

An Examination of the Implementation Fidelity of the Risk, Need, Responsivity Model of  
Rehabilitation in Ontario's Direct Operated Youth Justice Facilities

by

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## **Abstract**

Youth Justice Services in Ontario, Canada utilizes the Risk Need Responsivity Model of Rehabilitation (RNR model) as the evidence supporting their case management practices. The use of the RNR model has been substantiated through research that has suggested that when all components of the model are adhered to significant reductions in recidivism are possible. Since achieving reductions in recidivism is a primary goal of Ontario's youth justice systems, fidelity to the RNR model is essential to assist in reaching the desired outcomes.

The aim of this research project was to test fidelity to the RNR model in the direct operated youth justice system in Ontario, as well as to examine the contention that the principle of responsivity is the least understood and therefore least utilized component of the model. A retrospective chart review design that examined the files of all male youth meeting the study criteria between the fiscal years of 2001 and 2014 in the direct operated facilities was used to address three research questions.

The first research question sought to understand what information was collected in the case management process that aligned with the model components. The second question examined how the information collected was applied to case management goals for youth. The third question compared the identification and utilization of RNR information between the case management plans created in the community with those created in the direct operated facilities.

The key findings from this study suggest that fidelity to the RNR model can be achieved in respect to the identification of information that aligns with each of the model components. However, operationalization of the information into case management goals has proven to be less successful. Study results indicate that neither identification nor utilization of responsivity factors in case management plans is occurring in either the community or the facility setting.

## **Preface**

This thesis is an original work by Lori Walls. The research project, of which this thesis is a part, received research ethics approval from the University of Alberta Research Ethics Board, “An Examination of the Implementation Fidelity of the Risk, Need, Responsivity Model of Rehabilitation in Ontario’s Direct Operated Youth Justice Facilities”, No. 00050280, August 7, 2014.

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## Chapter One: Introduction

Correctional work with youth in Ontario Canada is grounded in the Risk Need Responsivity Model of Rehabilitation (RNR model). This model, drawn from General Personality and Cognitive Social Learning Theory, directs correctional frontline staff and policy makers in understanding the intensity of intervention in respect to rehabilitative work (risk), what to target (need), and how best to target the needs (responsivity) of youth who have come in contact with the justice system. The importance of the RNR model has been substantiated through a multitude of studies which concluded that if all three components of the model are adhered to, reductions in recidivism ranging from 17% in custody settings to 35% in community settings can be expected (Lipsey, 1999; Andrews & Bonta, 2006). Since achieving reductions in recidivism is a primary goal of justice systems, fidelity to the RNR model is essential to assist in reaching the desired outcomes. Fidelity in the context of justice systems refers to determining how well the RNR model has been implemented to “assess conformity with prescribed elements and the absence of non-prescribed elements” of the model (McGrew, Bond, Dietzen & Salyers, p. 316, 1994). The potential for reductions in recidivism highlight the importance of ensuring that Ontario’s Youth Justice System implements practices that direct and support compliance with the RNR model.

Although much has been written on the RNR model, the principles of risk and need have garnered most of the research attention relegating the principle of responsivity to “*third place*”. Andrews and Bonta (2010), as well as other seminal authors and researchers of the RNR model (Lipsey, 1999; Hoge, Andrew & Leschied, 2008; Craig, Dixon & Gannon, 2014; Latessa, Listwan & Koetzle, 2014), have stated that the principle of responsivity may be the least understood, and therefore least utilized, aspect of the model. Given that research indicates that

reductions in recidivism are greatest when all three components of the model are adhered to, concerns are raised when seminal authors in the field of correctional research speculate that one aspect of the model may be underutilized. The contention that the principle of responsivity is the least understood and therefore least utilized principle was discussed by Andrews and Bonta (2010) with the caveat that the problem is believed to be one of implementation fidelity and not theoretical shortcoming.

In support of the contention that the relegation of the principle of responsivity to lowest priority is a problem of implementation as opposed to a theoretical deficit, Craig, Dixon, and Gannon (2014) point to the evolution of risk assessment instruments stating that fourth generation assessment instruments specifically support the principles of the RNR model by providing a validated and reliable instrument to assess risk, need, and responsivity factors and “organize this information in a way that facilitates case management” (p. 88). However, Latessa, Listwan and Koetzle (2014) suggested that despite the use of assessment tools intended to operationalize the principles of the RNR model, a multitude of barriers can interfere with the effective implementation of the assessment results when it comes to formulating and / or carrying out case management goals. Case managers adopting a “one size fits all” approach to assessment, ignoring certain aspects of assessment results, or creating narratives out of results that do not distinguish between level of risk, need, or responsivity have been posited as barriers to implementing assessment results. Additionally, Flores, Lowenkamp, Holisinger, and Latessa (2006) indicated that when staff are not adequately trained in assessment practices the reliability and accuracy of results are significantly impacted. Andrews and Bonta (2010) further suggested that without a commitment to ongoing booster training sessions on assessment and

implementation, accuracy and reliability begin to drift resulting in case management processes that do not adhere to the principles of the RNR model.

Assessment information currently collected in Ontario's Youth Justice System is gathered through interviews conducted by a probation officer with relevant individuals including but not limited to the youth, family members and teachers. Documentation, such as psychological reports, school programming and behavioural plans, or information provided by agencies such as Child and Family Services, are also examined when available. The information is then used to populate the Risk Need Assessment (RNA) which calculates the level of risk, identifies the criminogenic needs of the youth, as well as highlighting responsivity factors for case management and programming considerations. Responsivity factors refer to the identification of characteristics that are related to a youth's learning ability, program engagement and program success (Latessa, Listwan & Koetzle, 2014). Under the current assessment practices the assessment results and subsequent case management goals are reliant on the training, skill and ability of the probation officer, as well as on the availability and quality of information collected.

In my position with the Effective Programming and Evaluation Unit, Youth Justice Ontario, I have participated in a number of research and evaluation projects that have pointed to problems with both the construction of the RNA and application of the RNA results, as well as with the resultant case management plans. One of the most pressing issues encountered is with respect to the principle of responsivity, specifically the underidentification and underutilization of responsivity factors in case management plans. Much of the information currently collected through interviews and documentation speaks to the categories of risk and criminogenic need with little focus on the strengths and / or barriers that could potentially impact the success of case management goals. Anecdotally, it is hypothesized that this occurs because the identification and

utilization of responsivity factors presents a unique set of challenges to the case manager. For example, the information needed to establish the level of risk and criminogenic needs is often readily available from existing documentation or easily obtained through interviews.

Additionally, this information is presented in an objective format, such as the number of previous offences or any past academic success of the youth. Conversely, information about responsivity factors is typically obtained through psycho-educational or other types of clinical assessment documentation not often readily available to the probation officer. Even when this documentation is available, interpretation and operationalization of the results assumes a level of clinical knowledge not typically possessed by a probation officer. This results in an absence of responsivity information, or conversely, underutilized information in the formulation of case management goals. These project results lend further support to Andrews' and Bonta's contention that the responsivity principle has been relegated to "*third place*" in the RNR model as a result of issues related to implementation fidelity as opposed to theoretical deficit. Without a systematic examination of this contention, anecdotal speculation continues to inform the current understanding of this problem.

Existing research around the issue of responsivity has primarily focused on evaluating the effectiveness of interventions for specific subpopulations of offenders, such as the evaluation of Aboriginal specific programming (Nee, Ellis, Morris & Wilson, 2012), or conversely, identifying specific responsivity needs of subpopulations, such as identifying the importance of addressing self-esteem in girls (Vitopoulos, Peterson-Badali & Skilling, 2012). Although these areas of research are important to moving the field forward, it is vital that the youth justice system also undertake an exploration of adherence to the RNR model with current case management practices in general, but specifically to explore current practices as they relate to the

identification and utilization of responsivity factors. The importance of garnering an understanding of these practices stems from the fact that the application of case management processes are directly related to programming and service alignment for youth which form the foundational principles for successful rehabilitation and reintegration established under the *Youth Criminal Justice Act* (YCJA), and are further supported by the principles of the Youth Justice Services Division (YJSD) in Ontario. As important as it is to understand the impact of the identification and utilization of responsivity factors at an individual level, it is equally important to understand the impact at a systems level. Having this understanding is essential for providing direction around dollars and cents issues such as program identification, program implementation and staff training needs (Nee et al., 2012).

