14	28.6	57.1	14.3	3.99
Negative recommendation	62	58.1	33.9	8.1	

*Note.* For assessments featuring offenders being considered for conditional release, a recommendation to grant (including granting the less liberal type of release) was considered positive while a recommendation to deny was considered negative. For assessments featuring offenders in the community being considered for more liberal parole, a positive recommendation was that the more liberal parole be granted while a negative recommendation was that the current type of conditional release be maintained. Finally, for suspended offenders, a recommendation to cancel the suspension was considered positive while a recommendation to revoke was considered negative.

All results non-significant.

Similarly, as can be seen in Table 29, after applying the adjustment to significance level to reflect non-independence of observations, there were no statistically significant differences in the percentage of parole officers' recommendations with which the coder agreed. Again, however, it appears that this may have been influenced by statistical power due to sample size as the difference in agreement between positive and negative recommendations for suspended offenders was of nearly 20 percentage points. Specifically, after taking into account the adjusted significance used in these analyses, the coder was non-significantly less likely to agree with the parole officer when he or she recommended that the offender's suspension of conditional release be cancelled.

Table 29  
*Percentage Agreement with Recommendation, by Assessment Type*

Type of Assessment	n	Recommendation <sup>a</sup>		$\chi^2$
		Positive	Negative	
Offenders in the institution	523	92.1	96.1	3.85†
Offenders in the community	108	98.5	95.4	0.93
Suspended offenders	76	78.6	96.8	6.16†

*Note.* Fisher's exact test used for offenders in the community and suspended offenders due to low expected frequencies.

<sup>a</sup>The specifics of the recommendation differed by type of assessment for decision. For those featuring offenders being considered for conditional release, a recommendation to grant (including granting the less liberal type of release) was considered positive while a recommendation to deny was considered negative. For assessments featuring offenders in the community being considered for more liberal parole, a positive recommendation was that the more liberal parole be granted while a negative recommendation was that the current type of conditional release be maintained. Finally, for suspended offenders, a recommendation to cancel the suspension was considered positive while a recommendation to revoke was considered negative. †  $p < .05$ .

Altogether, the analyses failed to provide consistent support for statistically significant differences in the assessments for decisions associated with different parole recommendations. The one exception was with respect to the risk relevance of those featuring suspended offenders, with assessments culminating in a recommendation to revoke tending to be assessed as less risk relevant. This result expands on the findings reported earlier that assessments featuring suspended offenders, as a group, are less risk relevant than those featuring other offenders. Specifically, the difference is attributable to the low risk relevance ratings of assessments resulting in a recommendation to revoke parole – those few resulting in a recommendation that the suspension be cancelled were actually not less risk relevant than those featuring other offenders.

### Discussion

Despite parole officers perceiving training in the use of the Structured Release Decision Making Framework to be interesting, informative, and useful, study results

demonstrated that the training did not lead to changes in the risk relevance of their parole recommendation documents nor the extent to which a coder agreed with the recommendations. Although the extent to which recommendations were perceived to be well-supported increased from prior to after training, the magnitude of the difference was very small.

Previous researchers have found that the effects of training decay over a relatively short time (Blume et al., 2010). Indeed, one of the CSC staff persons who facilitated the training reported having noticed an early change in behavior that was not sustained (B. Dulièpre, personal communication, Feb. 2, 2012). Given that post-training assessments could reflect assessments written several months after training, it cannot be ruled out that such a decay effect may have occurred.

That said, given the generally wide-ranging absence of pre- to post-training changes, it is more likely that the training simply did not lead to changes in the manner in which parole officers formulated recommendations – in other words, that training did not transfer well to parole officers' behaviours. There are a number of possible explanations for this outcome. First, the training itself may not have focused on appropriate material. Specifically, if the training focused on material that would not actually contribute to stronger recommendation formulation, it would be unrealistic to expect changes in this domain. This possibility seems unlikely given the extensive body of literature supporting the factors within the Structured Release Decision Making Framework and previous positive reactions to its implementation from members and staff of the PBC.

A second possibility relates to the individuals who were trained as well as their work colleagues. In their meta-analysis, Blume and colleagues (2010) found that a

number of interpersonal characteristics were related to the extent to which training resulted in behavioural transfer. Notably, these included voluntary participation and motivation to learn. Given that training was included within the context of mandatory continuous development, it may be that the non-voluntary nature of participation contributed to poor results. Blume and colleagues also found that peer and supervisor support for the application of training to the work environment are key components required for behavioural change. The extent to which such support was present was not assessed; however, explicit efforts to solicit support from supervisors were not comprehensive. Moreover, parole officer supervisors were not required to complete this training and there was no policy change to require the use of the training, which could both also have contributed to poor supervisor support for the use of the behaviours taught in training. Overall, lacks related to trainee selection and support at the work site may have contributed to poor transfer.

A final possible explanation is that the amount of training provided was insufficient. In a number of areas, there has begun to be interest in the concept of dose-response, or “the relationship between amount of exposure and amount of improvement in observed outcomes” (Valentine, Gottlieb, Keel, Griffith, & Ruthazer, 1988, p. 366). To date, this concept has not been a focus in much training research, but other researchers have found dose-response relationships in prevention programs (e.g., August, Less, Bloomquist, Realmuto & Hektner, 2004; Charlebois, Brendgen, Vitaro, Normandeau, & Boudreau, 2004), psychotherapy (e.g., Hansen, Lambert, & Forman, 2002), and interventions in general (e.g., Durlak & DuPre, 2008). Specifically in the realm of training, amount of training has been found to be associated with task performance in

substance abuse prevention coalition members (Yang, 2009) and entry-level professionals in new jobs (Saks, 1996), as well as with self-efficacy for work-related tasks in university-educated persons learning new career counseling skills (Soresi, Nota, & Lent, 2004). In intervention research, some authors have cautioned against ruling an intervention ineffective without first considering intervention dosage (Dane & Schneider, 1998; Rescinow, Braithwaite, Dilorio, Vaughan, Cohen, & Uhl, 2001). Others have suggested that intervention dosage may be associated with whether or not changes are maintained over time (August et al., 2004).

Given the large amount of information communicated in this training, and the brief time allotted for it, it seems that insufficient dosage very likely may have contributed to the failure to detect behavioural change as a result of training. Indeed, as reported in Study 2, a number of parole officers mentioned perceiving that there was too little time to adequately cover all the information presented. Many also mentioned that they would have liked greater opportunity to practice the skills presented.

Moreover, though no previous research has been conducted on training on parole recommendation formulation, some exists with respect to training in writing other types of forensic reports; this research provides further support for the role of dose-response in the present training transfer failure. In one study, an eight-hour training intervention on writing reports and formulating recommendations regarding capacity to stand trial did not lead to improvements in report quality (Skeem, Golding, Cohn & Berge, 1998). Studying similar reports, Robinson and Acklin (2010) found that a three-day training intervention led to improvements only in reports written by community-based psychologists; those written by government-employed psychologists did not improve. Finally, an examination

of a 50-hour training initiative aiming to increase the quality of forensic reports found positive results (Melton, Weithorn, & Slogobin, 1985). In other words, the previous limited research on training specific to forensic report writing and recommendation formulation can be summarized as follows: A training initiative of similar duration to the present one was ineffective, one lasting three times as long was effective for some participants, and only the one lasting six times longer led to consistent improvements.

Together, these three studies' findings and what can be inferred from the consideration of dose-response in other realms suggest that, were this training undertaken again, it would be worthwhile to consider increasing its duration. Such a change would make this training consistent with other types of training offered in criminal justice. For example, two different recently reported training initiatives used with probation officers and focused on core correctional practices lasted 3 (Bonta et al., 2011) and 3.5 days (Robinson, Lowenkamp, Holsinger, VanBenschoten, Alexander, & Oleson, 2012) respectively. Training in risk assessment instruments is typically about two days (e.g., the PCL-R; Darkstone Research Group, 2012).

It is also possible that training was of an appropriate duration, but its effects were hindered or masked by individual characteristics or barriers to transfer of training skills to behaviour. For instance, as discussed earlier, inter-individual differences amongst participants, including work site, previous work experience, academic training, gender, age, and personality characteristics, may all have influenced parole officers' reaction to training. For example, differences in previous experience may have resulted in parole officers varying in their familiarity of specific aspects of the information presented. In turn, they may also have varied in terms of the amount of cognitive load (essentially,

strain on working memory; Sweller, 1988) required to process that information. Too large a cognitive load could then negatively influence the amount of training material transferred to behaviour. Indeed, due to excessive cognitive load, it may be that some parole officers' capacity to benefit from training was inhibited. It is also possible that some participants did benefit from training, but that this benefit was not captured in analyses due to the fact that analyses considered all parole officers simultaneously and did not include or statistically control for individual differences.

Other individual characteristics may also have influenced the extent to which training content was transferred to behaviour. In addition to the interpersonal factors mentioned earlier (Blume et al., 2010), numerous other factors have been identified as having the potential of enhancing or inhibiting training transfer (Holton, Bates, Bookter, & Yamkovenko, 2007; Holton, Bates, & Ruona, 2000). Holton and his colleagues posited an inventory of 16 such factors, including capacity (individuals' dedication of time, energy, and mental effort), personal outcomes (individuals' expectancies regarding the personal and negative consequences of the application of training), and openness to change. To the extent that participants varied in terms of these factors, they may also have varied in the extent to which they transferred the taught skills to their work; again, it is possible that a certain subset of parole officers did successfully transfer skills, but that the global analyses failed to capture this effect. Moreover, it is possible that interventions focused on these and similar factors could improve training outcome. Future researchers would do well to examine these factors in order to better disentangle their role in trainees' performance.

Future researchers could also include, as part of their training intervention, more comprehensive efforts to solicit supervisor support for the use of the taught skills upon the parole officers' return from training and efforts to increase trainee motivation, as suggested by Blume and colleagues (2010). It will also be important to ensure that future training evaluations include data from as many training participants as possible (or a random selection of data from as many training participants as possible). Because the knowledge questionnaire data were used in this study, evaluation data could be drawn only from those who had also completed the knowledge questionnaire – unfortunately, however, only 18% of training participants did so. It will therefore be important in future to ensure a broader representation of training participants in evaluation to ensure that results represent all training participants.

Though this study did not detect meaningful differences from pre- to post-training in parole officers' documented rationales for recommendations, there were some other interesting findings. Of note was the overall quality of parole officers' documented rationale for recommendations. Somewhat surprisingly, the mean risk relevance score was of only 5.7 out of 10. Similarly, the median rating of the extent to which recommendations were well-supported and convincing was of only 4, of a range of possible ratings from 1 to 7. Though these scores seem low, further examination of the relevant literature revealed that they are consistent with what has been found elsewhere. In examining reports focused on competency to stand trial, Robinson and Acklin (2010) found a mean quality score of 69 out of 100. Somewhat colourfully, they concluded that “[r]eports demonstrated pervasive mediocrity with respect to quality” (Robinson & Acklin, 2010, p. 131). Other researchers have also found that forensic reports tend to be

assessed as being of relatively low quality, regardless of type of report (e.g., Acklin, Kennedy, Robinson, Dunkin, Dwire, & Lees., 2005, cited in Nguyen et al., 2011; Christy, Douglas, Otto, & Petril, 2004; Heilbrun & Collins, 1995; Nguyen et al., 2011). In addition, report authors often fail to include an explicit explanation for their recommendation (Acklin et al., 2005 cited in Nguyen et al., 2011; Skeem & Golding, 1998). Though the present study used a limited conceptualization of report quality (that is, focused on risk relevance and subjective measures but did not consider, for example, the extent of adherence to the components outlined in policy), these results strongly suggest that parole officers' reports, like those of other forensic report writers, leave room for improvement.

In addition, it was notable that, in supplementary analyses comparing assessments for decision featuring release-focused and suspension-focused cases, the suspension-focused ones in general – and those culminating in a recommendation to revoke conditional release in particular – were less risk relevant and perceived to be less well-supported. Though these analyses require replication, it may be that parole officers writing assessments in these cases feel that the reasons for their recommendation are relatively obvious, given preceding behaviour (and, specifically, perhaps more obvious than would be the case in assessments relating to the granting of parole). If this is the case, they may not feel the need to explain them as fully as they would recommendations pertaining to the granting of parole. Alternatively, they may feel that if they are recommending that an offender be returned to custody, as is usually the case for assessments of suspended offenders, the decision is “lower stakes” and therefore does not

require as comprehensive a treatment. Determining which, if either, of these interpretations is correct will require further research.

A further interesting finding was that, as expected, higher pre-training knowledge regarding risk assessment was consistently associated with more risk relevant documented rationales. The coder also perceived the rationales written by those with higher knowledge scores to be more well-supported and convincing, and, at least at pre-test, was more likely to agree with their parole recommendations. Generally speaking, parole officers received quite high scores on the knowledge score – the average score was almost 25 out of 30. Though this is a relatively high average score, and despite some parole officers' contentions that risk assessment was covered in too much detail in the present training, some parole officers could make further gains in this area.

Together with the relatively low quality of parole officer's assessments for decision, the fact that there is room for improvement with respect to their knowledge suggests that it is likely premature to conclude that further attempts at training would not be beneficial. Even for those parole officers with high baseline knowledge scores, further training on how to apply their theoretical knowledge relating to risk assessment to actual cases could be of utility.

When assessments were rated as more risk relevant, the coder was more likely to find them well-supported and to agree with them. As such, despite these preliminary results, there may still be value in training parole officers to better understand the factors relevant to risk and the manner to consider them in formulating their parole recommendations – in other words, in further training in the Structured Release Decision Making Framework – particularly given that the relevant literature suggests that

insufficient training dosage may have contributed importantly to the training's failure to result in behavioural change in the present study.

### **General Discussion**

The studies reported here were conducted to begin to address the long-standing gap in scholarly attention to the formulation of conditional release recommendations by parole officers. By examining the offender and parole officer factors that influence parole recommendations, as well as parole officers' perceptions and behavioural changes in response to training focused on the formulation of recommendations, the studies provided a starting point for a better understanding of parole officers' contribution to parole decision making. The studies included a simulation of recommendation making, an assessment of perceptions of training, and measurement of risk assessment knowledge and of quality of actual recommendation reports.

### **Summary of Findings**

In the simulation, offenders' criminal history, institutional adjustment, and gender were found to interact in the way they were related to simulated parole recommendations. Though the relationship was not constant across levels of institutional adjustment and gender, greater criminal history seemed associated with a higher likelihood of negative recommendations. The link was not surprising given criminal history is one of the factors most consistently linked to parole decision making in previous research (Caplan, 2007). In addition, criminal history has been frequently cited by paroling authorities as an important factor in their decisions (Kinnevy & Caplan, 2008). It is notable, however, that when parole officers formulated recommendations for women offenders, they were less influenced by criminal history than they were when making conditional release recommendations for male offenders. This finding lends support to Hannah-Moffat and

Yule's (2011) contention that parole research needs to be expanded to include an explicit consideration of the role of gender in arriving at these decisions.

The relationship of institutional adjustment to parole recommendations was contrary to expectations, in that, generally speaking, poor institutional adjustment tended to be associated with recommendations that parole be granted. Again, institutional adjustment interacted with the other manipulated case variables in its association with recommendation. The interaction suggested that parole officers may perceive that in some cases, criminal history "trumps" institutional adjustment in influencing recommendation. More likely, however, is that this finding is attributable to problems with the vignettes presented to parole officers, which parole officers indicated were a poor representation of offenders encountered in their daily work. This issue could mean that the present findings regarding the factors associated with parole recommendations should be considered tentative. Replication with a different collection of vignettes will be necessary to either support or counter the pattern of findings reported here.