The budgets of criminal justice systems are often the subject of public controversy, including debates over the cost of rehabilitation for incarcerated individuals (Andrews & Bonta, 2010). The result of ongoing scrutiny is that processes for aligning and providing rehabilitative programming have moved towards establishing evidence-based practices in order to demonstrate outcomes at both individual and systems levels (Lipsey, Howell, Kelly, Chapman & Carver, 2010). One common outcome measure utilized by justice systems is recidivism rates that are linked to the effectiveness of the rehabilitative programs provided. An assumption embedded in the current practice of linking program effectiveness to recidivism is that the responsivity factors of individuals were identified and utilized prior to program placement. However, if responsivity factors are not identified or utilized in case management goals and subsequent programming referrals, the failure may be misrepresented as ineffective programming rather than being directed to issues in case management processes that supersede program assignment.

This research project intends to examine the fidelity by which the RNR model is applied in the context of Ontario's direct operated youth justice facilities. The project is unique in that it is a first attempt to apply a systematic research process to questions that are currently only answered anecdotally within Ontario's youth justice system. With shrinking dollars and increased scrutiny on justice systems generally, and the direct operated youth facilities in Ontario in particular, there is an urgent need to examine current practices to ensure compliance with the research in order to achieve the Youth Justice mandate of reintegration, rehabilitation and reductions in recidivism.

Results of this research project were expected to not only test the fidelity of the RNR model and examine the contention that the principle of responsivity has been relegated to "*third place*", but are anticipated to reveal operational opportunities in case management processes that may lead to better outcomes for youth. Additionally, project results have the potential to provide guidance to policy makers around staff training needs, effective documentation gathering and information sharing practices, as well as providing a detailed profile of the risk, need and responsivity factors of sentenced youth in Ontario's direct operated facilities.

## Chapter Two: Literature Review

As the aim of this research project was to evaluate the fidelity of the RNR model it is important to understand both the theoretical underpinnings of the model, as well as ensuring that the model adheres to commonly accepted understandings of what constitutes sound theory. The following literature review provides a brief overview of the evolution of correctional theory, introduces the components of the RNR model, and concludes with an exploration of the research that supports the RNR model as an exemplar of correctional practice.

Social science and psychological explanations of criminal behaviour and rehabilitative practices are permeated with themes that pit determinism against free will amongst backdrops of religious, biological, personal, social or cultural explanations of crime. Yet, despite the lack of convergence, these theoretical perspectives have had significant influences on current models of rehabilitation. A brief discussion of historical trends in correctional rehabilitative practice is included for the purpose of providing context for the central theoretical tenet of this research: the *Risk Need Responsivity Model of Rehabilitation*. The primary focus of the historical discussion will be social sciences in general and current psychological theories in particular.

### Social Science Theories

Religious explanations of crime that dominated the eighteenth century viewed criminal behaviour as a “fall from grace” due to “inherent moral depravity” (Fitzgerald, 2011). An individual controlled by inherent moral depravity who committed crimes was viewed as having sinned and that sin was abhorred by God. Regardless of the offence committed, dealing with individuals that had “sinned” called for harsh punishment and punishment was believed also to be the answer to preventing further criminal activity (Fitzgerald, 2011).

In the nineteenth century, biological theories of criminal behaviour dismissed the idea of a “fall from grace” and proposed that criminal tendencies were inherited. As a result, certain physical characteristics and familial patterns were examined with a view to identifying criminals (Wolfgang, 1979). The biological school of thought was later disposed of in the twentieth century with the view that personality, as opposed to biological heredity, was the cause of criminal behaviour. When personality was given a place of primacy as being the cause of criminal behaviour, the idea that intervention could alter personality and prevent or change the criminal trajectory became dominant and a shift began toward the current ideological rehabilitative paradigm (Fitzgerald, 2011).

The next group of theories to emerge began to explore social influences on criminal behaviour and the concepts of differential association and social disorganization were posited. The theory of differential association, at a rudimentary level, suggests that contact with criminal groups is likely to make one a criminal (Fitzgerald, 2011). Social disorganization theory asserts that the values espoused by disorganized communities are at odds with organized communities and as such, individuals from disorganized communities are forced to act outside of mainstream society (Fitzgerald, 2011). Building on the concept of social disorganization, cultural theories of crime proposed that “contradictory cultural norms could give rise to delinquency” (Fitzgerald, 2011, p. 300).

The social science theories described above highlight the ever changing theoretical trends that shift between placing the cause of crime within the individual versus attributing blame to social or societal factors. With a return to the study of and focus on individual behaviours in the late 1900’s, psychological theories of crime were favoured and for the first time psychological



theories held a respected position in discussions on the causes of crime and rehabilitative practice (Lilly, Cullen & Ball, 2001).

### **Current Psychological Theories**

In the 1960's criminologist Robert Martinson joined with colleagues on a project to review a large number of rehabilitative prison programs in the United States. The results of the evaluations were compiled into an article published in 1974 entitled "*What Works*". The essence of the article suggested that, with few exceptions, rehabilitation efforts had no impact on recidivism. In his "*What Works*" article Martinson suggested that regardless of the type of rehabilitative intervention there is "no way to overcome, or even appreciably reduce, the powerful tendencies of offenders to continue in criminal behaviour" (Sarre, 1999, p. 2). The "*What Works*" article has since been facetiously renamed "*Nothing Works*". The resultant impact of Martinson's conclusions on legislation, policy and rehabilitative efforts is difficult to qualify given that 15 years after the article was released the United States Supreme Court continued to uphold sentencing guidelines that removed rehabilitation from consideration in the sentencing of offenders (Sarre, 1999). A punitive ideology and approach to dealing with crime flourished.

Subsequently, two significant developments were the impetus for bringing rehabilitative practice back into favour. The first occurred with developments in the 1980's in the world of justice research. With the advent of meta-analytical techniques, researchers were able to compile multiple rehabilitative studies and mathematically evaluate the impact of rehabilitation. These were techniques not available to Martinson and colleagues (Sarre, 1999). The first meta-analytical review of 400 treatment studies concluded that treatment, on average, resulted in a 17% reduction in recidivism (Lipsey, 1999). Other research results have since produced evidence

that treatment reduced recidivism rates as high as 35% (Andrews & Bonta, 2010). The results provided some of the first concrete evidence that treatment *does* work.

The second impact was the introduction of a new psychological theory that changed how people thought about crime. The *General Personality and Cognitive Social Learning Theory (GPCSL)* provided a new way of thinking about why people engage in criminal activity. The *general personality* part of the theory refers to a way of thinking about an individual's specific characteristics and patterns of behaviour. In respect to criminal behaviour, it refers to looking at a pattern of antisocial behaviour that includes the individual's history of rule violations, as well as considering personality factors such as impulsivity, self-centeredness and the need for excitement, to name a few of the possible factors to be considered (Andrews & Bonta, 2006). The *cognitive* aspect of the theory suggests that consideration must be given to an individual's thinking patterns and examines the impact these processes have on pro-criminal attitudes, values and beliefs.

Social learning theory assumes criminal behaviour is learned within a social context. This means that behaviour and thinking that contribute to criminal behaviour are viewed as being reinforced by an individual's social environment. An individual's social context or network might include, among others, peers, family, school or media. Social learning theory suggests that when an individual receives support for engaging in criminal behaviour, or witnesses other important people in their social network they view as "important" engaging in criminal behaviour, similar behaviours are more likely to be adopted or repeated (Andrews & Bonta, 2006). Social learning theory introduced the possibility that if criminal behaviour can be learned it can also be unlearned if the right interventions are provided. With a change in thinking toward General Personality Cognitive Social Learning Theory, and with evidence from meta-analytical

studies suggesting that rehabilitative programming does reduce recidivism, the field of criminal justice turned its attention to exploring “*what works*”.