Though specific hypotheses were not supported regarding the relationship of manipulated offender characteristics with parole officers' recommendations, it was clear that there was considerable variability in the release recommendations. Some parole officers recommended release in up to three-quarters of the cases presented, while others never did. Moreover, parole officers varied considerably in the amount and type of additional information they considered (or at least accessed) in making their decisions. This inter-individual decisional variability is consistent with that previously found in parole board members (Conley & Zimmerman, 1982; Gobeil, 2006), in those deciding on offenders' criminal responsibility (e.g., Callahan & Silver, 1998), in judges (e.g.,

Graziano et al., 1990; Kerr & Huang, 1986), and in jury members (e.g., van Koppen & ten Kate, 1984). Previous research has found that some inter-individual variability is associated with cognitive style (e.g., Butler & Moran, 2007b; Gordon, 2007) or legal authoritarianism (e.g., Griffit & Garcia, 1979; Martin & Cohn, 2004), but these findings were not replicated in this study. None of the three measures of cognitive style or legal authoritarianism was found to be associated with parole recommendations.

In addition, study results demonstrated that the rationales for recommendations produced by parole officers left considerable room for improvement with respect to the extent that they incorporated and fully explained the risk-related factors underlying the recommendations. Again, this is consistent with what has been found in other forensic contexts: Researchers have examined a variety of types of forensic reports and found them to be of relatively low quality (e.g., Robinson & Acklin, 2010; Christy et al., 2004; Heilbrun & Collins, 1995; Nguyen et al., 2011). Notably, however, the rationales for recommendation written by parole officers with greater knowledge of risk assessment were of better quality than those written by their counterparts with less knowledge.

Unfortunately, despite being positively received, training in risk assessment, in the factors empirically shown to be associated with parole outcome, and in the use of a structured framework to organize, conceptualize, and weigh this information did not lead to improvements in the documented recommendation rationales. Taking into account the association between risk assessment knowledge and recommendation quality, this was unfortunate. Given findings regarding the amount of intervention required to see gains in other fields (Durlak & DuPre, 2008), however, it is quite possible that the amount of training delivered in this situation may have been insufficient to lead to the desired

changes. As such, more extensive training may bring about a different result. Changes to training that target identified learning barriers (Blume et al., 2010; Holton, Bates, Bookter, & Yamkovenko, 2007; Holton, Bates, & Ruona, 2000) may also influence training outcome.

### **Parole Officers' Contributions to Parole Decision Making**

Previous research focused on the formulation of recommendations by parole officers has been extremely limited; often, recommendations were a peripheral topic in research focused on parole decision making (e.g., Carroll & Burke, 1990; Carroll et al., 1982; Holland et al., 1978; Metchik, 1988). What is known, however, is that parole officers' recommendations and parole decisions are identical in between roughly two-thirds and nine-tenths of cases (Hanby et al; 2008; NPB, 1996, cited in Samra-Grewal et al., 2000; Zinger, 2012), with estimates from the more recent data (Zinger, 2012) suggesting greater concordance. In addition, parole officers' recommendations are independently predictive of parole decisions, even after accounting for access to the same information (Carroll et al., 1982). As such, recommendations formulated by parole officers cannot be considered in isolation. Their influence on the entire parole process must be considered.

Though the research presented here is only an early step in better understanding the contribution of parole officers, it suggests that there is considerable variability in the parole officers' simulated recommendations and the information considered in reaching those recommendations. Moreover, expected relationships amongst offender and parole officer factors and recommendations were not found to explain the observed patterns. Though this variability, as mentioned, is not unique to the formulation of parole

recommendations but instead is pervasive across forensic decision making contexts (e.g., Callahan & Silver, 1998; Conley & Zimmerman, 1982; Gobeil, 2006; Graziano et al., 1990; Kerr & Huang, 1986; van Koppen & ten Kate, 1984), the inconsistencies are worrisome. These results are also of concern because of the previously mentioned high rate of concordance between parole officer recommendations and parole decisions. Considering this concordance, these findings suggest that parole decisions may be influenced by recommendations that may not be reliable and adequately supported. If replications support this interpretation, there would be a number of implications.

Parole decision making is a high stakes endeavour. Incorrect decisions can have important costs in terms of public safety and victimization. Moreover, inappropriately conservative decisions are arguably unjust to offenders and certainly have significant cost and institutional capacity implications. Given these consequences, parole boards have a responsibility to reach appropriate, transparent, defensible, high quality decisions. Indeed, failure to do so may open boards to extensive criticism and perhaps litigation. Boards typically cannot be held legally liable for the results of their decisions, but this has not stopped complainants from trying to do so, at least in the U.S. (see Ross, 2009). In addition, boards have been soundly criticized in the media, both in Canada and elsewhere, and the Canadian public's confidence in parole boards is not high (Cumberland & Zamble, 1992; Latimer & Desjardins, 2007; Roberts, 2004). To increase the Canadian public's confidence in parole, it is necessary to strengthen and demystify the parole decision making process – and, given the clear link between parole decision making and the formulation of parole recommendations, the recommendation making process also.

### **The Role of Discretion**

Though PBC and CSC policies do not explicitly prohibit the exclusive use of actuarial risk instruments in reaching parole recommendations and decisions (CSC, 2009, PBC, 2011a), their inclusion of extensive lists of factors that must be considered in reaching these recommendations and decisions amount to the same thing. The lists are so broad and varied that there likely does not exist an instrument that would accurately reflect all the required factors. As such, both CSC and the PBC's policies implicitly call upon and value the role of discretion in reaching parole recommendations and decisions.

That said, the use of discretion is not consistently supported in the research literature. As mentioned earlier, the relative merits of various types of risk assessment instruments have been repeatedly debated, with actuarial instruments (which include no room for discretion) and structured professional judgment (which includes a circumscribed role for discretion) being found to be considerably more predictive of outcomes of interest than clinical judgment (which is purely representative of professional expertise and discretion; e.g., Ægisdóttir, 2006; Grove & Meehl, 1996; Guy, 2010). Despite these results, one group of authors (Hart, Michie, & Cooke, 2007a, 2007b; Hart & Michie, 2008) has argued that applying the results of actuarial instruments – which are developed and normed using groups – to individuals is inappropriate because they cannot provide sufficient certainty in each unique case. Though the statistical analyses underlying these authors' arguments have been challenged as including errors (Harris, Rice, & Quinsey, 2008), the authors have argued that actuarial instruments should be used “with caution or not at all” (Hart, Michie, & Cooke, 2007b, p. s60), and

that a greater reliance on professional discretion with respect to case-specific factors is required.

Prominent correctional thinkers have previously argued that “decision makers must respond to considerations ... [of] specific cases in particular settings under particular circumstances” (Andrews, 1995, p. 58). Hence, some researchers have attempted to strike a balance by applying actuarial measures and then “over-riding” these measures when case-specific factors suggest that this may be necessary. Results, however, have not been positive. For example, overrides of recommended security classification decisions (e.g., Gobeil, 2007b), of violence risk assessments (e.g., Rice, 2007), and of sexual risk assessments (e.g., Hanson & Morton-Bourgon, 2009) have all led to reductions rather than increases in predictive accuracy.

These findings, then, suggest caution regarding the use of discretion in forensic decision making. However, as stated, policy effectively requires its use in parole decision making. Moreover, forensic decision makers value their decision making discretion (e.g., Pogrebin et al., 1986; Savelsberg, 1992) and have argued that discretion increases democracy, professionalism, and participatory administration of justice (Schneider, Ervin, & Snyder-Joy, 1996). In surveys, the Canadian public has also indicated that they value the ability of professionals to apply their discretion in making forensic decisions (specifically, in applying mandatory minimum sentencing regulations; Crutcher, Roberts, & Verbrugge, 2007). This valuing of discretion means that when initiatives have been undertaken to circumscribe discretion in the interests of greater consistency, transparency, or legislative compliance, they have generally not been well received (e.g., Pogrebin et al., 1986; Schneider et al., 1996) and not consistently resulted

in desired changes (e.g., Turpin-Petrosino, 1999; but see Steiner, Makarios, Travis, & Meade, 2011). In other words, where possible, parole decision makers have disregarded or circumvented attempts to limit their discretion. This is not unique to parole; other forensic decision makers have been found to do the same thing (e.g., Burns & Peyrot, 2008; Shook & Sarri, 2007). In fact, where efforts to limit discretion *have* been effective, it has been argued that discretion is sometimes simply shifted to another criminal justice partner, such as when changes have limited judicial discretion and prosecutors then became more selective in their decisions whether or not to pursue plea bargains and convictions (e.g., Wooldredge & Griffin, 2005)

Resistance to limiting discretion may partially be because most decision makers believe that they are particularly capable at understanding situations (Grove & Meehl, 1996) and reaching decisions (e.g., Kleitman & Stankov, 2001; Thompson & Mason, 1996). Of course, it is obvious that not everyone can be a better-than-average decision maker and that there is at least sometimes therefore a disconnect between confidence in decision making skills and the actual strength of those skills. Nonetheless, these beliefs may be attributable to decision makers believing themselves to have unique knowledge, experience, or expertise. However, research does not consistently demonstrate that such knowledge and experience is necessarily associated with better decision making. In one now-dated but illustrative study, Hakeem (1961) contrasted community parole officers' predictions of actual offenders' post-release outcome with equivalent predictions made by accountants, who would be expected to have no particular expertise in the area. Parole officers' predictions were slightly worse than those of accountants, though neither group's predictions were better than what would have resulted from a coin toss. Quinsey

and Ambtman (1979) similarly found that psychologists were no better than teachers at predicting dangerousness, suggesting that the failure of experience and specialized training or knowledge to increase decisional accuracy may be relatively widespread.

Altogether then, despite the value ascribed to it by decision makers, discretion – as exemplified in the failure to use actuarial measures as well as in “adjusting” actuarial measures’ recommendations – increases subjectivity and arguably decreases transparency and accuracy (e.g., Rice, 2007). In this context, it seems evident that with policies that embrace discretion comes important responsibility, both at the individual and at the organizational level. It is therefore incumbent upon both the PBC and CSC, given recommendation-decision concordance rates, to take action to ensure that discretion is exercised in an appropriate manner in the formulation of parole recommendations.

### **The Role of Evidence-Based Practice**

Though not incompatible by definition, extensive use of discretion tends not to be associated with reliance on empirical evidence. However, the use of structured professional judgment can contribute to ensuring a compromise between these two decision making features. As mentioned, in one recent study, a number of structured professional judgment measures have been found to be no less accurate – and possibly more accurate – than their actuarial counterparts in predicting outcome (Guy, 2010). Moreover, these measures can guide decision makers’ attention to the case features shown to be consistently associated with outcome. Indeed, Burke (2010b) has recently argued that one of parole decision makers’ “core competencies” involves finding and using empirically-supported information in reaching decisions; the use of a well-constructed and validated structured professional judgment instrument can facilitate this.

Though basing decisions on empirically-supported case factors seems self-evident, it is not as common in parole (and likely other forensic decision making contexts) as might be expected, despite a strong push toward greater incorporation of evidence-based practice in parole (e.g., Burke, 2010a, 2010b, 2011; Campbell, 2008). Indeed, one study found that though many American paroling and supervision authorities report valuing evidence-based practice, there is a lack of understanding regarding what it comprises (Jannetta, Elderbroom, Solomon, Cahill, Parthasarathy, & Burrell, 2009). In their survey of the use of evidence-based practice in parole supervision offices, these authors reported that at least 15% of respondents were unsure of what is meant by evidence-based practice in parole and/or were unsure which practices are rooted in evidence. This may be because of insufficient infrastructure; Campbell (2008) has argued that being evidence-based requires significant time, energy, and resources, as well as a willingness to change. It may be that the appetite in Canada (PBC, 2011a) and elsewhere (Burke, 2010a, 2010b, 2011; Campbell, 2008) to better incorporate evidence into parole decision making is not paralleled by sufficient financial and human resource investments.

Indeed, in the previously mentioned survey, just under half of respondents reported that they were provided with neither the monetary and staff resources nor the training necessary to implement evidence-based practices (Jannetta et al., 2009). This was despite the fact that most indicated that their senior management were supportive of the use of such practices. This suggest that, though the training provided to parole officers in the present context was not effective in increasing the extent to which they

supported their parole recommendations with evidence-based factors, training is likely an area worth considering further.

### **Implications Specific to CSC and the PBC**

In sum, the PBC, in adopting the Structured Release Decision Making Framework as policy (PBC, 2011a), has taken steps to ensure the use of discretion is appropriate and guided by evidence. CSC, in offering training in the use of the framework to its parole officers, has begun to do the same. Notably, the impacts of parole officers' formulation of recommendations, as made evident by their concordance and association with parole decisions, the potential consequences of parole decisions, and the potential costs of discretion with limited parameters, suggest that CSC continues to have a significant responsibility in this respect.

The limitations and preliminary character of the present findings make drawing conclusions regarding implications inappropriate. Further research in these and similar areas is necessary, however, as, if it is determined that recommendation formulation is problematic, there would be important implications. Of particular interest would be greater research regarding the extent to which parole officers vary in their recommendations and the quality of their recommendations, including as measured using different operationalizations of quality. If problems in these areas were consistently found across a body of research of appropriate size, there could be repercussions for CSC and the manner in which CSC and the PBC collaborate in considering offenders for parole. Again, however, it is important to reiterate that a much more substantial body of research is a necessary first step.

That said, one critic of the current process where parole officers formulate recommendations prior to the PBC's reaching of decisions has argued that this process is problematic in and of itself because the high rate of concordance between recommendations and decisions mean that parole decisions are not reached in as independent a manner as intended (Zinger, 2012). Indeed, Zinger has argued that CSC should discontinue providing conditional release recommendations to the PBC. Though this recommendation was included in a scholarly article, it is notable that Zinger is the Executive Director and General Counsel of the Office of the Correctional Investigator of Canada, which is legislatively mandated, among other things, to identify possible problematic area and make recommendations concerning CSC's policies and procedures (*Corrections and Conditional Release Act*, 1992).

Zinger noted that CSC is not legislatively required to make recommendations regarding conditional release; in addition, he argued that given the high rates of concordance between parole officers' recommendations and PBC decisions, the PBC's contribution to parole decision making has been sufficiently diminished as to call into question its ability and performance as an independent administrative tribunal. Specifically, he argued that "the roles and responsibilities of both PBC and CSC should be re-examined [and]... the very raison d'être of PBC should perhaps be questioned" (p. 12).

Though it is this author's opinion that Zinger's conclusion overstates the data he presents, his larger point that high rates of concordance between CSC recommendations and PBC decisions call into question the PBC's independence is valid. Given that CSC is not legislatively mandated to provide recommendations to the PBC, discontinuing their

provision would be, as Zinger suggests, one means of ensuring the PBC's independence. However, if CSC were to decide not to provide recommendations, this may actually result in more conservative – arguably unnecessarily conservative – decisions from the parole board. Board members have considerably less first-hand experience with offenders than do parole officers, and therefore, despite the comprehensive files CSC shares with them, know less about the offender. Decision making research conducted in a judicial setting show that when a decision involves uncertainty, the decision maker often proceeds conservatively (Albonetti, 1987); in the present context, this could mean that in the absence of the greater breadth of information represented by the parole officer's recommendation, a board member would be likely to decide the offender's conditional release decision conservatively – that is, to deny or revoke parole. This would have significant impacts in terms of financial costs, institutional crowding, and offenders' fair treatment.

Alternatively, CSC and the PBC must accept that the high rate of concordance between parole officers' recommendations and parole board members' decisions will continue to be present, and CSC must therefore assume the responsibility of ensuring that its recommendations are of the highest quality possible and are fully rooted in empirically-supported factors. Future research will be required to confirm whether recommendations meet these criteria, and, if not, to further clarify where improvements are needed.

Though it is premature to assume that improvements are needed, if such a need were identified, CSC might consider two approaches. First, given that, as mentioned, the policy guiding the factors to take into consideration in formulating parole

recommendations is broad and provides insufficient instruction on combining these factors (CSC, 2009), CSC can begin by improving this policy. Improvements could include providing greater detail in terms of how to consider and combine the factors as well as ensuring that the list of factors to include reflects the most up-to-date empirical findings from the bodies of literature on parole outcomes and recidivism.

Despite the fact that the training reported on here was not effective in increasing the quality of reports written by parole officers, training is likely another means of ensuring quality recommendation making and appropriate incorporation of evidence-based practice. Whether CSC chooses to further pursue training in the use of the Structured Release Decision Making Framework or another training approach, it could improve upon the present training by considering providing training of longer duration (e.g., Durlak & DuPre, 2008), undertaking initiatives to foster motivation to learn (e.g., Blume et al., 2010; Ruona et al., 2002), making changes to the workplace culture such that peers and supervisors are supportive of behavioural changes (e.g., Blume, 2010), and explicitly measuring whether barriers to learning transfer are present and of concern (Holton, Bates, Bookter, & Yamkovenko, 2007; Holton, Bates, & Ruona, 2000).

The changing of policy guidelines and the expansion of training initiatives represent only two examples of how CSC may address any identified problems in the quality of recommendation; it may well find other effective means of doing so. Regardless, it seems clear that, given the high rates of concordance between parole officers' recommendations and board members' decisions and the serious repercussions associated with poor quality recommendations, greater attention in this area is necessary. It is only through this continued research that CSC will fully understand the extent to

which its parole officers' recommendations meet expected levels of consistency, transparency, quality, and reliance on evidence, as well as whether changes are required.

### **Theoretical Implications**

In addition to the possible practical implications discussed above, if replicated, these studies' findings may also have certain limited theoretical implications. As mentioned, there are no well-established theories specific to parole decision making, but the phenomenon can appropriately be considered in the larger context of non-probabilistic decision making under uncertainty (e.g., Kahneman, 2002; Tversky & Kahneman, 1974). This school of thought suggests that when faced with making decisions where the likelihood of specific outcomes is unknown, decision makers often consciously or unconsciously rely on heuristics, or decisional short-cuts.

In previous vignette-based research, Gobeil (2006) found preliminary evidence of adaptive reliance on heuristics in parole board members making release decisions. Board members were more likely to rely on that information previously shown to be related to parole outcome or recidivism, and less likely to rely on information less strongly linked to these outcomes. The present study's findings were dissimilar, in that the difference in the extent to which specific information domains were considered by parole officers was much less than was previously the case for board members. As such, the specific heuristics used by parole board members in the previous study do not appear to be at play in a significant manner in this context.

However, other heuristics may apply, including the contrast and availability heuristics. The considerable inter-individual variability found in the current context may reflect differences in previous experience that, in turn, influence the manner in which

parole officers considered the cases with which they were presented. Specifically, the parole officers who participated in this study were from a variety of work sites – some worked in the community while others worked in minimum, medium, or maximum security institutions. Parole officers working in minimum and maximum security institutions, for instance, would likely imagine highly different prototypic offenders. When encountering the offender vignettes used in this study, parole officers likely would have compared their idea of a prototypic offender to the ones described in the experimental materials; this comparison may have led to considerable differences in their assessment of the fictitious offender's risk or its manageability. Alternatively or additionally, the parole officers from different work sites may have varied in the ease with which they could call to mind offenders similar to those presented in the vignettes; the availability heuristic may therefore have also played a role. Further research will be required to explore these possibilities, but if such heuristics are found to be influencing release recommendations, it would introduce a source of extra-legal variability into the formulation of recommendations.

Though the efficiencies to be gained from the use decisional heuristics are certainly acknowledged, this extra-legal influence could be problematic from an ethical point of view, as well, possibly, as a legal one. Though CSC, as mentioned, is not mandated to formulate parole recommendations, the PBC, which is so-mandated, is legislatively required to consider each case on its own merits (*Corrections and Conditional Release Act*, 1992). Though this requirement doesn't, strictly speaking, apply to CSC, given that CSC has taken on the formulation of parole recommendations, it could be maintained that it should be guided by the spirit of this legislative requirement.

In this context, it would arguably be inappropriate for parole officers to formulate recommendations either partially or fully based on offenders with whom they have previously worked – that is, to rely on decisional heuristics in formulating recommendations.

### **Limitations and Strengths**

The studies reported here were marked by a number of limitations. One of the major limitations was that sample sizes were smaller than had been anticipated. For Study 1, this meant that, as mentioned, the predictor to outcome variable ratio in regression analyses was less than desired (Hair et al., 1998; Tabachnik & Fidell, 2007). Further, the small sample size meant that there may have been insufficient power to detect certain effects. In addition, in Study 3, less than one in every five trained parole officers completed the knowledge questionnaire and could therefore be included in the study. As such, in all three studies – but perhaps particularly in Study 3 – there may have been systematic but unacknowledged differences between parole officers who were represented in the research and those who were not. The extent to which such differences existed is not known, but if they did, results may not be generalizable to the full population of CSC's parole officers.

Additional limitations apply to the experimental materials used in Study 1. The internal consistency of the measure of legal authoritarianism was low, which indicates that it may not have been measuring a cohesive construct. Conclusions related to this variable must therefore be considered tentative. Parole officers also indicated that the vignettes with which they were presented had low representativeness relative to the offenders they encounter in their daily life. Study results may therefore be limited in the

extent to which they are generalizable to the manner in which parole office actually formulate recommendations in their work. Future vignette-based research conducted with parole officers would benefit from piloting vignettes to ensure they are considered representative.

The training in the use of the Structured Release Decision Making Framework provided to parole officers had a number of limitations: it may have been insufficiently piloted and it may have been of too short a duration. In Study 2, a number of suggestions for improvement of the training emerged after it was no longer possible to make changes. By having a greater number of pilot iterations, it may have been possible to refine and improve the training further prior to national implementation. Perhaps more importantly, however, the lack of behavioural change may have resulted from too low of a training “dose” – it would have been ideal to provide more extensive training. It is also possible that the fact that training was not tailored to participants – both in terms of their previous experience and possible barriers to learning skills taught in training – was a limitation. It is possible that including versions of training specific to novices and to more experienced parole officers, or otherwise tailoring the material, would have led to different outcomes. Future researchers would benefit from exploring these possibilities.

In examining perceptions and results of training, analyses were limited by including no demographic, experiential, or other variables specific to parole officers. Even in the absence of the possibility of tailoring training according to these characteristics, it might have been informative to examine how these were associated with patterns of findings in Studies 2 and 3. Again, this is an area worthy of attention in subsequent research.

With respect to the examination of the extent to which training resulted in behavioural changes, this research was limited by relying solely on the concept of risk relevance in operationalizing the quality of recommendations. Given that there was no policy requirement to incorporate the framework or any other information taught in training into recommendations, it may have been unrealistic to expect such incorporation from parole officers. Similar future studies could benefit from the inclusion of alternative measures of quality, including ones that represent compliance with policy.

Despite these limitations, this research did have two particular strengths. First, the studies were among the first to examine the factors which might contribute to parole officers' recommendations and the manner in which the formulation of these recommendations could be improved through training. As such, one of these studies' important contributions was simply beginning to address the long-standing omission of parole recommendation making from scholarly literature. Second, all three studies reported here were conducted directly with parole officers rather than using a more accessible population as a proxy. Much of the previous research in parole decision making, especially older research (e.g., Griffitt & Garcia, 1979; Turpin-Petrosino, 1999; Vecchio, 1977), has been conducted using students or other samples as proxies. However, Lindsey and Miller (2011) recently contrasted the parole decision making of actual parole members with that of college students and found that the two groups made different decisions and cited different factors as influential in reaching their decisions. As such, the extent to which previous parole research conducted with decision maker proxies is generalizable to actual decision making is questionable; the current studies, however, are not marked by that limitation.

**Future Directions**

Further research in parole decision making should address the above limitations and expand on some of the ideas presented in these studies. In particular, to better situate further research on the factors that influence the formulation of parole recommendations, a worthwhile first step would be a broad archival review of the factors associated with parole officers' recommendations and the factors cited by parole officers for their recommendations. This could involve a review of both offender files and parole officers' rationales for recommendations presented in assessments for decisions in order to identify the file information associated with recommendations as well as the information cited by parole officers as reasons for these. This would both allow for a richer understanding of the factors that are actually associated with recommendations and allow for identification of any areas where the true correlates of recommendations and the reasons cited by parole officers in their rationales differ. Where such differences exist, it may be evidence that the factors influencing recommendations and the parole officers' beliefs regarding the factors influencing recommendations do not align – in other words, differences might clarify how the factors influencing recommendations and the factors parole officers *think* or *say* influence their recommendations differ. Results from such an examination may highlight areas to be included in future parole officer training. Alternatively or additionally, it would be of benefit to survey parole officers as to the factors they perceive as most important in reaching their parole recommendations, as has previously been done with parole boards (e.g., Kinnevy & Caplan, 2008; Serin & Scott, 2006) and parole officers considering temporary absence decisions (Porporino Cormier, 1982).

Training could also be improved by being made longer, soliciting voluntary training participation, taking steps to change the culture at parole officers' work sites to be more supportive of the behaviours taught in the training, measuring and analyzing the presence of barriers to training, and, possibly, including different versions of novice and experienced parole officers. In order to support and maintain changes, it would also be valuable to conduct both initial and refresher training. For newly hired parole officers, training could be incorporated into the initial three-week training. For both new parole officers and more experienced staff, training and refreshers in the material could be offered in the context of continuous development. The former approach would capitalize on the possibility that newly hired parole officers may be more receptive to learning manners of approaching their work tasks while the latter would ensure that a critical mass of trained parole officers is achieved in a timely fashion and minimize any "drift" in understanding of trained material. In addition, in order to make parole officers more likely to change their behaviour, future training attempts would benefit greatly from changes in policy to create an infrastructure which supports if not requires the use of the material taught in training. Finally, it may be good practice to involve parole officers in the refinement of future iterations of similar training. Campbell (2008) argued that if changes in the way parole decisions are to be effective, paroling authorities should be involved in their development and implementation – the same would be applicable for parole officers.

A final area wherein the present research may have implications for future research is that of remote data collection. Components of all three studies involved the collection of data using remote electronic means. While such an approach was certainly

advantageous in that it allowed collection of data from participants with whom this researcher was not directly in contact, contributed to minimizing the burden of participation by allowing participants to respond at a convenient time, and facilitated data entry, there were also challenges associated with its use. Specifically, problems with the electronic database resulted in a loss of data in Study 1, and response rates across all three studies were much lower than anticipated. Future researchers considering the use of remote data collection techniques would likely benefit from piloting their approach extensively in order to identify problems prior to implementation. Further, it may be appropriate to design complementary studies that include both remote and in-person data collection, as was done in Study 2, so as to be confident that results from data collected remotely were not biased in an unanticipated manner.

### **Conclusion**

The studies reported here represent an early step in what is hoped will be increased scholarly interest in the formulation of conditional release recommendations by parole officers. This group of knowledgeable professionals has, to date, garnered very little research focus. Given the high rates of concordance and the independent association between parole officers' recommendations and board members' decisions, further research in this area is required. In recent years, there have been considerable increases in the number of paroled offenders both in Canada (Public Safety Canada, 2011) and in the U.S. (Glaze & Bonczar, 2009). Partially as a consequence of the potential human and financial costs associated with errors in parole decision making across such large numbers of offenders, there has begun to be an appetite for increasing the rigour with which parole decisions are made (e.g., Burke, 2010a, 2010b, Campbell,

2008). This is exemplified in the U.S. by the Bureau of Justice Assistance funding the creation, in 2010, of a National Parole Resource Centre to assist paroling agencies to fulfill their mandates more effectively (National Parole Resource Center, 2012). Indeed, as a result of their decision making functions whereby they control offenders' access to the community and, conversely, the community's exposure to any risk presented by offenders, parole boards have come to be recognized as "critical to [any] nation's system of justice" (Burke, 2011, p. 3). Parole officers are arguably no less critical.

While extremely preliminary, the research presented here suggests that there may be room for improvement in the manner in which parole officers reach, formulate, and document their recommendations. More research is clearly necessary, the present study findings indicate that there is considerable variability across parole officers in the recommendations formulated, that offender factors are not consistently and predictably related to parole recommendations, and that recommendations are not of sufficient quality. If these findings are replicated, it may be necessary for CSC to address the manner in which its parole officers formulate recommendations in order to bring about improvements that ensure the discretion represented in formulating these recommendations is used appropriately and responsibly. By doing so, CSC can position itself at the forefront of correctional jurisdictions in responding to the calls for greater incorporation of evidence-based practice. Moreover, it will further support its reputation for the strong incorporation of research into correctional practice. The studies presented here act as a very early step in this process.

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## Appendix A. Informed Consent

*The purpose of informed consent is to ensure that potential participants understand the purpose of the research study and the nature of their involvement. It aims to provide potential participants with sufficient information to decide whether or not they wish to participate. You are encouraged to print a copy of this informed consent form to keep in your records.*

**Research title:** Understanding Parole Recommendations: The Contribution of Parole Officers

**Research personnel:** The following researchers may be contacted for further information: Renée Gobeil (Principal Investigator, Carleton University, 613-761-7102, [rgobeil@connect.carleton.ca](mailto:rgobeil@connect.carleton.ca)), or Dr. Ralph Serin (Supervisor, Carleton University, 613-520-2600, ext. 1557, [ralph\\_serin@carleton.ca](mailto:ralph_serin@carleton.ca)).

Should you have any ethical concerns about this study, please contact Dr. Avi Parush (Chair, Carleton University Research Ethics Committee for Psychological Research, 613-520-2600, ext. 6026, [avi\\_parush@carleton.ca](mailto:avi_parush@carleton.ca)). Should you have any other concerns about this study, please contact Dr. Janet Mantler (Chair, Carleton University Department of Psychology, 613-520-2600, ext. 4173, [janet\\_mantler@carleton.ca](mailto:janet_mantler@carleton.ca)).

**Purpose:** We are interested in how case factors influence your recommendations for parole decisions, as well as certain personality and cognitive factors. We are also interested in assessing the impact of your participation in training on risk assessment, case analysis, and report writing on the recommendations that you make. This research is being conducted with the support of CSC to assist in revisions to a new parole officer training program.

**Task requirements and duration:** Should you choose to participate in the study, you will be provided eight hypothetical offender case studies on which you will be asked to make release recommendations. Moreover, you will be asked to complete a questionnaire assessing certain personality and cognitive characteristics. The procedure will take about 40-60 minutes. *You should be allotted time during work hours to complete this component.*

After you have participated in the training on release recommendations, you will then be given another eight hypothetical offender case studies, and asked for your release recommendations on these. This procedure will take about 30-40 minutes.

Finally, we would like to review six Assessments for Decision regarding conditional release which you have written, in order to assess whether participation in training impacts the way in which you write your release recommendations. This component of the research does not require any time or other resource commitment on your part; the Assessments for Decision will be extracted directly from the Offender Management System.

**Location:** The study will be conducted within the context of the New Parole Officer Orientation Training conducted in your region. You are expected to complete the first set of tasks prior to attending the training, and may do so at work and during work time via the InfoNet. You will complete the second component during the training session itself.

**Potential risk/discomfort:** You may experience minor discomfort or anxiety as a result of reading the crime scene details in the hypothetical offender case studies. Please be reminded that your participation is entirely voluntary, that you may choose not to answer any question, and that you may withdraw from the study at any time if any part of it makes you feel uncomfortable.

**Anonymity and Confidentiality:** In order to be able to assess any changes in the way in which Assessments for Decision are written after participation in training, it will be necessary for your name to be associated with your results. Gathered data, however, are confidential, and only researchers associated with the project will have access to the data. Neither your colleagues, your supervisor, nor any other Correctional Service Canada staff to whom you may report either directly or indirectly will be made aware of any answers you provide within this study. Finally, when the results of this study are reported, this will occur only in an aggregate form; your individual responses will therefore not be identifiable.