### **What Works**

Based on the results of multiple meta-analytical studies the following three principles were deemed essential for effective rehabilitative programming: employ cognitive behavioural interventions, target criminogenic needs, and deliver more intensive services to high risk individuals (Gendreau, Goggin, French & Smith, 2006).

**Employ cognitive behavioural interventions.** Research has confirmed that cognitive behavioural and other behavioural programs are the most effective interventions for youth at-risk or in conflict with the law (Lowenkamp, Latessa & Smith, 2006). Cognitive Behavioural Therapy (CBT) is an approach that supports individuals in identifying and changing dysfunctional beliefs, thoughts and patterns of behaviour that contribute to their problems. Research has provided consistent evidence that CBT is associated with significant meaningful positive changes (Lowenkamp, Latessa & Smith, 2006). CBT has been shown to be relevant for people with different abilities and from a diverse range of backgrounds. The strategies of CBT have been used successfully to delay, reduce the severity and divert the long-term consequences of problem behaviours among young people (Lowenkamp, Latessa & Smith, 2006). Problem behaviours that are particularly open to change using CBT include violence and criminality (Andrews & Bonta, 2010).

**Target criminogenic needs.** Criminogenic needs are characteristics and circumstances of individuals that are directly linked to criminal behaviour (Andrews, Hoge & Leschied, 1992). Criminogenic needs are considered dynamic factors suggesting that these factors can be changed, and if changed, can reduce recidivism. When a criminogenic need is identified through

assessment, effective programming should aim to target one or more of the identified criminogenic needs. Programs not targeting criminogenic needs may be counter-productive to efficiency and effectiveness (Andrews & Bonta, 2006).

**Intensive services should be provided to, and reserved for, high risk individuals.**

When assessment results suggest that the individual's level of risk / need is high, the treatment prescribed must be of sufficient intensity to be effective. The recommended dosage of treatment for high risk individuals ranges from 100 hours of intervention to 300 hours of intervention (Lipsey, 1999). For individuals assigned to the low risk category, research has indicated that high intensity programming actually increases the likelihood of negative outcomes. It is also best to ensure separation between high risk individuals receiving intensive treatment and those in the low risk category (Andrews & Bonta, 2010).

**The Risk-Need-Responsivity Model of Offender Rehabilitation**

Researchers examining rehabilitation and behavioural change continued to build on the three principles of effective programming outlined in the meta-analytical studies by evolving the principles into the *Risk Need Responsivity Model of Effective Rehabilitation* (Andrews & Bonta, 2006). The principles were established to guide the process for determining an individual's level of risk (*Risk Principle*), level of need (*Need Principle*), and the characteristics that will impact an individual's ability to benefit from programming (*Responsivity Principle*) (Andrews & Bonta, 2010). Two additional principles have subsequently been added to the model that speak to the type of programming needed to effectively address a youth's level of risk, need and responsivity factors that outline how best to deliver, monitor and evaluate the applied programming. These two principles are referred to as the treatment principle and the fidelity principle.

The *Risk Principle* states that an individual with the highest level of risk should be provided with the most intense services (Andrews & Bonta, 2010). The Risk Principle outlined in the RNR model presupposes that the assignment of an individual to programming is based on a reliable and valid assessment that categorizes an individual's level of risk.

To understand the risk principle it is essential to understand how risk is measured. Risk assessment is an essential part of justice systems and as such, risk assessment tools have undergone multiple changes over time. The earliest version of risk assessment instruments predicted recidivism by applying professional judgment (Andrews & Bonta, 2010). Professional judgment refers to information gathered through techniques such as interviews and observations that are used to guide decisions. These professional judgment predictions are referred to as 1<sup>st</sup> generation assessment tools (Andrews & Bonta, 2007).

The 2<sup>nd</sup> generation assessment tools correlated static (things that cannot be changed) characteristics of individuals (i.e., age, criminal history, etc.) with reoffending behaviour (Shichor, 1997). The 3<sup>rd</sup> generation assessment tools included examination of both static and dynamic risk factors. Dynamic factors are factors that are amenable to change such as criminal thinking. The 4<sup>th</sup> generation, and the most current evolution of risk assessment tools, examines both dynamic and static risk factors, as well as incorporating protective factors or strengths that may reduce the risk of reoffending by calculating the protective factors into the overall equation of risk (Andrews & Bonta, 2007). The assessment results are then incorporated into case management plans.

The *Need Principle* states that effective programs target the dynamic risk factors or criminogenic needs of an individual (Andrews & Bonta, 2010). The dynamic risk factors are the areas identified through an assessment as being associated with re-offending behaviour that, with

effective programming, are amenable to change. Research findings indicate that the strongest risk factors associated with recidivism are a history of antisocial behaviour, antisocial personality pattern, antisocial cognition and antisocial associates (Andrews & Bonta, 2010).

The *Responsivity Principle* speaks to the need to maximize the individual's ability to learn from a rehabilitative intervention by providing cognitive behavioural treatment and tailoring the intervention to the learning style, motivation, abilities and strengths of the offender (Andrews & Bonta, 2010). There are two parts to the responsivity principle: general responsivity and specific responsivity.

General responsivity suggests the use of cognitive social learning methods to influence behaviour by asserting that cognitive social learning strategies are most effective regardless of the type of offender (female, Aboriginal, sex offender, psychopath, etc.) (Andrews & Bonta, 2010). Effective cognitive social learning strategies operate according to the following two principles:

1. Relationship principle – establish a warm, respectful and collaborative working alliance with the client,
2. Structuring principle – influence the direction of change towards the pro-social through pro-social modeling, appropriate use of reinforcement, disapproval and problem solving (Andrews & Bonta, 2010).

Specific responsivity refers to a fine tuning of the cognitive behavioural interventions. The essence of the principle is that treatment can be enhanced if the treatment and / or intervention pay attention to personal factors that facilitate learning (Andrews & Bonta, 2010). Treatment programs involve teaching offenders new behaviours and cognitions and, to maximize this learning, require attention not only to whether the offender is a visual learner or an auditory

learner but to a whole range of personal-cognitive-social factors (Latessa, Listwan & Koetzle, 2014). Essentially, treatment planners and providers must understand the impact of the individual's personal, cognitive and social factors on their ability to participate in treatment by taking into account strengths, learning style, personality, motivation and the bio-social characteristics of the individual (gender, race, etc.) (Andrews & Bonta, 2010).

Perhaps Andrews and Bonta (2007) summed up the principles of need, and responsivity best by stating:

“Human beings are always changing their behaviour as a consequence to environmental demands and through their own deliberate, autonomous, self-directed change. By adhering to the need and responsivity principles through assessment of criminogenic needs and responsivity factors we acknowledge that change is an important aspect of life and behaviour change can be facilitated with appropriate interventions” (2007, p.7).

### **Putting the Risk Need Responsivity Model to the Test**

Andrews and Bonta (2010) posited that three types of understanding constitute the foundation of the psychology of criminal conduct and thus the RNR model: empirical, theoretical, and practical understanding. An empirical understanding highlights the observable individual variation in criminal conduct, as well as providing details surrounding covariates (i.e., biological, personal, interpersonal, situational and social variables) that provide insight into correlates of “individual differences in criminal history and the predictors of the criminal futures of individuals” (p.13). Given that the RNR model places a primary focus on addressing risk and need factors it follows that much of the research used to support these principles is concerned with increasing knowledge of correlates, predictors and causal and functional variables that highlight the relationships between these variables and the likelihood of re-offending. To gain

empirical understanding of risk and need factors, the measurement of the level of covariation is typically sought through the use of the *Pearson Product Moment Correlation Coefficient* (Pearson  $r$ ). Additional information comparing findings from diverse studies can be obtained by applying interpretation through the Binomial Effect Size Display (Andrews & Bonta, 2010). The three types of research design normally relied upon to support the risk / need principles are cross sectional, longitudinal and multi-wave longitudinal designs.