### **Consent**

I have read the above form and understand the conditions of my participation. Specifically, I acknowledge that my participation in this study is voluntary, and if for any reason, at any time, I wish to discontinue my participation, I may do so without having to give an explanation. I may also choose not to answer any items for any reason. Furthermore, I am also aware that the data gathered in this study are confidential with respect to my personal identity. Furthermore, I acknowledge being informed that there are no penalties or rewards for participation, though if I participate, my name will be entered in a draw for one of two \$50 gift certificates to Chapters. In lieu of signature, I am clicking on the "I consent to participate" box below to indicate that I agree to participate in this study.

Appendix B. Background Questionnaire

1. What is your age?
  - Less than 25
  - 25-34
  - 35-44
  - 45-54
  - Greater than 55
  
2. What is your gender?
  - Male
  - Female
  
3. What is your level of education?
  - High school diploma
  - Some post-secondary
  - College diploma / university degree
  - Post-graduate degree
  - Other: \_\_\_\_\_
  
4. Do you currently work as a:
  - Community parole officer
  - Institutional parole officer
  
5. How many months have you been employed in this capacity?  
 \_\_\_\_\_ *months*
  
6. Have you previously worked at CSC in another capacity?
  - No
  - Yes

*If YES, in what capacity?*

  - Community parole officer
  - Institutional parole officer
  - Other
  - Multiple positions
  
7. How long, in total, have you been employed by CSC?  
 \_\_\_\_\_ *years*
  
8. Do you primarily work with:
  - Male offenders
  - Women offenders
  - Both men and women offenders

## Appendix C. Case-Based Vignettes

**Female, Low Institutional Adjustment, Limited Criminal History – I**

This is the case of a 34 year old woman offender who is serving 6 years for 3 counts of armed robbery. Police information indicates that she was arrested as a result of an identification stemming from video surveillance equipment in a liquor store that was robbed. Both the video surveillance footage and the offender's testimony suggest that she was coerced into participating in the robberies by her boyfriend. She pleaded guilty and cooperated with police. She has served a previous term in the provincial system for a number of drug-related offences, but this was four years prior to her arrest in this context. After serving 3 years of her sentence, the offender is applying for day parole.

During her sentence, the offender has been involved in a number of institutional incidents including arguments and fighting. She originally reported that residing with a particular housemate was causing irreconcilable friction, but transferring her to another house did not solve the problem. She seems to be involved in arguments on a regular basis with both her housemates and other women. She has participated in Cognitive Skills training and the program facilitator commented that she is now better able to draw boundaries and see the consequences of her actions. However, her participation in arguments with other offenders did not diminish as a result of her program participation.

Reports on file indicate that she is a moderate risk to re-offend (no statistical scale applies). She has residency confirmed at a halfway house in a city other than the one in which she and her former boyfriend resided. She has had no contact with this boyfriend, but she is considering returning to her community following day parole.

***Additional Information******Risk Assessment***

While structured risk instruments such as the SIR-R1 cannot be used with women offenders, the offender's poor institutional behaviour suggests that she is *not* a low risk offender.

***Mental Health Information***

No formal diagnosis has been provided. Psychological counseling has focused on her assertiveness within the context of relationships generally and romantic relationships specifically. The psychologist has reported that the offender's frustration tolerance is low, contributing to her frequent arguments.

***Victim Information***

There is no victim information with relation to the armed robberies. In court, her lawyer argued that the offender was a victim in this context due to her boyfriend's coercion.

***Program Information***

Reports on file indicate that the offender actively participated in the Cognitive Skills program, including completing homework assignments and generally interacting appropriately with other participants. The offender reported learning a great deal from the program, however her behaviour suggests that she may not be practicing her skills.

#### *Release Plan*

The offender recognizes that she should not reside in the same community as her former boyfriend, at least until she strengthens her community supports. For this reason, she plans to move to another city where her cousin lives. She plans to reach out to a women's advocacy group with a chapter in her home town so that she can have supports in place when she returns there when she completes her day parole.

#### *Criminal History*

The offender's current convictions were all for robberies committed in the company of her former boyfriend. Her previous convictions were related to her substance use and she reports not having used substances in over four years. Though it appears that the seriousness of her criminality is increasing, her involvement with a criminally involved male partner may explain this progression.

### **Female, Low Institutional Adjustment, Limited Criminal History – II**

This is the case of a 38 year old woman offender who is serving 5 years and 6 months after being convicted for assault and assault causing bodily harm. In the second case, the victim was so seriously injured that she spent several days in hospital and required over twenty stitches to her face. In both cases, the offender was under the influence of alcohol at the time. She also previously served time in a provincial facility for driving while impaired. Pre-sentence reports reveal that, prior to conviction, the offender held a stable legal job. She is described on file as a charismatic and hard-working individual. She has presently served 36 months of her sentence and is applying for day parole.

Since her arrival at the facility, the offender has been involved in a number of incidents, including possession of contraband substances and several dirty urinalysis results. She has participated in the Women Offender Substance Abuse Program, and, at one point, was residing in the drug-free house at her institution. However, as a result of other offenders reporting that she was consuming alcohol and a dirty urinalysis she was returned to her original house. On the other hand, she has been working in the mattress cover sewing shop and has been characterized by her work supervisor as a proactive, dependable, and hard-working person. When she has been drinking, though, she does not show up for work.

Reports on file indicate that she is a moderate risk to re-offend (no statistical scale applies). Though her criminal record is not extensive, she does not seem to be managing her substance use appropriately. The offender has residency confirmed at a halfway house. She feels that participating in an Alcoholics Anonymous group upon her release will be helpful.

### ***Additional Information***

#### *Risk Assessment*

In conformance with policy, the SIR-R1 was not administered to this female offender. However, file indications suggest that due to her problematic substance use and her institutional incidents, her risk to re-offend is moderate.

#### *Mental Health Information*

No formal diagnosis has been provided. Psychological reports indicate that the offender has a relatively stable personality and mood, but that her use of substances contributes to significant disorganization. This being said, her alcohol abuse has been seen as related to her lifestyle impulsivity, not mental health concerns.

#### *Victim Information*

The two victims of the offender's assaults both suffered serious physical damage. The victim of the second assault has submitted a victim impact statement in which she reported having lost wages for the days she spent in hospital and having suffered a considerable reduction of her self-esteem as a result of her new facial scar. The offender reports feeling remorseful at the extent of her victims' injuries.

#### *Program Information*

The program facilitator's reports regarding participation in WOSAP were originally quite promising, but there are several indicators that the offender continued to use alcohol while incarcerated. The program facilitator suggests that the death of the offender's mother may have contributed to her relapse, and indicates that the offender needs further practice in developing her coping mechanism. The offender feels that participation in AA in the community will provide support for future difficult life events.

#### *Release Plan*

The offender recognizes that her substance use is problematic for her. Prior to her incarceration, she had a pro-social life and a stable job. She hopes to return to her former employer and recognizes that if she continues to drink, her employer will not be able to trust her. For this reason, she is planning to participate in AA if granted day parole.

#### *Criminal History*

The offender's only previous conviction was for driving while impaired, for which she served a 60 day sentence. There is no indication of criminal behaviour while she was a juvenile, but the fact that she was convicted of both an assault and an assault CBH in rapid succession suggests her criminal behaviour may be escalating.

### **Female, Low Institutional Adjustment, Extensive Criminal History – I**

This is the case of a 37 year old woman serving a 70 month sentence for fraud (x 6), conspiracy, and breach (x 3). Pre-sentence reports indicate that the offender was

involved with a co-accused in a business venture with the goal of defrauding individuals who thought they were donating funds to help the victims of Hurricane Katrina. The venture was thoroughly planned, and involved multiple strategies to attempt to extract maximum amounts. Although substance abuse has been noted, her motivation in committing these crimes appears to have been financial. Her previous criminal record includes several separate convictions for fraud, credit card fraud, and uttering forged documents, as well as one conviction for assault, for which she served 30 days. She is applying for day parole. She has served 3 years of her sentence.

In her current sentence, the offender has been involved in four separate incidents where she was found providing 3-way telephone services to other offenders for a fee. She has participated in the Women Offender Substance Abuse Program, as well as in employment and employability programs in order to allow her to develop the skills required to hold legal employment which provides a living wage. Program reports from WOSAP indicate that her performance was quite good. During the programs, she also addressed her cognitions around the financial motives for her criminality; she has made good progress in this area. She has succeeded in earning her snow plow license. She has expressed that she enjoys using the snow plow and would like to try to develop a career in this area. To supplement this work, she is interested in working in landscaping during the summer months.

Reports suggest that she is at moderate risk to re-offend. The offender has been accepted at a halfway house near her family, and she expresses that if she finds work, she thinks she will succeed. She has identified a list of snow removal companies in the area that she intends to approach regarding employment.

### ***Additional Information***

#### ***Risk Assessment***

Due to the offender's gender, no statistical scale applies. However, her criminal history, together with her institutional behaviour, suggest that she is *not* a low risk offender.

#### ***Mental Health Information***

No formal diagnosis has been provided. File indications suggest that the offender may have an inappropriate sense of entitlement, which may explain her involvement in fraud. She can sometimes be dismissive of the views of those who try to have her see the impact of her crimes on the victims.

#### ***Victim Information***

The offender is somewhat unwilling to consider the depth of impact her offence may have had on her victims. She tends to assume that insurance can cover victims' losses. Given the ploy used, however, a number of victims lost significant amounts of money. One older woman reported feeling that her generosity was being punished.

#### ***Program Information***

The offender's performance in WOSAP was satisfactory, but the program facilitator's report suggests that she could have done better. She did not seem fully engaged in the program. However, she has responded more positively to her snow plow training program. The training facilitator for this project reported that the offender was genuinely engaged and motivated in pursuing this skill.

#### *Release Plan*

If the offender finds it difficult to get work, she may resort to the easier approach of simply resorting to fraud. For this reason, the fact that the offender has actively developed a list of snow removal and landscaping companies that she can contact is a positive indicator of her commitment. It is important the offender have a back up plan in case she is unsuccessful in finding this kind of work.

#### *Criminal History*

The offender's criminal behaviour began when she was a juvenile. She did not complete high school due to running away from home, and her criminal behaviour has been mainly acquisitive in nature to secure money to live in a comfortable lifestyle. Her breaches are simply the result of new charges while she was on probation.

### **Female, Low Institutional Adjustment, Extensive Criminal History – II**

This is the case of a 34 year old woman offender serving a 66 month sentence for multiple offences: theft x 2, break and enter x 4, impaired driving, assault, and fail to appear x 2. Most of these offences have been committed while under the influence of alcohol or in order to secure money to purchase alcohol. Her criminal record demonstrates multiple previous offences also committed under the influence of alcohol. She has served two previous provincial terms, both for property offences. She reports that all of her offences are committed on the spur of the moment and are unplanned. She states that if she planned the offences, she probably would not have gotten caught.

At admission, the offender was recommended for the Woman Offender Substance Abuse Program and for educational upgrading. She has completed the program satisfactorily and will be finished her grade ten courses in 3 weeks. Her teacher indicates that she is eager to learn and intelligent. Within her house, however, she is not well-liked. She has been involved in a number of arguments, and has also been found to be under the influence 3 times, but her last institutional misconduct was more than 18 months ago. Her housemates report that she still has a cocky attitude that makes her difficult to get along with.

The offender has been assessed as a moderate risk to re-offend (no scale applies). She says that she would have to be stupid to get involved in crime again, and has been in contact with a re-upholstery company in her home town. The owner of this company offered her a job upon her release, and she feels that having a stable job will help her stay straight. She has also been accepted in an accredited Private Home Placement.

### ***Additional Information***

#### *Risk Assessment*

Given that no statistical risk instrument exists for female offenders, the offender's file does not include a risk score. However, the extensive nature of her criminal involvement demonstrates that the offender is not a low risk offender.

#### *Mental Health Information*

No formal diagnosis has been provided. The offender seems to be intelligent but impulsive. She does not consistently think through her ideas prior to acting on them, though this behaviour seems to be changing, given that she has not been involved in any institutional incidents in the last year and a half.

#### *Victim Information*

There is no victim information on file. Given that the offender did not plan her offences and was usually under the influence of alcohol when committing them, she does not seem to think of the possible impacts on victims.

#### *Program Information*

The offender's participation both in the Woman Offender Substance Abuse Program and in educational upgrading has been satisfactory. Her WOSAP facilitator reported that the offender was always willing to share and support other offenders in the program. Her teacher said that she was a keen and capable student.

#### *Release Plan*

The offender plans to continue her educational upgrading and to work for the re-upholstery company with which she has been in contact. She also is planning to go to an accredited Private Home Placement, which she feels will help her stay sober because she won't be surrounded by other offenders who are using. She seems to be very aware of her risk factors.

#### *Criminal History*

Her criminal history seems to have started when she dropped out of school as a teenager to follow her boyfriend to Winnipeg. When that relationship didn't work, she became involved in drugs and alcohol, and this involvement seems to have motivated much of her offending. She now feels that her participation in educational programs has served to demonstrate how well she can learn, though, and she doesn't want to return to the same criminal way of life.

### **Female, High Institutional Adjustment, Limited Criminal History – I**

This is the case of a 39 year old woman serving 6 years for a serious assault causing bodily harm. After finding out that her abusive partner was being unfaithful, she planned and carried out a scheme to drop a load of limestone on his legs when he visited her at her work. Reports indicate that, as a result, he had to have several surgeries and still

requires a leg brace and cane to walk. Reports further indicate that he was verbally and physically abusive to her throughout their 8 year marriage. She is now applying for parole after serving 3 years. The offender's criminal history reveals only one previous conviction for theft at age 22.

At admission, she was recommended for the Women's Violence Prevention Program. This recommendation was then changed given that she had committed only one violent offence, and the offender has instead participated in Abuse and Trauma and in one-on-one sessions with the psychologist. Her psychological reports indicate that she has become more assertive and recognizes the value of healthy relationships. The psychologist cautions, however, that the offender may once again become involved in an abusive relationship as her sense of self-worth is not high. Throughout her sentence, the offender has only one incident on file, arising from disobeying a direct order.

File indications reveal that the offender is a moderate risk to re-offend (no scale applies). There are especially serious concerns regarding her behaviour if she becomes involved in another abusive relationship. The offender has decided to return to a community other than the one she lived in with her ex-husband, and has been accepted at a halfway house there. She has her fork-lift operator's license and does not anticipate that finding work will be difficult.

### ***Additional Information***

#### ***Risk Assessment***

Though no statistical scale applies to this offender due to her gender, the seriousness of her present offence demonstrates that she is *not* a low risk to re-offend.

#### ***Mental Health Information***

Though no formal diagnosis has been provided, the offender has documented problems with perceived self-worth and with self-esteem. Also, she has suffered from anxious feelings throughout her abusive marriage. Her participation in the Abuse and Trauma program seems to have helped her with these feelings.

#### ***Victim Information***

Her ex-husband has not regained full mobility in his left leg after this offence. However, the offender's lawyer stated that she was the victim in this circumstance given that her ex-husband was physically and verbally abusive toward her for most of their 8 years of marriage. Throughout this time, the offender has suffered burns and broken bones at the victim's hands.

#### ***Program Information***

One-on-one sessions with the psychologist have resulted in positive improvements in the offender's state of mind. However, the psychologist reports that the offender still suffers from low self-worth and that she has trouble seeing her own value. The psychologist suggests that the offender should not immediately become involved in a romantic

relationship, but should instead spend some time getting used to positive platonic relationships.

#### *Release Plan*

While the offender does not have support from a significant other, she is likely to be able to find a stable, legal, and well-paying job as a fork-lift operator without difficulty. She plans to explore community counseling options to continue working through her history of abuse.

#### *Criminal History*

The offender has a very limited criminal history. The theft for which was convicted in her 20s was of a painting from a small arts and crafts shop. The offender reported that she fell in love with the painting but could not afford it. Her more recent offence seems to have been solely motivated by her feelings of frustration and anxiety regarding her ex-husband.