**Empirical understanding.** In an early study conducted by Gendreau, Andrews, Goggin, and Chanteloupe (1992) a survey of studies reporting on the correlates of crime published in the English language between 1970 and 1992 was conducted. In total 372 studies were selected yielding over 1770 Pearson correlation coefficients “each of which reflected the covariation of some potential correlate of individual criminal conduct with some measure of criminal conduct” (p. 62). Seven categories of risk / need factors were identified that included lower class origins, personal distress / psychopathology, personal educational / vocational achievement, parental / family factors, temperament / misconduct / personality, and antisocial attitudes / associates. Results suggest that lower class origins (.06) and personal distress (.08) were relatively minor risk factors while antisocial attitudes (.22) and temperament (.21) were major risk factors for criminality. Similar results were found in a study conducted with an adolescent population (Simourd, 1994). Eight other meta-analytical studies followed between 1993 and 2003 providing further support for the findings from the Gendreau, et al. (1992) study. From these findings a pattern was established that resonated across study design, assessment instrument, age, gender and race. The results from these studies are the foundation of what is currently referred to as the *Central Eight Criminogenic Risk Factors*.



Table 1

## Central Eight Criminogenic Needs

---

 History of Antisocial Behaviour \*

Antisocial Personality Pattern\*

Antisocial Cognition\*

Antisocial Associates\*

Family Issues

School / Employment Issues

Leisure and / or Recreation

Substance Abuse

\*Indicates that the criminogenic need is considered one of the *big four*.

The central eight criminogenic risk factors are best understood by dividing the eight factors into two groups of four. The first four risk / need factors are often referred to as the “*Big Four*” and include a history of antisocial behaviour, antisocial personality pattern, antisocial cognition and antisocial associates. The remaining four factors are considered to be moderate risk / need factors and include family / marital circumstances, school / work, leisure / recreation and substance abuse. Of the eight meta-analytical studies conducted between 1993 and 2003 the “grand mean  $r$  for the Big Four was .26, and 95 percent of the time the true mean would fall between .22 and point .30” (Andrews & Bonta, 2010, p. 64) . The grand mean for the remaining four risk / need factors was .17. These results provided strong evidence of the predictive power of the central eight risk / need factors and as such form the subscales of many risk assessment instruments in use today (Andrews & Bonta, 2010).

Andrews and Bonta (2010) suggested that the mark of a good theory is that the theory is able to provide a number of accurate explanations. First, the theory must demonstrate general applicability, such as providing empirical findings that demonstrate that the central eight criminogenic factors are relevant across diverse subpopulations of offenders. Second, a good theory is expected to be both internally and externally consistent (Andrews & Bonta, 2010). This

assertion requires examining how well explanatory variables in the theory fit together (internal consistency), as well as examining how closely aligned the principles of the theory are with other commonly accepted scientific theories (external consistency) (Andrews & Bonta, 2010). As an historical explanation of the main social science theories of crime and current psychological perspectives was previously provided, further discussion will be restricted except to reiterate that the foundation of the RNR model is firmly entrenched in the GPCSL perspective which capitalizes on decades of research on the specific components of the theory.

**Theoretical understanding.** The most important aspect of theoretical understanding is in relation to providing predictive accuracy on the central assumptions posited by a theory or model (Andrews & Bonta, 2010). The four major empirical tests put forward by Andrews and Bonta that are used to determine if the RNR model is empirically defensible are: (1) the theory must provide systematic evidence for how the various risk factors are associated with one another; (2) the theory must demonstrate the ability to accurately predict variation in criminal behaviour; (3) the theory provides evidence of the potential to “influence criminal activity by way of deliberate interventions that focus on the causal variables suggested by the theory” (p.16); (4) the theory demonstrates applicability across diverse circumstances and populations.

Given the importance of predictive accuracy in the determination of whether a theory / model is comprehensive, it is important to ensure that the RNR model and the GPCSL theory on which the model is based, pass the four major empirical tests outlined above. In respect to tests one and two, the results of multiple meta-analytical studies (outlined above) have provided evidence of the correlates and predictors of individual criminal conduct. To determine alignment with the third test, explanations offered in the GPCSL theory are relied upon. Specifically, GPCSL directs practitioners to apply cognitive behavioural interventions in a structured and

systematic way by targeting the individual risk / needs identified through the use of empirically sound assessment practices. Results derived from research studies such as those conducted by Lipsey (1999) and Andrews and Bonta (2010) that showed reductions in recidivism rates of between 17 and 35 percent following the application of CBT interventions, have provided the evidence of the model's ability to influence criminal activity by way of deliberate interventions.

The fourth test, which requires that the model be applicable across diverse circumstances and populations, is also addressed by the results presented in the meta-analytical work outlined above. Additional studies conducted after 2003 have produced similar findings. For example, in a study of 4482 Canadian youth the central eight criminogenic factors predicted equally well for white and non-white youth, as well as for male and female youth (Andrews & Bonta, 2010). In a number of studies conducted across the Canadian Prairie Provinces with Aboriginal youth the subscales of the Youth Level of Service Inventory containing the central eight factors strongly predicted recidivism (Gossner & Wormith, 2007; Luong, 2007). In a study of 3960 adult Aboriginal offenders the results suggested that total risk scores predicted general recidivism. All eight of the central criminogenic factors predicted both general and violent recidivism. The predictive validity of the risk / need score for male and female Aboriginal offenders was significant (Tanasichuk & Wormith, 2009).

In addition to research having established empirical evidence for the predictability of the RNR model across diverse populations and circumstance, the GPCSL theory and subsequent principles also speak to diverse applicability of the model through the examination of individual responsivity factors when making determinations about how to apply interventions. General responsivity directs the use of cognitive behavioural techniques as research has provided strong evidential support confirming CBT as the most effective practice when learning new attitudes

and changing behaviour (Andrews & Bonta, 2010). CBT has also demonstrated relevance for people with different abilities and across diverse range of backgrounds (Lipsey, 1999). Specific responsivity then posits that general responsivity techniques must be considered and adapted to the individual characteristics of the offender. Characteristics for consideration are wide ranging and include, but are not limited to, culture, gender, IQ, motivation and developmental stage.

**Practical understanding.** Having passed the tests of providing empirical and theoretical understanding, the RNR model must also prove to be effective in the provision of practical understanding. Andrews and Bonta (2010) stated that “a practical understanding is guaranteed if the empirical and theoretical base of the psychology of criminal behaviour is sound” (p. 17). It has been established that the theoretical base of the RNR model is the GPCSL. Although this theory has been validated it is just as important to understand the evolution of the theoretical predecessors of the GPCSL to further ensure the test of practical understanding has been met.

Discussions of psychological theories of criminal behaviour and rehabilitative efforts can be analysed at both a macro and a micro level. Andrews and Bonta (2010) offered the following definition which I have adopted as the principle understanding of the psychology of criminal conduct guiding this research project:

“A psychology of criminal conduct involves the ethical application of psychological knowledge and methods to the practical tasks of predicting and influencing the likelihood of criminal behavior and to the reduction of the human and social costs associated with crime and criminal justice processing” (p. 4).

The following discussion of psychological theories outlines the evolution of the historical psychological knowledge base that has influenced the “methods and practical tasks of predicting

and influencing the likelihood of criminal behavior” and resulted in the development of the GPCSL and RNR model (Andrews & Bonta, p. 4, 2010).

According to Freud, all humans have natural drives and urges repressed in the unconscious (Moore, 2011). Likewise, all humans have criminal tendencies. From the psychoanalytical perspective, an individual can learn to control their inner drives and urges through socialization. Criminal tendencies can be suppressed if a child undergoes the “proper” identification process with their parents (Siegel, Welsh & Senna, 2006). If these conditions are not met, a personality disturbance may result exhibiting internal and / or external antisocial tendencies and negative attachment patterns. Inward antisocial tendencies are believed to result in neuroticism and outward antisocial tendencies create criminals (Siegel, et. al., 2006). Based on these understandings, rehabilitation efforts are primarily focused on correcting deficits in socialization and attachment processes (Moore, 2011).

Intelligence theories of criminal conduct have a long and controversial history (Moore, 2011). The early psychological intelligence theories attempted to connect intelligence to delinquency by proposing that “feble-mindedness” or low intelligence resulted in criminal behaviour (Shoemaker, 2005). However, the pursuit of research that attempted to link IQ with criminal behaviour quickly fell out of favour due to an inability to replicate the original works. Additional concerns were raised in regard to the possibility of the research results disseminating “misleading conclusions about heredity, race and class” (Moore, 2011, p. 230). More recent views of criminal theory, such as those posed by Andrews and Bonta (2006), view IQ as an important factor that must be considered when making choices about the type and modality of rehabilitative programming, but denounce IQ as a cause of criminal behaviour.