### **Female, High Institutional Adjustment, Limited Criminal History – II**

This is the case of a 38 year old woman offender who was convicted of embezzlement and conspiracy and sentenced to 5 years and 6 months. Pre-sentence reports reveal that while working at a car parts warehouse, she and a colleague were involved in a scheme to skim profits from their employer for a period of about ten months. The offender reports that she was being underpaid for the work she did, and if the company had paid her what she was worth, she would not have become involved in this plan. Her criminal record does not demonstrate any other indications of financial crimes, though she has two convictions in the last 12 years for driving while impaired. She is described on file as argumentative and easily frustrated. The offender has been incarcerated for 3 years, and reports that she has been sober for five. She is applying for consideration for day parole.

During her sentence, she successfully completed the Education and Engagement module of the Women Offender Substance Abuse Program. The program facilitator reports that she seems committed to a drug-free life and has coping strategies and relapse prevention strategies in place to allow her to achieve this goal. She has also been involved in employment and employability programs, with less success. Reports indicate that she has few transferable skills and little patience or interest for learning new skills. She was not responsive to an advocacy group volunteer who came to speak about employment prospects on release.

Reports indicate she is a moderate risk to re-offend (no statistical scale applies). Her primary risk factors have been identified as employment and a possible substance use relapse if she becomes frustrated as a result of her difficulty finding employment. She has been accepted at a halfway house in a large urban centre.

#### ***Additional Information***

*Risk Assessment*

The SIR-R1 was not completed for this offender since she is female. However, the systematic nature of her crime and her history of problems managing her substance use suggest that she is a moderate risk to re-offend.

*Mental Health Information*

The offender has reports on file from the psychologist suggesting that she has quite low frustration tolerance. The offender has reported that she thought that when she succeeded in stopping using alcohol and drugs, things would get much easier for her. She feels disappointed because the changes she expected have not materialized. However, her success and commitment in stopping her substance abuse demonstrate that she can succeed when she wants to.

*Victim Information*

The victim in this case is the offender's former employer. The offender was involved in this scheme together with a co-accused, and both she and the co-accused say that the scheme was not her idea. The offender regrets the impact her crime has had on her employer, but one report suggests this may be because of the impact this will have on her future searches for employment.

*Program Information*

The offender's participation in programming seems to reflect her personal goals. She values and is committed to not using substances, and the program facilitator reports that her participation in the Education and Engagement module of WOSAP was strong. However, her participation in Employment and Employability programming has been poor, and she seems to have less interest in this area.

*Release Plan*

The offender has applied for residence at a halfway house in a big city, and been accepted. She plans to go to a large city both because she has support there in the form of extended family and because she knows that there will be employment resources and prospects there.

*Criminal History*

The offender's two previous convictions were for driving while impaired. She expresses considerable remorse for having committed these offences, and this remorse seems genuine. Her more recent offence seems driven by her low frustration tolerance.

**Female, High Institutional Adjustment, Extensive Criminal History – I**

This is the case of a 35 year old woman offender serving a six year sentence for assault (x 2) and criminal harassment. Reports document a persistent harassment of her former boyfriend over a period of over a year, as well as physical assaults of two women with whom he went on dates. The offender has served both a previous federal and a provincial sentence for similar offences where she harassed former boyfriends and threatened their dates. The current case represents an escalation of her behaviour toward the dates. She

has served 3 years of her sentence, and is now requesting that her application for day parole be considered.

At admission, she was referred to the Women's Violence Prevention Program. Though she was originally resistant, once she completed it, she felt that the program was very helpful to her. She reported that it allowed her to identify her priorities, and that she set as a primary goal to become involved in more positive and respectful relationships. The program facilitator reports that the offender has incorporated numerous skills regarding assertiveness and goal-setting. Reports of her behaviour in her house corroborate the program facilitator's report: after one minor argument early in her sentence, the offender has not been involved in any institutional misconducts.

Reports on file suggest that the offender is at a moderate risk of re-offending (no statistical scale applies). The offender has been accepted at a halfway house. She intends to reside there, to see a counsellor, and to join a community women's group involved in hiking so that she can continue to develop her platonic relationship skills. She feels that it is important that she does not become involved in a romantic relationship right away.

### ***Additional Information***

#### ***Risk Assessment***

The pervasive nature of the offender's crime nature demonstrates that she is not a low risk offender. No statistical scale applies.

#### ***Mental Health Information***

Though no formal diagnosis has been provided, the woman's behaviour demonstrates some features of obsession and disconnection from reality in terms of recognizing when relationships are over. However, reports from her program participation indicate that she grew up in a household where affection was demonstrated very intensely – the program facilitator suggested that the offender's new increased knowledge of appropriate ways to demonstrate affection will decrease the likelihood of her repeating her offence.

#### ***Victim Information***

Her ex-boyfriend's two dates who she assaulted were not seriously hurt. In one case, the victim's hair was pulled and she was pushed into a wall. In the other, the victim was tripped and kicked in the shins. The offender stated that her intention was not to hurt the victim but to show her ex-boyfriend that he was important to her.

#### ***Program Information***

The Women's Violence Prevention Program seems to have been very helpful to the offender. She is recognizing that her behaviour was inappropriate and she no longer wants to be involved in such intense relationships. She plans to practice her relationship skills in platonic relationships prior to considering becoming intimately involved with someone.

#### ***Release Plan***

The offender plans to return to a halfway house near her hometown. She seems to have a solid plan regarding her involvement in community programs, and her work history demonstrates no difficulties in this area.

#### *Criminal History*

The offender's involvement in this type of offence in the past suggests that harassment is an ingrained behaviour pattern that may not easily be stopped. However, during her previous periods of incarceration, she did not complete any programming that targeted her criminal cycle.

### **Female, High Institutional Adjustment, Extensive Criminal History – II**

This is the case of a 39 year old woman offender serving 5 years and 6 months for break and enter (x 11). At the time of arrest, the offender reported that her partner had been laid off, and she was committing the break and enters in order to meet their financial obligations. The offender has multiple previous convictions, at both the provincial and federal level, for property crimes such as theft and break and enter. Her motivation seems to be solely financial. Though she has a long-term stable job as an administrative officer and an adequate income, she tends to live beyond her means. She is requesting that her application for day parole be considered. She has served 3 years of her sentence.

At admission, the offender was referred for participation in Cognitive Skills. The facilitator reports that she has participated fully, was a strong lead within the group, and is able to recognize the consequences that will arise if she continues her behaviour. File indications also show that the offender's long-term employer has told her that this is the last time they will hold her job, and that if she is arrested again, they will no longer be supportive. When she was told this, the offender was upset and got in a fight with a housemate. Since that time, however, she has reported that this ultimatum has inspired her to straighten up her act.

The offender has been assessed as representing a moderate risk to re-offend (no statistical scale applies). She has been accepted at a Private Home Placement in her home-town and her employer is willing to have her back. She plans to be involved in one-on-one counselling to help her stay focused.

#### ***Additional Information***

##### *Risk Assessment*

The offender's persistent criminal history clearly demonstrates that she is not a low risk to re-offend. No statistical scale applies given that the offender is female.

##### *Mental Health Information*

Reports on file suggest that the offender has tended to resort to wishful thinking whereby she does not always recognize the consequences of her act. This time, though, her employer's ultimatum seems to have really impacted her.

*Victim Information*

There is no victim information on file. The offender's thefts are never of large amounts, as she says that she only takes what she needs. However, she seems not to have recognized the emotional impacts of her break and enters on the victims.

*Program Information*

The offender's participation in Cognitive Skills was reported as the program facilitator as being quite strong. She completed all homework assignments, was on time and did not miss sessions, and acted as a mentor within the group. The program facilitator reports that the offender seems to have finally woken up to the consequences of her acts, probably due to the ultimatum she received.

*Release Plan*

The offender plans to return to her employer. She recognizes that this is the last time this option will be open to her. She has also requested residence at a Private Home Placement. She feels that residing in this environment, rather than with many other women, will contribute to her better budgeting her money and not trying to live beyond her means.

*Criminal History*

The offender comes from a fairly poor background and most of her criminality has been acquisitive in nature. She reports that when she was younger, she expected to be more financially comfortable, and that her motivation for crime comes from this expectation. She now states, however, that she hopes to make money legally and save her money, as she recognizes that further convictions for the same offences will cause her to lose her job permanently and will result in even longer sentences.

**Male, Low Institutional Adjustment, Limited Criminal History – I**

This is the case of a 34 year old male offender who is serving a 6 year sentence for assault and two counts of armed robbery. Pre-sentence reports indicate that he approached the clerk at a convenience store, and when the clerk was not able to provide the amount of money he demanded, he hit the clerk in the shoulder with the bat he was carrying. He then went to a second convenience store and conducted another robbery. Police apprehended him as he left and reports show that he was intoxicated at the time. The offender also has a previous conviction for theft for which he served 30 days about 4 months prior to the present conviction. He is presently applying for day parole, given that he has served 3 years of his sentence.

Upon admission, the offender was referred to complete substance abuse programming and the Alternatives, Attitudes, and Associates program. Though he attended programming, in early reports he was described as an unwilling participant. He eventually came around, though, and the more recent program reports are much more promising. He has also been caught with brew materials and with multiple dirty urinalyses, though none of these incidents occurred in the last 18 months. The offender

has participated in one-on-one counseling, as he says that his offences were related to his not knowing how to react to having lost his job. His psychologist reports that he is now more able to see and consider multiple options when faced with a problem.

The offender has been assessed as a moderate risk to re-offend according to the SIR-R1. He feels that he will be successful in the community because he now has more skills for dealing with his urges to drink and unforeseen situations like losing a job. His residence at a halfway house has been confirmed, and he has already begun identifying prospective employers and local AA meetings.

### *Additional Information*

#### *Risk Assessment*

The offender's score on the SIR-R1 was +6, which means that 2 of every 3 offenders with this score will not re-offend within 3 years of release. The violent nature of his crimes contributes to his estimate of risk.

#### *Mental Health Information*

There is no formal diagnosis on file. The psychologist's reports have dealt mainly with his substance use and in developing a larger repertoire of coping mechanisms to deal with life stressors. Recent psychological reports have been positive.

#### *Victim Information*

There is no official victim information on file. In one of the offender's two armed robberies, he swung a bat and hit his victim in the shoulder. In the second robbery, he brandished the bat but did not swing it. The offender reports remorse for having frightened his victims. In a previous job as a bank teller, he had also been held up, and he said that he could empathize with the clerks' feelings.

#### *Program Information*

The programming process seemed somewhat slow for this offender. At first, the program facilitators reported that he seemed to simply "be going through the motions" and was not absorbing or interested in program material. Over time, however, his performance improved a lot, and there are no recent indications of substance use or of attitudes supportive of using violence to obtain his goals. He reports that he feels motivated to clean up his act and get a good job.

#### *Release Plan*

The offender recognizes that he has had a limited repertoire of coping mechanisms in stressful situations in the past. He had developed a release plan that involves practicing his coping skills, being proactive about finding a job, and actively attending AA meetings. He also has enough savings to live for four months without working.

#### *Criminal History*

The offender has only one previous conviction, but it occurred a very short time prior to the present offences. This rapidity suggests that the offender's crime cycle may be

escalating. However, both offences were likely linked to the offender's inability to deal with his life circumstances at this time period. It seems unlikely that they be repeated without such a stressor.

### **Male, Low Institutional Adjustment, Limited Criminal History – II**

This is the case of a 35 year old male offender who is serving a sentence of 5 years and 6 months for a serious assault causing bodily harm. After a verbal altercation in a bar about the offender's girlfriend, the offender followed the victim to his car and attacked him while he was unlocking the car's trunk. The offender held the victim's body over the open trunk and repeatedly slammed the trunk on the victim's shoulders and back. The offender discontinued the attack after noting that witnesses were watching. In his version of the offence, the offender reports that he was provoked by the victim stating that the offender's girlfriend was sexually easy and available. The offender also served 45 days for another assault in his early twenties. After serving 3 years of his sentence, he is applying for day parole.

The offender completed the old Anger and Emotion Management Program as well as substance abuse programming. He seems to understand and to have internalized the program material. When other offenders have pushed him to take responsibility for his act, he has responded in an angry fashion, and a number of verbal altercations have ensued. He is also angry and hurt that his girlfriend ended their relationship after this act. He has been reprimanded for repeatedly trying to send her letters, despite her requests that he not contact her.

The offender has been assessed as a moderate risk to re-offend (SIR-R1). He acknowledges that being near his ex-girlfriend is a risk factor for him, and consequently, he has applied for and been accepted at a halfway house approximately four hours away. He has been promised a job as a labourer through a family friend at this location.

### ***Additional Information***

#### ***Risk Assessment***

The SIR-R1 provided a score of -4 for this offender, which corresponds to 1 in 2 offenders with similar scores re-offending within 3 years. This is not an estimate of violent recidivism.

#### ***Mental Health Information***

Though there is no formal diagnosis on file, the offender seems to have difficulty managing his anger. However, his largely crime-free life to-date suggests that while he may be a somewhat angry or hostile person, these emotions are usually of low enough intensity to not lead to criminal acts.

#### ***Victim Information***

Though there are no statements on file from the offender's victim, there is one from the offender's ex-girlfriend. She recounts that his attempts to get in touch with her have been frightening for her. She says that she thought she knew the offender and the fact that he was so physically aggressive with someone makes her feel that she was vulnerable to physical violence herself throughout their relationship. She reports now having doubts about her ability to judge character.

#### *Program Information*

The offender has participated adequately both in Anger and Emotion Management and in the National Substance Abuse Program. His program facilitators have written very positive reports and feel that he fully understands and is able to apply the knowledge and skills gained.

#### *Release Plan*

Though the offender is still disappointed in his ex-girlfriend's reaction to what he sees as the defense of her honour, he does recognize that she won't come around to his point of view. As a result, he thinks it is best if he lives some distance from her and also if he does not get involved in another romantic relationship right away.

#### *Criminal History*

The offender does not seem to have an extensive history of crime, but his anger management problem seems to have existed since he was a juvenile. He was raised in foster care and has difficulty creating bonds with others. The assault for which the offender was convicted at 22 involved an acquaintance teasing him about his mother giving him up to foster care – the offender became angry and he and the acquaintance had a physical fight.

### **Male, Low Institutional Adjustment, Extensive Criminal History – I**

This is the case of a 37 year old offender who is serving a 70 month sentence for fraud (x 6) and conspiracy (x 2). Reports on file indicate that the offender and his brother launched a false business to distribute diving apparel to SCUBA diving shops. They used the internet and mail order to solicit sales, but did not distribute the apparel paid for. In his youth, the offender had several previous convictions for theft. More recently, he served 60 days for cloning debit cards. It seems that the motivation for his offences has consistently been financial. He has now served 3 years of his sentence and he is requesting that his application for day parole be considered.

The offender participated in Cognitive Skills and in Corcan activities and training while incarcerated. He has been suspected to be running a pen-pal dating service where women in the community paid a fee to his collaborator to be put into contact with an inmate. This behaviour ended about 18 months ago, prior to his involvement in the programming. Since then, he has reported enjoying the work he completes where he has become involved in a plumbing apprenticeship program. He says that he finds the work peaceful

and restorative. His work supervisor has indicated that he is a proactive learner. However, his work supervisor characterizes him as possessive about "his" equipment.

The offender has been assessed as representing a moderate risk to re-offend (SIR-R1). His residency at a halfway house has been confirmed and he has been in contact with a plumbing company that may be able to offer him a job after he is released. He reports that he would like to establish a career in this area.

### ***Additional Information***

#### ***Risk Assessment***

The offender's score on the SIR-R1 is 0, meaning that 2 out of 3 offenders will not re-offend within 3 years of release. The offender's persistent involvement in acquisitive criminal behaviour suggests that he is *not* a low risk to re-offend.

#### ***Mental Health Information***

There is no indication on file of a mental health diagnosis. The offender has been described as self-serving and callous. However, the type of criminality in which the offender has engaged demonstrates that he is intelligent and resourceful. His work supervisor suggests that if the offender can harness these skills, he can develop a good career.