Cognitive psychological theories focus on how the cognitive processes of an individual impact an individual's interaction with the environment (Moore, 2011). In respect to criminal behaviour, cognitive theories explore how individuals who commit crime interact with their environments, as well as offering explanations about why the cognitive perceptions and interpretations that individuals who commit crimes make about their interactions lead to criminal responding (Wright & Schwartz, 2010). Cognitive theorists such as Piaget proposed a developmental stages theory of cognitive development where cognition is viewed as existing on a continuum that increases in complexity as environmental demands require more complex cognitive responses (Wright & Schwartz, 2010). Criminal behaviour is thereby regarded as a failure to successfully acquire the necessary skills to pass from one stage to the other. Cognitive deficits result in an individual being rendered ill-equipped to deal with the increasing complexity of environmental demands which creates the conditions that can lead to criminal behaviour (Siegel et al., 2006). Rehabilitation under this model focuses on the examination and correction of an individual's faulty or developmentally immature interpretations and cognitions (Moore, 2011).

Learning theories such as those proposed by Pavlov, Watson and Skinner, laid the foundation for much of what is currently believed about criminal conduct and rehabilitative practice (Moore, 2011). For example, Skinner's theory of operant conditioning posits that a stimulus situated in the environment provokes a voluntary response that is either positively or negatively reinforced (Skinner, 1963). Positive reinforcement, or rewarding of the response, ensures that the response will continue should the stimulus, or a similar stimulus, be presented again. Negatively reinforcing the response prevents the response from reoccurring in the presence of the stimulus (Skinner, 1963). The theory of operant conditioning suggested that

patterns of responding eventually become internalized and subsequently form patterns of behaviour, and therefore, “the strength of criminal behavior is a direct function of the amount, frequency, and probability of its reinforcement” (Burgess & Akers, 1966, p. 146). Principles such as those espoused by operant conditioning spawned the development of a number of rehabilitative programs for justice populations (Andrews & Bonta, 2010).

Researchers have provided evidence that the RNR model has met the criteria of demonstrating empirical, theoretical and practical understanding. What has yet to be determined is the extent to which “real world” practices in Ontario’s direct operated youth justice facilities align with the recommendations put forth in the RNR model. Chen (1990) stated that without measurement of “adherence to an intended model, there is no way to determine whether unsuccessful outcomes reflect a failure of the model or failure to implement the model as intended” (p. 317).

The purpose of this study was to use a structured research process to answer the question above: to what extent do “real world” practices in Ontario’s direct operated youth justice facilities align with the recommendations put forth in the RNR model. Although the overarching goal of this research process was to determine fidelity, the secondary goal was to test the hypothesis that the principle of responsivity is under identified and underutilized in case management plans as a result of implementation error.

To achieve these answers three research questions were explored. The first research question was posed to examine what information was collected in the RNA in order to compare the alignment of the information with the RNR model. The second question assessed to what extent the information from the RNA was incorporated into the case management plan. The third question examined how information from the RNA, and case management plan created in the

community was applied within the facility context. The use of these research questions allowed for the examination of fidelity to both the individual components of the RNR model, as well as examining alignment with each of the principles independently for the purpose of testing the hypothesis related to the principle of responsivity.



### **Chapter Three: Methodology**

The intent of this research project was to examine the fidelity in which the RNR model is applied in the context of Ontario's direct operated youth justice facilities. To achieve this three research questions are explored. The first research question looked at what information was collected in the RNA and how closely this information mapped onto the RNR model. The second question assessed to what extent the information from the RNA was incorporated into the case management plans of youth. The third question examined how the collected information from both the RNA, and case management plan created by the probation officer, informed the case management plan within the facility.

#### **Study Design**

The three research questions posed in this study are explored through a cross-sectional retrospective chart review process. Cross-sectional studies are a form of observational research that involves data collection from a population, or a subset of a population, at a defined point in time (Creswell, 2009). Cross-sectional studies are considered descriptive research and are not used to determine cause and effect relationships. Cross-sectional studies aim to provide information on the entire population under study. The information of interest that is present in the population is recorded, but variables are not manipulated. Instead, this method is selected in order to make inferences about possible relationships and to gather preliminary data to support further research and experimentation (Fowler, 2009). Retrospective research often requires "the analysis of data that were originally collected for reasons other than research" (Hess, 2006, p. 126). Advantages of using this type of research process include a "relatively inexpensive ability to research rich readily accessible existing data" (Gearing, Milan, Barber & Ickowicz, 2006, p. 126). However, limitations around incomplete documentation, difficulty interpreting

documentation, and difficulty establishing cause and effect are also probable. To overcome these limitations Gearing et.al (2006) suggested a systematic approach to retrospective chart review studies that includes a careful consideration of the research questions at the conception stage of the project, obtaining a thorough understanding of the information gathering and documentation processes used to establish the charts, as well as obtaining an understanding of any contextual factors such as policies and staffing structures that can assist the researcher in becoming familiar with how and why the information was initially created.

As a result of my employment with Youth Justice Services Ontario, I am in a unique position of having first-hand knowledge of the legislation, policies and procedures that guide the case management process at the centre of this investigation. I have also had the privilege of working as a psychologist with persons who were incarcerated in both a federal institution for women and a provincial secure facility for youth. These employment experiences required that I work both in the role of the case manager creating charts, as well as being responsible for the quality control aspect of the case management planning processes. I believe that these experiences have helped to mitigate the limitations often associated with conducting retrospective chart review studies.

### **Sampling**

The broadest sampling is at the level of the entire population. A population is described as a group of individuals who possess one feature that distinguishes them from other groups (Creswell, 2005). The population parameters for this study were all male youth serving a custodial sentence in direct operated (DO) youth justice facilities in the Province of Ontario between the fiscal years (March 31<sup>st</sup>) of 2011 and 2014. Only male youth were included in this sample as the number of female youth serving custodial sentences was so low that the females

were housed in a single treatment facility. As this project intended to sample the entire population of male youth in DO sites serving a custodial sentence, considerations such as coverage error were not necessary. Participant exclusion criteria for this project included youth sentenced to less than 30 days and youth files that did not contain both a Risk Need Assessment / Case Management Plan (RNA/CMP) and Case Management Reintegration Plan (CMRP).

Information pertaining to youth in the justice system in Ontario is stored in a database titled the Young Offender Tracking Information System (YOTIS). Each youth involved with the justice system is assigned a YOTIS number and information pertaining to the youth is stored under the corresponding number. In order to obtain the data for this project the researcher provided the Ministry with a copy of ethics approval and a Court Order. Following the provision of these documents, a request for the YOTIS numbers of all youth serving custodial sentences in DO facilities between the fiscal years 2011 and 2014 was made to the Program Evaluation Statistics and Research Unit (PESAR), Youth Justice Services Division, Ministry of Children and Youth Services. Once the YOTIS numbers for these youth were compiled, a request for the corresponding RNA/CMPs and CMRPs was made to the Effective Program and Evaluation Unit (EPEU). Prior to the Ministry providing any information to an external researcher, the data undergoes a de-identifying process leaving the researcher only able to identify youth by the YOTIS number assigned (personal communication with D. Irvine, YJSD, 2014). Once the data set was obtained data collection began.

### **Data Collection**

Researchers have suggested that when looking to measure fidelity a three step process should be utilized (McGrew et. al., 1994, Teague, Bond & Drake, 1998). The first step requires that the critical components and / or indicators of the model be identified. Once the components

and / or indicators are identified, sources of data for each of the components / indicators must be described, as well as specifying how the data sources will be measured. The second step is to collect the data to measure the components / indicators. The third step is analyzing the components and / or indicators to test for reliability and validity (Mowbray, Holter, Teague & Bybee, 2003). The methodology outlined below incorporates each of the three steps recommended by the research by first identifying what information is collected and utilized in the RNA/CMP and then comparing that information with the information collected and utilized in the facility case management plan.