#### ***Victim Information***

There is no victim information on file. There seem to have been numerous businesses involved in the scam, but the offender and his brother showed what they considered to be restraint in selecting the businesses to defraud. They only entered into contracts to provide diving apparel from larger companies which the co-accuseds felt could "take" the loss.

#### ***Program Information***

The offender's participation in the Cognitive Skills program was not particularly strong. However, as reported by his work supervisor, his work in this area seems to have led to changes in his behaviour. There are no more results of his involvement in any illegal activities, and the offender reports feeling calm when involved in plumbing activities.

#### ***Release Plan***

The offender has already contacted a dairy farm in the area in which he has been accepted at a halfway house. He hopes that this farm will be able to offer him a job upon his release. His intelligence means that he could probably get another job easily, but he strongly feels that agricultural work is the best fit for him.

#### ***Criminal History***

The offender's motivation has consistently been financial. Though his brother was not an official co-accused on his previous convictions, police files indicate that he may have been involved. The offender and his brother grew up in poverty and dropped out of

school young to make money for their family. This has made it difficult for the offender to get highly paying jobs despite his intelligence.

### **Male, Low Institutional Adjustment, Extensive Criminal History – II**

This is the case of a 39 year old male offender serving a six year sentence for multiple counts of theft (x 9), break and enter (x 5), and selling stolen goods (x 8). He has previously served two provincial and one federal term for similar offences, but not since his late twenties. In the offender's version of the offence, he reports that he only engages in this kind of behaviour when he uses, and that he had previously been clean for 7 years. He states that he had a relapse about 2 months before his arrest, and this is the only reason for his offences. He has now served 3 years of his sentence and is applying for day parole.

At admission, the offender was recommended to substance abuse programming, and after 20 months, he had completed the program satisfactorily. His program facilitator reported that he fully understands his relapse triggers and was working to develop coping strategies that would prevent another relapse. There are no indications of his using during his period of incarceration. On the other hand, the offender has been involved in a number of verbal altercations and has been written up for disobeying orders from COs. He thinks that by not using since his admission, he has demonstrated his trust-worthiness; he feels that the way he is treated while incarcerated is not representative of this level of trust-worthiness, and he finds it very frustrating.

He has been assessed as being at a moderate risk to re-offend (SIR-R1). He and the substance abuse program facilitator both feel that he is unlikely to return to criminal behaviour if he does not relapse to drug use. Both also feel that he has sufficient knowledge and skills to prevent relapse. His residency at a halfway house has been confirmed, and he plans to attend NA in the community.

### ***Additional Information***

#### ***Risk Assessment***

The SIR-R1 score for this offender was of -4, which means that 1 of every 2 offenders with this SIR-R1 score do not re-offend within 3 years. Though his criminal record is extensive, the long period of time elapsed between his previous conviction and this one is a positive factor for him.

#### ***Mental Health Information***

There is no formal diagnosis on file. However, the offender has been recognized as having difficulty dealing with feelings of frustration and disappointment, as demonstrated by his feelings towards the institutional staff when he feels he has demonstrated his trust-worthiness. His substance abuse seems to be linked to frustrating life events, not mental health.

*Victim Information*

There is no victim information on file. It seems that victims lost between \$40 and \$1800 worth of goods each. The offender was selling the stolen items and using the stolen money to pay for drugs. Prior to this substance use relapse, both the offender and collateral contacts report that he was clean for over 7 years.

*Program Information*

The offender's participation in substance abuse programming was strong. The facilitator reported that he seemed familiar with most of the program material, but the offender said that the fact that he had relapsed into substance use meant he must have needed a refresher of the material. He was very willing to share with other offenders and was committed to learning about relapse prevention and coping methods.

*Release Plan*

The offender plans to attend Narcotics Anonymous in the community as a means of coping with stressors and preventing future substance use relapses. He also has his spot confirmed at a halfway house in his home community. He feels that returning to his home community will be positive because he can reconnect with his old NA sponsor there.

*Criminal History*

Both the offender's version and police versions of the offence histories show that the offender only becomes involved in criminal behaviour when he is using substances. He became involved in drugs when he was in his late teens, but when his ex-girlfriend had a baby about 8 years ago, he decided to get clean. He says his daughter remains a strong motivator for him.

**Male, High Institutional Adjustment, Limited Criminal History – I**

This is the case of a 38 year old male offender serving a 66 month sentence for one count of assault and one count of assault causing bodily harm. Police reports indicate that a chronic disagreement between the offender and his neighbours escalated to the point that a physical fight took place. When he and the neighbours were arguing in the corridor of their apartment building, the offender pushed the female neighbour into her apartment and then used a broken beer bottle as a weapon to attack the male neighbour. This victim was seriously cut on the cheek and shoulder and ultimately required plastic surgery to his cheek. Both victims also report suffering considerable emotional distress as a result of the attack. The offender's only previous offences were 2 drug-related convictions at a very young age. The offender has served three years of his sentence and has applied for day parole.

Within the context of his participation in the old Anger and Emotion Management program, he wrote and mailed a letter to the victims in which he blamed them for the altercation. The letter was intended as a program activity and was not intended to be

mailed. This presented an opportunity to more fully address the matter of responsibility and he now acknowledges that he could have resolved the matter in another way.

The offender has been assessed as moderate risk (SIR-R1). He has residency confirmed at a halfway house in his home community. The offender was not responsive to suggestions that he settle in different community, as he says that he wants to be close to two of his three brothers, who are generally pro-social influences but to whom he is not close.

### ***Additional Information***

#### ***Risk Assessment***

The offender's score on the SIR-R1 was +6. 2 out of 3 other offenders with this score have not re-offended within a three year period. Though the offender does not have an extensive criminal history, the escalation of this fight to such a serious level is problematic.

#### ***Mental Health Information***

There is no formal indication of mental health diagnosis on file. However, the offender's failure to take full responsibility for the assaults he committed is seen as a negative. He seems fairly intelligent, but his behaviour and his attitude regarding the fight suggest a certain level of poorly managed hostility.

#### ***Victim Information***

Both the female and male neighbours of the offender reported feeling quite frightened by the fight that took place. The male neighbour admitted that he would sometimes provoke the offender, but said that he never expected this type of reaction. He has had to have invasive plastic surgery to attempt to camouflage the scarring caused by the broken bottle cutting his cheek.

#### ***Program Information***

Although the offender participated fully in the Anger and Emotion Management program in which he was enrolled, it was in this context that he mailed the letter to his victims. There were no other problematic behaviours during the program, and the offender seems to be taking full responsibility for his offence.

#### ***Release Plan***

The offender plans to be released to the community where his two younger brothers live. He says that his brothers are an inspiration because they both have good careers and are married. He plans to look for work when he gets out.

#### ***Criminal History***

The offender's only other convictions were for the sale of marijuana as a juvenile. When he was a young teenager, he would steal his older brother's drugs to sell when he wanted money. This circumstance demonstrates that the offender did not grow up in a

particularly pro-social environment, but the current offence is nonetheless a departure from normal behaviour for him.

### **Male, High Institutional Adjustment, Limited Criminal History – II**

This is the case of a 34 year old man serving 6 years after being convicted for 3 counts of armed robbery. He and his girlfriend committed the robberies together at diners along the inter-provincial highway. Police reports demonstrate that they wore disguises and modified their license plate so as to not be caught. Both the offender and file indications suggest that his girlfriend was responsible for most of the planning in these offences; however, the offender was a willing participant. The motivation for the robberies was “thrill”, as well as to obtain money to purchase alcohol. The offender also has a recent previous conviction for theft under for a “gas-and-dash.” He has now served 3 years of his sentence, and he is applying for consideration for day parole.

At admission, the offender was recommended to substance abuse programming as well as for Cognitive Skills. He has performed satisfactorily in both, but there are file indications of a dirty urinalysis 4 months ago. Both program facilitators indicate that the offender’s major risk factor is his attraction to risk-taking. The Cognitive Skills facilitator indicated that she suspects his offences are an escalation of his risk-taking behaviours and that unless he finds alternate ways to satisfy his desire for risk, future offending is likely. She feels that drinking will encourage his desire to take risks and therefore his likelihood of offending.

The offender has been assessed as representing a moderate risk to re-offend (SIR-R1). He has residence confirmed at a halfway house, and intends to participate in a community-based substance abuse program if he is approved for day parole. The offender has extensive experience working in manufacturing plants and plans to return to this type of work.

#### ***Additional Information***

##### *Risk Assessment*

The offender’s SIR-R1 score was -3, which means that half of the offenders with similar scores re-offended within three years. The fact that he is motivated by risk-taking to commit these offences is not a positive.

##### *Mental Health Information*

The offender has no formal diagnosis on file. Most reports, however, talk about the offender’s attraction to risk. He seems to continually want to surround himself with excitement. The offender recognizes this issue, however, and plans to explore options such as sky-diving to see if he can better manage that component of his personality.

##### *Victim Information*

There is no victim information report on file. The offender says that he didn't think much about the victims while he was committing the offences, because his girlfriend told him the robberies would be over so quickly the victims would hardly have time to register it. Throughout his program participation, however, other inmates have confronted him with the likely impact of his crimes, and he has been responsive.

#### *Program Information*

The offender has participated in both the National Substance Abuse Program (moderate intensity) and in the Cognitive Skills program. Reports on file suggest that his program participation was satisfactory, but that he needs to continue to work on finding alternatives in his thrill-seeking. The offender plans to participate in further substance abuse programming in the community.

#### *Release Plan*

Though the offender plans to return to his home community, his previous girlfriend no longer resides there. He recognizes that it would not be a good idea for him to be with her now. His plan is to become involved in an AA program or something similar, and to look for work in a vehicle plant in his hometown.

#### *Criminal History*

The offender's criminal pattern is somewhat unusual, in that he seems to be a bit of a "late bloomer". There are no indications of a criminal history either as a juvenile or an adult prior to the "gas-and-dash" which occurred prior to the present conviction.

### **Male, High Institutional Adjustment, Extensive Criminal History – I**

This is the case of a 38 year old man serving 66 months for criminal harassment (x 8). According to the pre-sentence report, the offender was tracking and harassing Human Resource employees from his former place of work. It would appear that his motivation was to frighten them rather than to physically harm them, but a number of the victims report considerably heightened anxiety which has markedly impacted their lives. He has several previous convictions, one of which was also for harassment. The other three were all for impaired driving. Prior to his current conviction, official records suggest that the offender was crime-free for 4 years. He has served 3 years of his sentence and has applied for day parole.

The offender was recommended for and has participated in the old Anger and Emotion Management program. He has also completed academic upgrading to achieve his grade ten. Program participation and attendance has been good, except for one incident where he had a minor physical altercation with another inmate. The program facilitator for A&EM reports that he has made good progress regarding concrete problem solving skills, and the offender reports that he regrets not having resolved his frustration with his employer in a more pro-social way. He claims that he hadn't fully grasped the profound consequences his behaviour would have on his victims.

The offender has been assessed as presenting a moderate risk to re-offend (SIR-R1). His application for residence at a halfway house near his former home has been accepted. He intends to participate in one-on-one counseling on day release in order to further consolidate his problem-solving skills.

### ***Additional Information***

#### *Risk Assessment*

The offender's score on the SIR-R1 was of +3, which indicates that 2 out of 3 offenders with the same score will not re-offend. While the offender's progress regarding problem solving skills is promising, his multiple convictions for harassment are worrisome.

#### *Mental Health Information*

There is no formal diagnosis on file, but the institutional psychologist reports that the offender is particularly narcissistic and prone to stress. When under stress, the offender has difficulty in managing his emotions. When he is not under stress, however, he has normal insight into his behaviour and regrets his treatment of others.

#### *Victim Information*

A number of his co-workers reported feeling very anxious and stated that they no longer felt safe. One in particular claimed that found it difficult now to live on her own because she was frightened of being alone if she ever found herself in a similar situation again. The offender feels badly for the impact he had on his victims.

#### *Program Information*

The offender participated satisfactorily in both his educational pursuits and in his Anger and Emotion Management program. He states that participation in the program has allowed him to better understand the consequences others will live as a result of his behaviour. His program facilitator feels that this increased insight is genuine.

#### *Release Plan*

The offender plans to return to his home community, but he is sensitive to the impact his presence could have on his victims. The halfway house is across town from his previous employer, and he plans to concentrate his job search attempts in that area of town also.

#### *Criminal History*

The offender's previous impaired driving convictions occurred when he was 19, 21, and 24. He has not had any problems managing his drinking since. His previous harassment conviction occurred when he was 31, when he followed a co-worker home several times and refused to stop when she asked him to. He said he wanted to pay her back for having turned him down for a promotion.

**Male, High Institutional Adjustment, Extensive Criminal History – II**

This is the case of a 36 year old man serving 6 years for theft under (x 6), theft over (x 3) and sale of stolen goods (x 6). Prior to his conviction, the offender had been working illegally for a landscaping company. When he was working at residential sites, he would frequently ask for permission to use the client's washroom, and while inside, would steal any valuables left in obvious places. The offender has three previous convictions for a total of 13 counts of theft under and 6 counts of sale of stolen goods, but prior to the current conviction, the most recent one was eight years ago. He has now served 3 years of his 6 year sentence and has applied for consideration for day parole.

The offender has participated in Cognitive Skills to help him understand the consequences of his actions. The program facilitator reports that he has been a model participant and has learned a lot and has established concrete goals regarding finding pro-social ways of making enough money to support himself. He has been working in the CORCAN shop in order to achieve his goals and develop transferable skills that will allow him to find work in the community. Since his admission, he has been involved in two minor incidents where he disobeyed direct orders. Reports reveal that the offender stated that he did not hear the orders due to a minor hearing impairment, but staff are unsure of the sincerity of his comments and suggest that he can hear fine when he wishes to.

The offender has been assessed at moderate risk to re-offend (SIR-R1). He has residence confirmed for him at a halfway house in his home community, and he intends to get work at a local factory that produces components for washing machines. He states that since he'll be able to make a living wage in this way, he won't need to steal.

### ***Additional Information***

#### ***Risk Assessment***

According to the offender's SIR-R1 rating of 0, 2 out of 3 offenders with similar scores will not re-offend within 3 years. The fact that the offender has had an extensive criminal history is problematic, but his 8 year crime-free period demonstrates that the offender can behave pro-socially when he has appropriate resources.

#### ***Mental Health Information***

There is no formal diagnosis on file. The offender believes that his problems result from his parents having forced him to drop out of school to work when he was younger. Reports on file indicate that while the offender is generally sincere and insightful, he can sometimes provide self-serving explanations for his actions.

#### ***Victim Information***

There are no reports of victim information on file. It should be noted, however, that not only were the persons who had money stolen victimized, but so was the landscaping company for which he worked as its reputation was damaged.

#### ***Program Information***

The offender participated very well in the Cognitive Skills program. He has incorporated the knowledge gained in this program into planning his day parole, in that he recognizes that he needs to develop marketable job skills.

*Release Plan*

The offender plans to work at a local factory. The offender will need to be vigilant with his relations with persons in authority, as his disobeying of orders from correctional staff suggests that he may have problems with relationships involving a power imbalance.

*Criminal History*

The offender feels that his criminal cycle is rooted in his previous inability to earn a satisfactory wage. During the period when he was crime free, he had worked with a construction company. It was only when he was laid off from this job and returned to work under-the-table as a landscaper that he resumed his involvement in acquisitive crime.

**Vignette Follow-Up Question**

**You have chosen to [grant / deny] release.**

**How would you rate the representativeness of this case?**

Please rate how representative this case is of those which you encounter in the course of your daily work.

- 0%
- 10%
- 20%
- 30%
- 40%
- 50%
- 60%
- 70%
- 80%
- 90%
- 100%

## Appendix D. Measures of Personality and Cognitive Style

**Revised Legal Attitudes Questionnaire (Kravitz et al., 1993)**

1. Unfair treatment of underprivileged groups and classes is the chief cause of crime.<sup>a</sup>
2. Too many obviously guilty persons escape punishment because of legal technicalities.
3. Evidence illegally obtained should be admissible in court if such evidence is the only way of obtaining a conviction.
4. Search warrants should clearly specify the person or things to be seized.<sup>a</sup>
5. No one should be convicted of a crime on the basis of circumstantial evidence, no matter how strong such evidence is.<sup>a</sup>
6. There is no need in a criminal case for the accused to prove his or her innocence beyond a reasonable doubt.<sup>a</sup>
7. Any person who resists arrest commits a crime.
8. When determining a person's guilt or innocence, the existence of a prior arrest record should not be considered.<sup>a</sup>
9. Wiretapping by anyone and for any reason should be completely illegal.<sup>a</sup>
10. Defendants in a criminal case should be required to take the witness stand.
11. All too often, minority group members do not get fair trials.<sup>a</sup>
12. Because of the oppression and persecution minority group members suffer, they deserve leniency and special treatment in the courts.<sup>a</sup>
13. Citizens need to be protected against excess police power as well as against criminals.<sup>a</sup>
14. It is better for society that several guilty persons be freed than one innocent person wrongfully imprisoned.<sup>a</sup>
15. Accused persons should be required to take lie-detector tests.
16. When there is a "hung" jury in a criminal case, the defendant should always be freed and the indictment dismissed.<sup>a</sup>

17. A society with true freedom and equality for *all* would have very little crime. <sup>a</sup>
18. It is moral and ethical for a lawyer to represent a defendant in a criminal case even when he or she believes his or her client is guilty. <sup>a</sup>
19. Police should be allowed to arrest and question suspicious-looking persons to determine whether they have been up to something illegal.
20. The law coddles criminals to the detriment of society.
21. The freedom of society is endangered as much by overzealous law enforcement as by the acts of individual criminals. <sup>a</sup>
22. In the long run, liberty is more important than order. <sup>a</sup>
23. Upstanding citizens have nothing to fear from the police.

<sup>a</sup> Items are reverse scored.

**Need for Cognition Scale (Cacioppo & Petty, 1984)**

1. I would prefer complex to simple problems.
2. I like the responsibility of handling a situation that requires a lot of thinking.
3. Thinking is not my idea of fun.<sup>a</sup>
4. I would rather do something that requires little thought than something that is sure to challenge my thinking abilities.<sup>a</sup>
5. I try to anticipate and avoid situations where there is a likely chance that I will have to think in depth about something.<sup>a</sup>
6. I find satisfaction in deliberating hard and for long hours.
7. I only think as hard as I have to.<sup>a</sup>
8. I prefer to think about small, daily projects than long-term ones.<sup>a</sup>
9. I like tasks that require little thought once I've learned them.<sup>a</sup>
10. The idea of relying on thought to make my way to the top appeals to me.
11. I really enjoy a task that involves coming up with new solutions to problems.
12. Learning new ways to think doesn't excite me very much.<sup>a</sup>
13. I prefer my life to be filled with puzzles that I must solve.
14. The notion of thinking abstractly is appealing to me.
15. I would prefer a task that is intellectual, difficult, and important to one that is somewhat important but does not require much thought.
16. I feel relief rather than satisfaction after completing a task that required a lot of mental effort.<sup>a</sup>
17. It's enough for me that something gets the job done; I don't care how or why it works.<sup>a</sup>
18. I usually end up deliberating about issues even when they do not affect me personally.

<sup>a</sup> Items are reverse scored.

**Personal Need for Structure Scale (Thompson et al., 2001)**

1. It upsets me to go into a situation without knowing what I can expect from it.
2. I'm not bothered by things that interrupt my daily routine. <sup>a</sup>
3. I enjoy having a clear and structured mode of life.
4. I like to have a place for everything and everything in its place.
5. I find that a well-ordered life with regular hours makes my life tedious. <sup>a</sup>
6. I don't like situations that are uncertain.
7. I hate to change my plans at the last minute.
8. I hate to be with people who are unpredictable.
9. I find that a consistent routine enables me to enjoy life more.
10. I enjoy the exhilaration of being in unpredictable situations. <sup>a</sup>
11. I become uncomfortable when the rules in a situation are not clear.

<sup>a</sup> Items are reverse scored.

**Personal Fear of Invalidity Scale (Thompson et al., 2001)**

1. I may struggle with a few decisions but not very often. <sup>a</sup>
2. I never put off making an important decision. <sup>a</sup>
3. Sometimes I become impatient over my indecisiveness.
4. Sometimes I see so many options to a situation that it is really confusing.
5. I can be reluctant to commit myself to something because of the probability that I might be wrong.
6. I tend to struggle with most decisions.
7. Even after making an important decision I want to continue to think about the pros and cons to make sure that I am not wrong.
8. Regardless of whether others see an event as positive or negative I don't mind committing myself to it. <sup>a</sup>
9. I prefer situations where I do not have to decide immediately.
10. I rarely doubt that the course of action I have selected will be correct. <sup>a</sup>
11. I tend to continue to evaluate recently made decisions.
12. I wish I did not worry so much about making errors.
13. Decisions rarely weigh heavily on my shoulders. <sup>a</sup>
14. I find myself reluctant to commit to new ideas but find little comfort in remaining with the tried and true.

<sup>a</sup> Items are reverse scored.

## Appendix E. Debriefing

*Please keep this form for your records.*

**Research title:** Understanding Parole Recommendations: The Contribution of Parole Officers

***What are we trying to learn in this research?***

The purpose of this study is to obtain data on the ways in which case factors, together with personality and cognitive factors, influence parole recommendations. We are also interested in assessing the impact of participation in training on risk assessment, case analysis, and report writing on the recommendations that are made.

***Why is this important to researchers and the general public?***

This study both allows a better understanding of a poorly understood component of the parole release process (that is, the contribution of parole officers), and will ultimately demonstrate whether training on risk assessment, case analysis, and report writing is effective in reaching its goals.

***Where can I learn more?***

As this study is the first to address this exact area, no references in the area exist. You can read research in the area relating to parole board members, however, in: Caplan, J.M. (2007). What factors affect parole: A review of empirical research. *Federal Probation*, 71(1), 16-19.

Additionally, more can be learned about institutional staff's views of the risk factors relevant to conditional release decisions by reading: Samra-Grewal, J., Pfeifer, J.E., & Ogloff, J.P. (2000). Recommendations for conditional release suitability: Cognitive biases and consistency in case management officers' decision-making. *Canadian Journal of Criminology*, 42, 421-447.

***What if I have questions?***

For questions about the study, or to obtain copies of the articles cited above, you may contact Renée Gobeil (Carleton University, 613-761-7102, [rgobeil@connect.carleton.ca](mailto:rgobeil@connect.carleton.ca)), or Dr. Ralph Serin (Carleton University, 613-520-2600, ext. 1557, [ralph\\_serin@carleton.ca](mailto:ralph_serin@carleton.ca)).

Should you have any ethical concerns about this study, please contact Dr. Avi Parush (Chair, Carleton University Ethics Committee for Psychological Research, 613-520-2600, ext. 6026, [avi\\_parush@carleton.ca](mailto:avi_parush@carleton.ca)). Should you have any other concerns about this study, please contact Dr. Janet Mantler (Chair, Carleton University Department of Psychology, 613-520-2600, ext. 4173, [janet\\_mantler@carleton.ca](mailto:janet_mantler@carleton.ca)).

**Your participation is appreciated; thank you.**

## Appendix F. Description of Data and Their Characteristics (Study 1)

Variable	Distribution / Violation	Original Distribution / <i>M (SD)</i> [Range]
<b>Sample Descriptive Variables (<i>N</i> = 48)<sup>a</sup></b>		
<b><u>Demographic Variables</u></b>		
Age group	Uneven distribution	'55+' < 10% (6.3%)
Gender	No violation	'Female' = 67%
Education	No violation	'College diploma / university degree' = 90%
<b><u>Employment-Related Variables</u></b>		
Months in this capacity	Normal distribution	87.5 (71.2) [6-240]
Previously worked at CSC	No violation	'Yes' = 75%
In what capacity?	No violation	All categories > 10%
Total time employed by CSC (years)	Normal distribution	10.2 (7.5) [1-28]
Work primarily with	Uneven distribution	'Women offenders' and 'Men and women' < 10%
<b>Parole Officer-Level Analyses (<i>N</i> = 40)</b>		
<b><u>Personality and Cognitive Style Scales</u></b>		
Revised Legal Attitudes Questionnaire	Normal distribution	77.1 (9.2) [55-96]
Need for Cognition Scale	Normal distribution	45.3 (8.4) [24- 62]
Personal Need for Structure Scale	Normal distribution	38.7 (8.7) [13- 59]
Personal Fear of Invalidity Scale	Normal distribution	54.3 (10.6) [29-72]
<b><u>Case-based Vignettes</u></b>		
Representativeness	Normal distribution	36.7 (19.0) [5-78.8]
Percentages of grants recommended	Normal distribution	63.0 (20.2) [25-100]
Information accessed	Normal distribution	3.3 (2.1) [0-6]
<b>Vignette-Level Analyses (<i>N</i> = 370)</b>		
<b><u>All vignettes</u></b>		
Representativeness	Normal distribution	35.8 (28.0) [0-90]
Release recommendation	No violation	'Grant' = 63%
Information accessed	Normal distribution	3.0 (2.5) [0-6]
Risk assessment	No violation	'Yes' = 46%
Mental health information	No violation	'Yes' = 55%
Victim information	No violation	'Yes' = 42%
Program information	No violation	'Yes' = 48%
Release plan	No violation	'Yes' = 54%
Criminal history	No violation	'Yes' = 51%

(table continues)

Variable	Distribution / Violation	Original Distribution / $M(SD)$ [Range]
<b>By vignette<sup>b</sup></b>		
<i>Female, low institutional adjustment, limited criminal history (n = 45)</i>		
Release recommendation	No violation	'Grant' = 78%
Information accessed	Normal distribution	2.5 (2.6) [0-6]
Representativeness	Normal distribution	30.9 (30.8) [0-90]
<i>Female, low institutional adjustment, extensive criminal history (n = 45)</i>		
Release recommendation	No violation	'Grant' = 48%
Information accessed	Normal distribution	3.1 (2.4) [0-6]
Representativeness	Normal distribution	27.3 (26.7) [0-90]
<i>Female, high institutional adjustment, limited criminal history (n = 44)</i>		
Release recommendation	No violation	'Grant' = 16%
Information accessed	Normal distribution	2.9 (2.5) [0-6]
Representativeness	Normal distribution	23.6 (26.3) [0-80]
<i>Female, high institutional adjustment, extensive criminal history (n = 46)</i>		
Release recommendation	No violation	'Grant' = 20%
Information accessed	Normal distribution	3.0 (2.5) [0-6]
Representativeness	Normal distribution	24.5 (25.9) [0-90]
<i>Male, low institutional adjustment, limited criminal history (n = 48)</i>		
Release recommendation	No violation	'Grant' = 48%
Information accessed	Normal distribution	2.9 (2.7) [0-6]
Representativeness	Normal distribution	51.2 (22.9) [0-80]
<i>Male, low institutional adjustment, extensive criminal history (n = 48)</i>		
Release recommendation	No violation	'Grant' = 27%
Information accessed	Normal distribution	3.0 (2.6) [0-6]
Representativeness	Normal distribution	46.9 (28.2) [0-90]
<i>Male, high institutional adjustment, limited criminal history (n = 47)</i>		
Release recommendation	No violation	'Grant' = 55%
Information accessed	Normal distribution	3.0 (2.6) [0-6]
Representativeness	Normal distribution	44.7 (26.2) [0-90]
<i>Male, high institutional adjustment, extensive criminal history (n = 47)</i>		
Release recommendation	Uneven distribution	'Grant' = 6%
Information accessed	Normal distribution	3.2 (2.6) [0-6]
Representativeness	Normal distribution	34.5 (22.8) [0-80]

<sup>a</sup>No corrections were applied to demographic and employment variables as they were used exclusively in a descriptive capacity. <sup>b</sup> Separate information for each vignette is provided for information purposes only; analyses involved all vignettes and therefore data screening was conducted for all vignettes together.

## Appendix G. Correlations amongst Measures (Study 1)

Table G1  
*Parole Officer-Level Analyses: Intercorrelations*

Measure	2.	3.	4.	5.	6.
1. Percentage of releases granted	-.01	-.04	.11	-.05	-.27
2. Information accessed		-.18	-.24	.05	-.19
3. Revised Legal Attitudes			-.14	.55*	-.17
4. Need for Cognition				-.35	-.18
5. Personal Need for Structure					.26
6. Personal Fear of Invalidity					

*Note.* The correlations reported for the Personal Fear of Invalidity Scale represent pooled results generated for the imputed datasets.

\* $p < .003$  (equivalent to .05 after application of a Bonferroni correction:  $.05 / 15$ ).

Table G2  
*Vignette-Level Analyses: Intercorrelations*

Measure	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. Release recommendation (1 = 'grant')	.08	.01	.04	.05	.02	.13	.07	-.07	.26*	.25*
2. Information accessed		-	-	-	-	-	-	-	-	-
3. Risk assessment (1 = 'yes')			.61*	.58*	.57*	.66*	.59*	-	-	-
4. Mental health information (1 = 'yes')				.69*	.74*	.74*	.73*	-	-	-
5. Victim information (1 = 'yes')					.70*	.65*	.64*	-	-	-
6. Program information (1 = 'yes')						.75*	.67*	-	-	-
7. Release plan (1 = 'yes')							.66*	-	-	-
8. Criminal history (1 = 'yes')								-	-	-
9. Vignette gender (1 = 'female')									.01	.01
10. Vignette institutional adjustment (1 = 'low')										.01
11. Vignette criminal history (1 = 'limited')										

*Note.* Biserial correlations were calculated between dichotomous and categorical variables. Phi coefficients were calculated for pairs of dichotomous variables.

\* $p < .002$  (equivalent to .05 after application of Bonferroni correction:  $.05 / 28$ , approximated as .001 due to the constraints of the statistical software used).

Appendix H. Evaluation Forms

**Evaluation Form Used in Waves 1 and 2 of Training**

*Please rate the next items using the following scale:*

1	2	3	4	5
Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree

**Training Content**

- 1. The training met my expectations 1 2 3 4 5
- 2. The content of the training was relevant to the work I do. 1 2 3 4 5
- 3. The training content was organized and easy to follow 1 2 3 4 5
- 4. The materials distributed were pertinent and useful. 1 2 3 4 5

**Training Delivery**

- 5. The presenters were knowledgeable. 1 2 3 4 5
- 6. The presentations were interesting and practical. 1 2 3 4 5
- 7. Training was engaging. 1 2 3 4 5

**Training "Fit"**

- 8. The training was appropriate to my level of knowledge. 1 2 3 4 5
- 9. I will be able to apply the knowledge learned. 1 2 3 4 5
- 10. The training will help me do my job better. 1 2 3 4 5

*Please take the time to provide more detailed comments:*

What component of the training session did you find most useful?

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What component did you find least useful?

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Were there any topics that you would have liked to see addressed that were not?

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---

What items or activities would you like to see added to this training?

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---

---

How can we improve our training session?

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---

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Additional comments?