**Research Question One: What information is collected in the RNA, and how closely does this information map onto the RNR model?**

In 1992, the Ministry of Community and Social Services of Ontario funded a project to identify effective interventions for youth at risk or in conflict with the law. The project focused on identifying specific domains of risk and need (Andrews, Hoge, & Leschied, 1992). The “*What Works*” literature provided validation of the risk and need indicators identified in the project and, as a result, an evidence-informed case management approach grounded in the RNR model was established and implemented throughout Ontario’s youth justice system. The foundation of this case management process is the use of a fourth generation empirically validated assessment tool being the RNA/CMP. The RNA/CMP is also directly aligned with the principles outlined in the RNR model (Hoge, Andrew & Leschied, 2008).

The RNA/CMP was created to assist probation officers with the identification of a youth’s risks, needs and responsivity factors, as well as for the purpose of supporting the incorporation of assessment findings into case management planning (Andrews, Hoge & Leschied, 1992). The RNA/CMP remains the risk assessment instrument in use today across

YJSD Ontario. Considerable research has been conducted that continues to support the RNA/CMP as a reliable and valid risk assessment tool (Andrews & Bonta, 2010).

The RNA/CMP has five sections, and data was collected from each section in order to respond to the first question. Sections one and two contain the assessment of the youth's risks and criminogenic needs. These sections of the assessment correspond to the first two principles in the RNR model (risk and need) and direct the assessor to record information collected from interviews and other sources pertaining to the eight criminogenic risk / need factors identified in the literature (Hoge, Andrew & Leschied, 2008). For each of the eight criminogenic need categories the assessor is provided a list of criteria on which to evaluate the youth. For example, under the criminogenic need category titled "*Prior and Current Offences*" five criteria are identified: (a) three or more prior findings of guilt, (b) two or more prior failures to comply, (c) prior probation, (d) prior custody, and (e) three or more current findings of guilt. Each criterion is awarded a score of 1 if applicable to the youth. A total score for each category is then calculated. Each of the eight criminogenic needs is then given a rating of either low, moderate or high that corresponds to the numerical total of the category. The scores across the eight areas of criminogenic need are then totaled to identify the overall risk level of the youth. Scores of 0-8 indicate a low risk of re-offense, 9-26 a moderate risk, 27-34 a high risk and 35-42 a very high risk for re-offence (Hoge, Andrew & Leschied, 2008).

For this project, sections one and two of the RNA/CMP data were extracted and coded based on the total criminogenic need category score for seven of the eight criminogenic need areas, as well as the overall risk level. The first of the eight criminogenic need categories, *Prior and Current Offences*, was not coded as the factors in this category are considered static and

therefore not amendable to change. As a result, these factors are used only in the calculation of risk and not in the construction of case management goals.

Section three of the RNA corresponds to the third principle of the RNR model which refers to the identification and utilization of responsivity factors. This section of the assessment is titled “Other Needs / Special Considerations”, but is used interchangeably in this paper with the terms responsivity or responsivity factors. Section three of the RNA/CMP assesses responsivity by providing lists of common responsivity factors drawn from the literature. As the RNA/CMP is a tool designed to be administered to youth between the ages of 12 and 17 years, responsivity factors are listed for both family and parents and for the individual youth. This is in recognition that a youth may have limited agency during this period of development and is therefore impacted by the responsivity factors of the family. If a responsivity factor has been identified, the assessor is to consider the impact of this factor when creating case management goals and subsequent programming or service referrals. Data for section three of the RNA/CMP was extracted by replicating the list of responsivity factors for the youth contained in the RNA/CMP and assigning a value of present (yes) or absent (no). Responsivity factors identified on the assessment for family were not tracked for this project as family responsivity factors are not typically a consideration of the facility case management team when setting goals for the youth during their custodial sentence.

Section four of the RNA/CMP is the identification of the overall risk level obtained and documented in section one and two of the assessment. An additional comments section is added to the score in section four below the risk rating to allow the assessor to expand on their rationale for rating assignment. Most risk assessment instruments have been constructed in a way that allows the assessor to use their professional discretion to override the numeric risk level of the

instrument to allow for justification of greater or lesser supervision or intervention. For example, a youth may receive a moderate overall risk score which then corresponds to a moderate level of supervision and intervention. However, the assessor may decide based on the type of offence, environmental circumstances or other significant factors, that a higher level of supervision and / or intervention is warranted for the youth. The numerical score would then be overridden and the risk level descriptor adjusted to reflect this decision. The rationale for the decision would then be documented in section four of the RNA/CMP. For this research project only the original numeric risk level was utilized as override decisions are based on professional discretion and not linked directly to any of the criminogenic needs categories. An examination of the rationale for override decisions was also excluded.

**Research Question Two: To what extent is the information contained in sections one through four of the RNA/CMP incorporated into the case management plans for youth?**

To answer the question posed in question two, section five of the RNA/CMP was examined. In this section, the assessor creates a list of goals for the youth and documents the means of achieving these goals. The Case Management Plan (CMP) is intended to reflect the totality of the principles outlined in the RNR model by establishing goals that represent the areas of criminogenic need, aligning the level of intervention and supervision with the level of risk, and by utilizing the identified responsivity factors to ensure appropriate intervention or programming assignment thereby giving the youth the greatest chance to succeed and ultimately reducing the potential of re-offending (Hoge, Andrew & Leschied, 2008).

Data extraction for section five of the RNA/CMP involved documenting the list of criminogenic needs identified in sections one and two of the RNA/CMP and indicating the presence (yes) or absence (no) of a corresponding goal in the CMP. Next, the list of identified

responsivity factors from section three was recorded for the purpose of assessing the presence or absence of these factors in the case management goals. A two stage process utilizing two abstractors was required to achieve this data collection. Researchers suggest that when using inter-rater reliability techniques it is “imperative to have a minimum of two abstractors” (Allison, Wall, Spettell, Calhoun, Fargason, Kobylinski, Farmer & Kiefe, 2000, p. 129). Additionally, it is recommended that the data abstractors be carefully trained in the protocol required for the abstraction, as well as having familiarity with research techniques and some knowledge of the subject matter and information documentation processes used to create the original record (Allison, et al., 2000). For this aspect of the project, both abstractors were clinically trained holding at least a Master’s degree, as well having forensic employment experience. Ten participant files were used to test the two person inter-rater reliability protocol. First, each rater independently coded the ten participant files. Once complete, the two raters came together to discuss any coding divergences. There were no discrepancies found between the two raters either in the testing phases of the protocol or during the review of the remainder of the 89 participant files. Inter-rater reliability for this project was 1.00 (100%).

The first step in the two step data collection process required the abstractors to examine the CMP goals and means of achievement against the list of responsivity factors identified in section three of the RNA. To do this, the abstractors independently looked for exact wording matches (i.e., sexual abuse was noted in the responsivity factors list in section three and the words “sexual abuse” were mentioned in the goals and means of achievement section of the CMP). The abstractors then documented the findings as either identified or not identified. In the second step, the abstractors attempted to identify evidence of the utilization of the responsivity factors by reviewing the narrative goals of the CMP. For example, if a learning disability was



identified as a responsivity factor, regardless of whether exact wording was used, there should be some mention of the need for modification or specialized programming as per YJSD policy and in alignment with the principles of the RNR model. The two abstractors then compared each of their findings. Identification was coded as present when the abstractors agreed. A third abstractor was consulted in cases where agreement was not met. Utilization was also coded following the same agreement protocol.

**Research Question Three: In what way does the information from the RNA/CMP inform the case management plan within the facility?**

YJSD policy indicates that when a youth is sentenced to a direct operated facility the probation officer will provide the facility with the RNA/CMP within two days of admission. Policy also directs that a Case Management Reintegration Plan (CMRP) aligned with the information identified in the RNA/CMP be created by the facility case management team, of which the probation officer is a member, within 30 days of the youth's admission to the facility (YJSD Policy Manual, 2010). What this suggests is that the goals in the CMRP should reflect how the facility intends to address the goals and / or criminogenic need areas identified in the RNA/CMP.

The CMRP is a document created internally by YJSD and therefore contains sections that pertain to operational and other issues outside of the scope of this project. Only section four (Case Management) of the CMRP and the list of members in attendance at the CMRP meeting were utilized for this data collection process.

In order to establish alignment between the CMRP and the RNA/CMP, the criminogenic needs identified in sections one and two of the RNA/CMP were documented and compared to section four of the CMRP. The data was then coded by indicating aligned (yes) or not aligned

(no). Next, the responsivity factors identified in section three of the RNA/CMP were compared to the responsivity factors listed in the CMRP under the heading “identified needs” in section four and the data coded by indicating aligned (yes) or not aligned (no). The probation officer’s attendance at the CMRP meeting was also documented.

Policy provides that the RNA/CMP is considered the foundational document upon which all decisions for sentenced youth are based and therefore the goals of the CMRP should be aligned with the goals of the CMP (YJSD Policy Manual, 2010). In order to assess the existence of alignment the goals of the CMP were extracted and compared to the goals of the CMRP. The two abstractor system described above was used to make this determination. First, the abstractors coded for exact word matches. Then the narratives from the *means of achievement* sections of the CMRP were analyzed for each set of goals to determine congruence.

Responsivity factor alignment data collection required that the two abstractors use the same process previously outlined to first determine if responsivity factors were identified and then utilized in the CMRP goals. Once a determination of identification and utilization was documented, the abstractors were able to compare the identification and utilization of responsivity factors in the CMRP with those identified in the CMP.

Question three of the research project was included for the purpose of collecting information that would assist the researcher in drawing inferences about the translation of the RNR model information constructed within a structured risk assessment tool into the facility case management plans or CMRP. To enhance this analysis, data for this question was collected that documented the number of times the probation officer attended the CMRP meeting. YJSD policy sanctions the use of a single case management model. This means that the probation officer is the

single case manager regardless of what or where (detention, probation, or custody) the youth's involvement is in the youth justice system (YJSD, 2010).

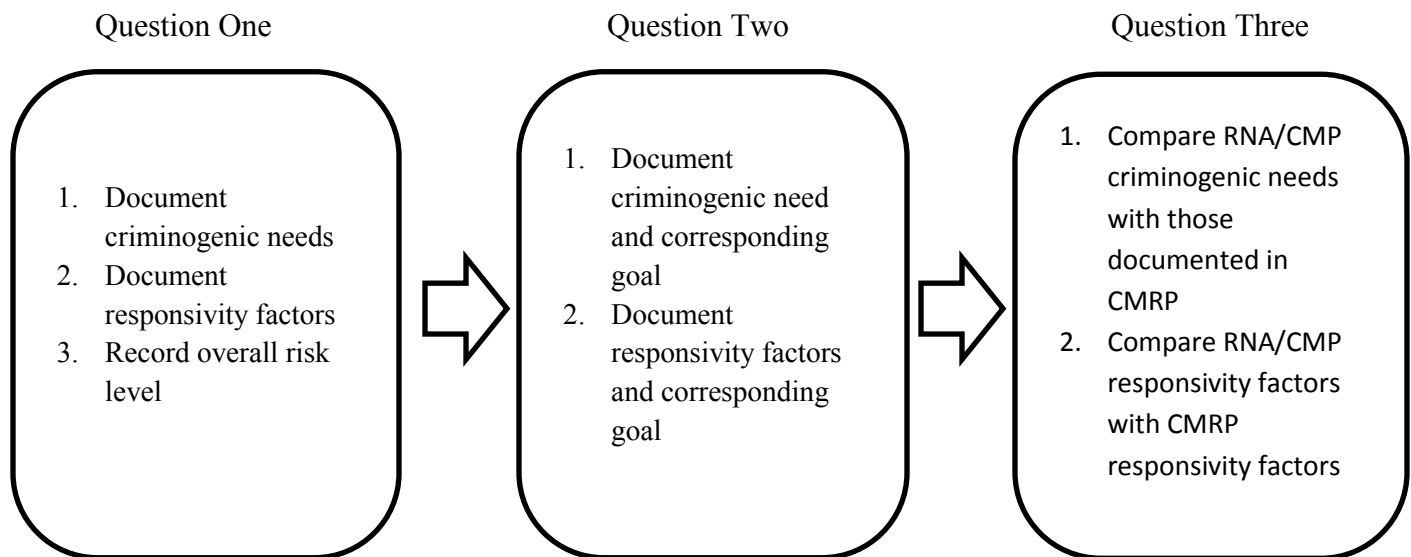
In the secure facility context, an individual from the facility case management team (usually a prime worker or social worker) has responsibility for the construction of the CMRP document. However, the case management team as a whole provides input. The probation officer is a member of the facility team and is therefore expected to be in attendance at the CMRP meetings. Tracking the attendance of the probation officer at these meetings was done for the purpose of helping to answer questions about RNR model translation as their presence or absence has the potential to impact the identification and utilization of the RNR model components at the facility level. The analysis of the collection of this information revealed that out of the 89 meetings that were conducted, the probation officer was in attendance 83 times or 93.25%.

Researchers have indicated that fidelity should be examined by exploring both the structure and process of the model in question (Kelly, Heckman, Stevenson & Williams, 2000). The information contained above describes the protocols established for measuring the RNR model, or structure component of this project. An additional protocol was established to explore the process component. This protocol included documenting admission and discharge dates, documenting whether the RNA was sent by the probation officer to the facility, noting if the probation officer attended the case management meeting at the facility that was undertaken to create the facility case management plan, as well as documenting narrative comments on other aspects of the implementation process. Mowbray, et al. (2003) indicated that for the process component of a fidelity examination project it may be difficult to obtain objective measurable data. However, narrative descriptions of the process surrounding the structure are essential for

providing the context in which the model implementation occurs and, as such, provides important clues to the success or failure of the implementation (Mowbray, et al., 2003).

Figure 1

**Outline of the Steps Taken to Collect Data under each of Three Research Questions**



\*The number of Probation officers in attendance at the CMRP meetings was also documented.

**Ethical Considerations**

Following approval for this research project from the University of Alberta's Supervisory Committee, an ethics application was filed and accepted by the University of Alberta's Ethics Board. A separate research proposal was then submitted to the Ontario Ministry of Community Safety and Correctional Services and Ministry of Children and Youth Services Joint Research Committee. The Ministry's Research Committee required a copy of the ethics approval from the University of Alberta with submission of the research project proposal. As identifying information was required for this project (e.g., RNA/CMP and CMRPs), a Court Order to obtain

the youth information was required under s. 119 of the *Youth Criminal Justice Act*. Once the Court Order was granted, it was submitted to the Ministry's Research Committee and a research agreement between the University of Alberta and the Ontario Ministry was signed.

Several steps were taken during this research project to safeguard the identities of the youth whose files were reviewed. Each youth was provided a confidential research ID number that corresponded to the YOTIS number provided by the Ministry. A master list linking the research ID numbers with the YOTIS numbers was maintained in a password protected word document kept on a password protected computer. Only the principal investigator had access to both passwords. The Excel datasets created to hold all the extracted data had no identifying information and only contained the confidential research ID numbers. These data sets were also password protected and kept on a password protected computer.

The results of this study are reported in aggregate form in order to protect the personal identities of the youth whose files were reviewed. Lastly, an electronic copy of the data will be held by the researcher for a period of 10 years post-publication in accordance with CPA guidelines. At all times during the execution of this research, the core principles of ethical behaviour were strictly adhered to by minimizing the risk of harm, ensuring participant privacy and avoiding deceptive practices.

## Chapter Four: Findings

### Research Question One

The first research question of this project sought to examine what information was collected in the RNA/CMP and how closely the information mapped onto the RNR model. Answering this question first required establishing the number of eligible youth files based on the inclusion criteria: youth sentenced for more than 30 days and discharged between the fiscal years of 2011 and 2014. A further sorting of the files was then conducted to determine which remaining files contained both the RNA/CMP and CMRP as required by YJSD policy for all youth sentenced to more than 30 days and thus eligible for this study.