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*Thank you!*

**Evaluation Form Used in Wave 3 of Training**

Thinking about the training program that you have completed, please indicate how you feel about each of the statements below. Unless otherwise indicated, think about the training program as a whole when responding. Please indicate your response according to the following scale:

	<b>1</b> <b>Strongly</b> <b>Disagree</b>	<b>2</b> <b>Disagree</b>	<b>3</b> <b>Neither</b>	<b>4</b> <b>Agree</b>	<b>5</b> <b>Strongly</b> <b>Agree</b>	<b>6</b> <b>Not</b> <b>Applicable</b> <b>(N/A)</b>
<b>Training Program Materials</b>						
	<b>Strongly</b>	<b>Disagree</b>	<b>Disagree</b>	<b>Neither</b>	<b>Agree</b>	<b>Strongly</b> <b>Agree</b> <b>N/A</b>
1) I felt the training material was interesting.	1	2	3	4	5	6
2) I felt motivated by the training material.	1	2	3	4	5	6
3) I felt it was easy to follow the material contained in the Structured Release Decision Making Training Program.	1	2	3	4	5	6
4) I felt that the training material was easy to understand.	1	2	3	4	5	6
5) I did not feel overwhelmed by the training material.	1	2	3	4	5	6
6) Overall, I felt that the training content was not too difficult to learn.	1	2	3	4	5	6
7) The training material provided in the Structured Release Decision Making Training Program prepared me to be successful in analyzing cases and writing reports.	1	2	3	4	5	6
8) I felt that the training material provided me with knowledge and skills that will be useful on the job.	1	2	3	4	5	6
9) I feel that the training material has real practical value.	1	2	3	4	5	6

<b>Training Program Overall</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neither</b>	<b>Agree</b>	<b>Strongly Agree</b>	<b>N/A</b>
10) Overall, I think the Structured Release Decision Making Training Program met the stated objectives.	1	2	3	4	5	6
11) The training program was well structured.	1	2	3	4	5	6
12) The training program flowed logically.	1	2	3	4	5	6
13) In general, the evaluation methods were fair. <sup>a</sup>	1	2	3	4	5	6
14) I felt the evaluations effectively tested my knowledge of the training material. <sup>a</sup>	1	2	3	4	5	6
15) Overall, I felt that the tests were not too difficult. <sup>a</sup>	1	2	3	4	5	6
16) The different types of learning activities (e.g., classroom-based learning, practical applications, clickers, etc.) enhanced my comprehension of key content areas.	1	2	3	4	5	6
17) I felt able to self evaluate my learning through the different learning activities.	1	2	3	4	5	6
18) I felt that the pace of the training program was just right.	1	2	3	4	5	6
19) I feel that the quality of my work on the job will improve as a result of completing this training program.	1	2	3	4	5	6
20) I feel motivated to use what I have learned in this training program in the future, when I am on the job.	1	2	3	4	5	6

21) In general, I am satisfied with the following elements of the Structured Release Decision Making Training Program:

Length	1	2	3	4	5	6
Quality	1	2	3	4	5	6
Content	1	2	3	4	5	6
Time I Invested	1	2	3	4	5	6

22) As a whole, the clickers were a valuable part of the training program.

	1	2	3	4	5	6
--	---	---	---	---	---	---

Facilitator	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	N/A
23) In general, the facilitator(s) were well prepared and organized.	1	2	3	4	5	6
24) Overall, the facilitator(s) communicated in a clear and concise manner (e.g., when answering questions, providing direction/instruction, etc.).	1	2	3	4	5	6
25) In general, I felt that the facilitator(s) possessed a lot of practical knowledge.	1	2	3	4	5	6
26) In general, the facilitator(s) created and maintained a positive learning environment.	1	2	3	4	5	6
27) In general, the facilitator(s) served as positive and professional role models.	1	2	3	4	5	6
28) Overall, I felt that the facilitator(s) provided feedback that was timely, specific and helped me identify areas in need of development.	1	2	3	4	5	6

<sup>a</sup> Items omitted from analyses.

## Appendix I. Knowledge Questionnaire

**Risk Assessment**

Please answer the series of questions listed below relating to risk assessment. The purpose of this quiz is to ensure Parole Officers who are completing the training have knowledge of risk assessment research, the different risk instruments and their limitations. Such knowledge is fundamental to effective structured release decision making

**[Correct answers are bolded.]**

**True and False Questions**

1. In general, static factors (e.g., prior criminal history) are <u>more</u> predictive of future re-offending than dynamic factors (e.g., antisocial attitudes).	<b>True</b>	False
2. Overall, clinical opinion has been demonstrated to be equal to but not more accurate than statistical risk instruments for predicting recidivism.	True	<b>False</b>
3. For the most part, the majority of general recidivism risk scales seem to consider fairly similar information.	<b>True</b>	False
4. The SIR-R scale predicts both general and violent recidivism at above the chance level.	<b>True</b>	False
5. It is a known fact that offenders burn out by age 40 because the age-crime curve indicates that after age 19 or 20 crime decreases with age.	True	<b>False</b>
6. Juvenile delinquency information such as age of onset, type and frequency of crimes and association with criminal peers is important information even when predicting risk in adult offenders.	<b>True</b>	False
7. Psychopathy, as measured by the Psychopathy Checklist, is one of the more important predictors of violent re-offending.	<b>True</b>	False
8. Positive institutional performance is an important predictor of post-release success.	True	<b>False</b>
9. Initial time of release is a time of increased risk for offender failure.	<b>True</b>	False

10. Clinical overrides of statistical risk estimates, when used by experienced parole officers, always improve the accuracy of risk assessment.	True	<b>False</b>
11. Because they focus on diagnoses, psychologists or psychiatrists are more skilled at risk assessment than parole officers.	True	<b>False</b>
12. Mentally ill offenders are greater risk to re-offend than non-mentally disordered offenders.	True	<b>False</b>
13. Certain risk factors are unique in terms of prediction for offender sub-populations such as sex offenders or domestic violence.	<b>True</b>	False
14. Anchoring a decision with a standardized risk estimate generally yields greater accuracy.	<b>True</b>	False
15. Successful programming is an important reason to ignore risk estimates.	True	<b>False</b>

### Multiple Choice Questions

1. Research with risk assessment instruments has found:
  - a. **training increases accuracy**
  - b. training is not really required when one has the manual
  - c. the value of training is related to the years of experience of the trainer  
(more experience = more value)
  - d. the need for training is related to the years of experience of the trainee  
(less experience = more training)
  - e. most staff have good math skills
  
2. Research with the custody classification instruments (LSI, Custody Rating Scale) has found:
  - a. an increase in community failures.
  - b. a decrease in minimum security placements.
  - c. **a decrease in escapes.**
  - d. an increase in escapes.
  - e. none of the above.
  
3. Reviews of the offender treatment and risk literature have concluded that treatment has:
  - a. no effect on recidivism.
  - b. **a small effect on reducing recidivism.**
  - c. a small effect on increasing recidivism.
  - d. the studies are so poorly done that a conclusion cannot be drawn.
  - e. too much undetected crime is committed to make sense of the literature.

4. Regarding risk assessment, which of the following is correct?
- comparable accuracy exists for various standard measures.
  - it is helpful to use purpose specific scales (e.g. sex offender scales to predict sex offending).
  - dynamic risk scales slightly increase predictive accuracy when combined with static/statistical measures.
  - risk assessment has reached levels of accuracy exceeding chance.
  - all of the above.**
5. Risk assessment and prediction has been a concern within corrections and parole for some time. Despite recent advances, accuracy in determining which offenders will fail can still be affected by:
- low failure rates of certain types of crime (e.g., sex offending).
  - the quality of the information used in the risk assessment.
  - the method or approach used in the risk assessment.
  - the degree of training received by the person doing the assessment.
  - all of the above.**
6. Comparisons between clinical (1<sup>st</sup> generation) and statistical (2<sup>nd</sup> generation) prediction have found:
- clinical is always superior.
  - actuarial is always superior
  - differences are only apparent with sexual and violent recidivism.
  - overall, actuarial approaches yield higher correlations with recidivism.**
  - none of the above.
7. Indicators of mental health:
- are relatively poor predictors of recidivism.**
  - reflect criminogenic needs.
  - are predictors of recidivism among mentally disordered offenders but not normal offenders.
  - are rarely used in the assessment of dangerousness.
  - none of the above
8. The major correlates (risk factors) of crime:
- are generally the same for men and women; Aboriginals and non-Aboriginals.**
  - have yet to be identified.
  - depend on the age of the offender.
  - are different for the poor than they are for the rich.
  - are only static.
9. Compared to non-disordered offenders, mentally disordered offenders are:
- most at risk when acute symptoms are medicated.
  - only at risk when substance abuse and antisociality co-exist.
  - no different in terms of recidivism.
  - hospitalized rather than incarcerated.
  - at greatest risk when acute symptoms exist, especially for those with substance abuse and antisocial personality traits.**

10. Static and dynamic risk measures each contribute to risk assessment. In general which of the following is not correct:
- static information tells you who is at risk
  - dynamic information tells you when someone is at risk
  - both are equally important in making accurate risk assessments**
  - dynamic information is more important (i.e., accurate)
  - static information is more important (i.e., accurate)
11. Regarding risk assessment and its application to women offenders and Aboriginal offenders, which is correct?
- none of the traditional risk factors apply to these groups
  - there has been no research with these groups to inform practice
  - the specific weights and norms for a risk scale may vary**
  - the Corrections and Conditional Release Act prohibits its use
  - it is unethical and illegal
12. A structured decision framework is preferred because:
- it is anchored by a statistical estimate of risk
  - it considers all the relevant information
  - it limits clinical overrides
  - it helps limit liability
  - all of the above**
13. When making release recommendations, which is most important to consider?
- program performance
  - the interview with the offender
  - file information, including the criminal history**
  - offender remorse
  - institutional performance
14. Given that initial release to the community is a time of increased risk for the offender, it is most important to:
- increase frequency of contact with the offender
  - set clear limits
  - develop a good working relationship
  - identify protective factors
  - do all of the above**
15. The requirement to use professional discretion is an important consideration by parole officers. Which is not correct?
- it should be judiciously and sparingly used
  - it should be supported with a clear rationale
  - it's use should be limited in scope (i.e., not making a high-risk offender a low-risk case)
  - it should only be used by experienced parole officers**
  - it should not be based solely on the interview with the offender

## Appendix J. Risk Relevance Coding Form

Coder: \_\_\_\_\_

PO Identifier: \_\_\_\_\_

Assessment for Decision completed:

- Prior to completion of training?  
(Exemplar:    1        2        3)
- After completion of training?  
(Exemplar:    1        2        3)

1. What type of offender is the subject of the A4D:
  - An offender who is presently incarcerated, being considered for release
  - An offender who is presently in the community, being considered for parole continuation or a more liberal type of parole
  - An offender who has had his or her release suspended
  - Other: \_\_\_\_\_
2. What is the offender's gender?
  - Male        Female
3. Among the following factors, check all those included in the A4D:
  - An indication of level of risk
  - A time period for which the risk assessment is valid
  - A statement regarding management of risk (e.g., assumability, acceptability)
4. Among the following, check all those used to convey risk:
  - Probability (e.g., 0-100%)
  - Frequency (e.g., X of Y similar offenders re-offend)
  - Risk rating (e.g., low, moderate, high)
5. Was an indication of short-term risk (i.e., within 3 months) provided?
  - No        Yes
6. Was an indication of long-term risk (i.e., greater than one year) provided?
  - No        Yes
7. Does the A4D include a clear indication of impacts if re-offence occurs?
  - No        Yes



- j. Evidence of offender change (or lack thereof)  
(beyond program completion – actual differences in behaviour)
  - No
  - Yes →  Mentioned but discussed superficially (i.e., just listed)
  - Discussed comprehensively (analyzed; may include examples)
  
- k. Release plan  
(e.g., presence of community stability factors, aftercare, changes to release plan to reflect changes in offender situation since release)
  - No
  - Yes →  Mentioned but discussed superficially (i.e., just listed)
  - Discussed comprehensively (analyzed; may include examples)
  
- l. Protective factors (or lack thereof)  
(e.g., family, social supports, community organization, employment, religion)
  - No
  - Yes →  Mentioned but discussed superficially (i.e., just listed)
  - Discussed comprehensively (analyzed; may include examples)
  
- m. Case-specific factors relevant to risk management and/or assessment not reflected above  
(e.g., communication of risk-related thoughts, victim involvement)
  - No
  - Yes →  Mentioned but discussed superficially (i.e., just listed)
  - Discussed comprehensively (analyzed; may include examples)
  
- n. Strategies to manage risk  
(e.g., community programs, conditions, mitigating strategies)
  - No
  - Yes →  Mentioned but discussed superficially (i.e., just listed)
  - Discussed comprehensively (analyzed; may include examples)

9. Check the recommendation made by the parole officer:

If A4D is being completed for an offender in the institution:

- Grant parole
- Deny parole
- Grant a less liberal form of parole (i.e., support DP but not FP)

If A4D is being completed for an offender in the community:

*If being considered for continuation or more liberal form of parole:*

- Grant more liberal parole
- Maintain current parole
- No specific recommendation

*If has been suspended:*

- OR  Cancel suspension  
 Revoke

10. Does the A4D include a recommendation regarding special conditions (e.g., imposing, removing, maintaining)?

- No
- Yes

11. Rate the extent to which the PO's report is well supported and convincing:
- Report is founded in established risk principles and seems convincing
  - Report is moderately convincing and supported
  - Report is poorly supported and is not convincing
12. Based on the PO's analysis, do you agree with his/her recommendation?
- No
  - Yes

Appendix K. Derivation of Composite Categories for Study 3's *Supported* Question

To derive categories, the various possible rating combinations were first ranked (see Table K1). Given that the equivalence of certain rankings were difficult to ascertain (e.g., it is not intuitively clear if or how 011 differs from 002), the frequency with which each of these possibilities occurred was calculated. These were used to inform decisions regarding groupings and cut-offs for the ambiguous rating combinations; those that were unambiguous were not grouped. The ordinal categories indicated in the right-most column of the table were the result; these were used in analyses.

Table K1  
*Distribution of Ratings and Categories Assigned to Supported Question*

Number of Completed Assessments			Frequency (%)	Cumulative Frequency (%)	Category
One	Two	Three			
0	00	000	7.6	7.6	1
		001	9.2	13.4	2
	01		4.2		
		011	15.7	16.0	3
		002	0.4		
1	11	111	30.5	30.5	4
	02	012	3.4	15.7	5
		112	12.2		
	12		4.2		
		202	0.8	11.5	6
		122	6.5		
2	22	222	5.3	5.3	7

*Note.* For the ratings, 0 denotes *poorly*, 1 denotes *moderately*, and 2 denotes *well*. Frequencies were calculated using the combined pre- and post-training data.

## Appendix L. Description of Data and Their Characteristics (Study 3)

Variable	Distribution / Violation	Original Distribution / $M(SD)$ [Range]
<i>Description of assessments for decision</i>		
Offender gender	Uneven distribution	"Female" = 4%
Type of case being considered	Normal distribution	"Suspended" = 11%
Recommendation reached		
Offenders being considered for release	Normal distribution	"Grant less liberal" = 10%
Offenders in community	Normal distribution	"Grant more liberal" = 28%
Suspended offenders	Normal distribution	"Cancel suspension" = 18%
Risk rating included	Normal distribution	"Yes" = 65%
Risk frequency included	Normal distribution	"Yes" = 54%
Risk probability included	Uneven distribution	"Yes" = 7%
Short term risk estimate	Uneven distribution	"Yes" = 3%
Long term risk estimate	Uneven distribution	"Yes" = 5%
Risk manageability mentioned	Normal distribution	"Yes" = 55%
Risk management strategies mentioned	Normal distribution	"Yes" = 85%
Recommendation made regarding special conditions	Normal distribution	"Yes" = 86%
<i>Pre-training</i>		
Knowledge score	Negatively skewed	24.5 (3.0) [15-29]
Risk relevance score	Normal distribution	0.55 (0.15) [0.25-0.91]
Report well-supported and convincing?	Relatively even distribution	5 of 7 categories > 10%; lowest category = 5%
Agree with recommendation?	Negatively skewed & kurtotic	Dichotomized ("Yes" = 86%)
<i>Post-training</i>		
Risk relevance score	Normal distribution	0.57 (0.15) [0.23-0.88]
Report well-supported and convincing?	Relatively even distribution	6 of 7 categories > 10%; lowest category = 3%
Agree with recommendation?	Negatively skewed & kurtotic	Dichotomized ("Yes" = 86%)

$N = 131$ .