Table 2

#### Overview of Youth File Eligibility

	Number	Percentage
Number of youth discharged during the fiscal years 2011-2014	414	
Youth sentenced to less than 30 days and omitted from sample	30	7.25%
Remaining total	384	92.75%
Number of files with RNA/CMP	142	36.97%
Number of files with CMRP	153	39.84%
Number of files with both an RNA/CMP and CMRP	89	23.17%

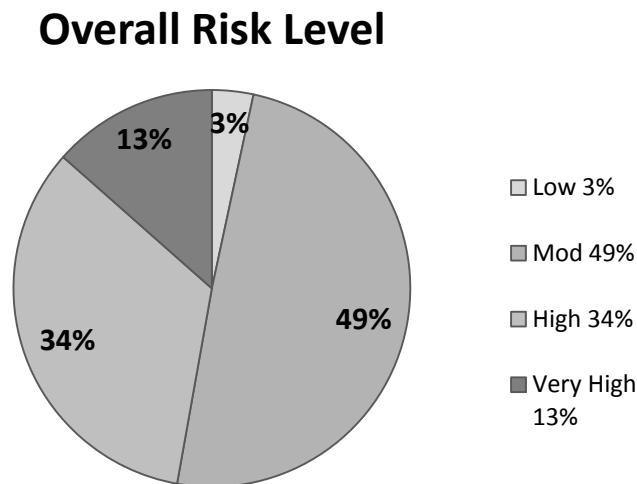
Once it was established that 89 of the 384 files were eligible, information from sections one and two of the RNA/CMP were extracted and analyzed to ensure that all eight criminogenic categories had been completed for each assessment. Next, information from section four of the

assessment was extracted and analyzed to confirm that the overall risk level and corresponding descriptor were assigned. All 89 files were found to contain information in sections one and two of the RNA/CMP assessment thereby demonstrating alignment with the first two principles of the RNR model that requires information related to risk and criminogenic need be gathered for each sentenced youth.

The following figure represents the overall risk level distribution of the 89 study participants which was achieved by tabulating the scores from sections one and two of the RNA/CMP.

Figure 2

#### Overall Risk Level Distribution of the 89 Study Participants



The final step in addressing what information was collected in the RNA/CMP necessitated the gathering of information from section three of the RNA/CMP: *Other Needs / Special Considerations*. Alignment with the third component of the RNR model requires responsivity factors to be documented when identified and / or applicable to the youth. All 89 files in this project identified at least one responsivity factor. The following table represents the frequency of responsivity factors identified in the RNA/CMP.

Table 3

**Frequency of Responsivity Factors Identified in the RNA/CMP**

<b>Responsivity Factor</b>	<b>Percentage</b>	<b>Number of Times Identified</b>
Health problems	12%	11
Physical disability	1%	1
Low intelligence / Developmental delay	13%	12
Learning disability	28%	25
Underachievement	69%	61
Poor problem solving skills	64%	57
Victim of physical / Sexual abuse	27%	24
Victim of neglect	30%	27
Shy / Withdrawn	12%	11
Peers outside age range	27%	24
Depressed	20%	18
Low self-esteem	33%	29
Inappropriate sexual activity	11%	10
Racist / Sexist attitudes	9%	8
Poor social skills	28%	25
Engages in denial	36%	32
Suicide attempts	17%	15
Diagnosis of psychosis	1%	1
Third party threat	6%	5
History of sexual / Physical assault	35%	31
History of assault on authority figures	19%	17
History of weapon use	40%	36
History of fire setting	19%	17
History of escapes	18%	16
Protection issues	19%	17
Adverse living conditions	12%	11
Other	33%	29

### **Research Question Two**

The objective of the second research question was to examine to what extent the information found in sections one through four of the RNA/CMP were incorporated into the case



management plans contained within the assessments. Achieving this understanding first required utilization of the information documented under the seven criminogenic need categories collected for this project. This information was used to assess at what level of need (low, moderate or high) each criminogenic category was identified as falling within. The case management goals were then analyzed to see if the identified criminogenic need had a corresponding goal documented in the case management plan. The results indicated that for those youth whose risk level was high, there was a greater likelihood that identified needs were addressed in the CMP. In terms of needs, those related to education and employment was most frequently addressed in CMP across all levels of risk. See Table 4.

Table 4

**Criminogenic Needs by Risk Level and Corresponding Percentage of Needs Addressed in Case Management Goals of the RNA/CMP**

	Total Identified	Total Addressed	Percentage Identified That Were Addressed	Total Identified	Total Addressed	Percentage Identified That Were Addressed	Total Identified	Total Addressed	Percentage Identified That Were Addressed
Risk Level	Low			Mod			High		
Criminogenic Need									
Family Circumstances / Parenting	18	3	17%	39	7	18%	32	12	38%
Education / Employment	4	3	75%	30	22	73%	55	45	82%
Peer Relations	3	0	0%	40	7	18%	46	8	17%
Substance Abuse	6	0	0%	29	12	41%	54	38	70%
Leisure / Recreation	7	0	0%	18	3	17%	64	18	28%
Personality / Behavior	2	0	0%	55	23	42%	32	17	53%
Attitudes / Orientation	7	0	0%	52	3	6%	30	3	10%

The second step in gathering the data for this research question followed a similar process as outlined above. First, the lists of responsivity factors identified in the assessment were used to search for exact wording matches within each case management goal. If exact wording matches were not found, the abstractors searched each goal to assess if the responsivity factors were considered within the goals without direct reference to the exact wording. Overall, a number of responsivity factors were identified. However, very few of those identified were addressed in the case management plan goals. See Table 5 below.

Table 5

**Responsivity Factors Identified and Corresponding Percentage of Factors Addressed in Goals in CMP**

<b>Responsivity Factors</b>	<b>Total Identified In CMP</b>	<b>Total Addressed In CMP Goals</b>	<b>Percentage Identified That Were Addressed</b>
Health problems	11	0	0%
Physical disability	1	0	0%
Low intelligence / Developmental delay	12	2	17%
Learning disability	25	0	0%
Underachievement	61	0	0%
Poor problem solving skills	57	1	2%
Victim of physical / Sexual abuse	24	0	0%
Victim of neglect	27	1	4%
Shy / Withdrawn	11	0	0%
Peers outside age range	24	1	4%
Depressed	18	0	0%
Low self-esteem	29	0	0%
Inappropriate sexual activity	10	0	0%
Racist / Sexist attitudes	8	0	0%
Poor social skills	25	0	0%

<b>Responsivity Factors</b>	<b>Total Identified In CMP</b>	<b>Total Addressed In CMP Goals</b>	<b>Percentage Identified That Were Addressed</b>
Engages in denial	32	0	0%
Suicide attempts	15	0	0%
Diagnosis of psychosis	1	0	0%
Third party threat	5	0	0%
History of sexual / Physical assault	31	0	0%
History of assault on authority figures	17	0	0%
History of weapon use	36	0	0%
History of fire setting	17	0	0%
History of escapes	16	0	0%
Protection issues	17	0	0%
Adverse living conditions	11	1	9%
Other	29	0	0%
<b>Totals</b>	<b>569</b>	<b>6</b>	

### **Research Question Three**

The information collected to address research questions one and two sought to assess the alignment of information gathered in the RNA/CMP with the RNR model. The objective of the third research question was to take the test of fidelity a step further by assessing how the information garnered in the RNA/CMP was applied to the CMRP created by the facility case management team. Conducting a comparison between the RNA/CMP and the CMRP provided insight into how the RNR information gathered using a structured assessment process where the components of the model were clearly defined, would transfer to a case management plan that does not provide the same level of direction.

The CMRP contains a section where the individual holding the pen on the facility case management team was intended to document the criminogenic needs and responsivity factors

identified in the RNA/CMP. The facility case management team then constructs facility goals that are intended to align with the criminogenic need areas identified in the RNA/CMP. Ideally, all the criminogenic need categories identified, especially those in the high and moderate ranges, should have a corresponding goal in the RNA/CMP that is then transferred to the CMRP document and adjusted to reflect how the goal will be addressed within a secure custody context. The results suggested that Education / Employment was the category addressed most often in both the CMP and CMRP with the other categories showing greater variance. See Table 6 below.

Table 6

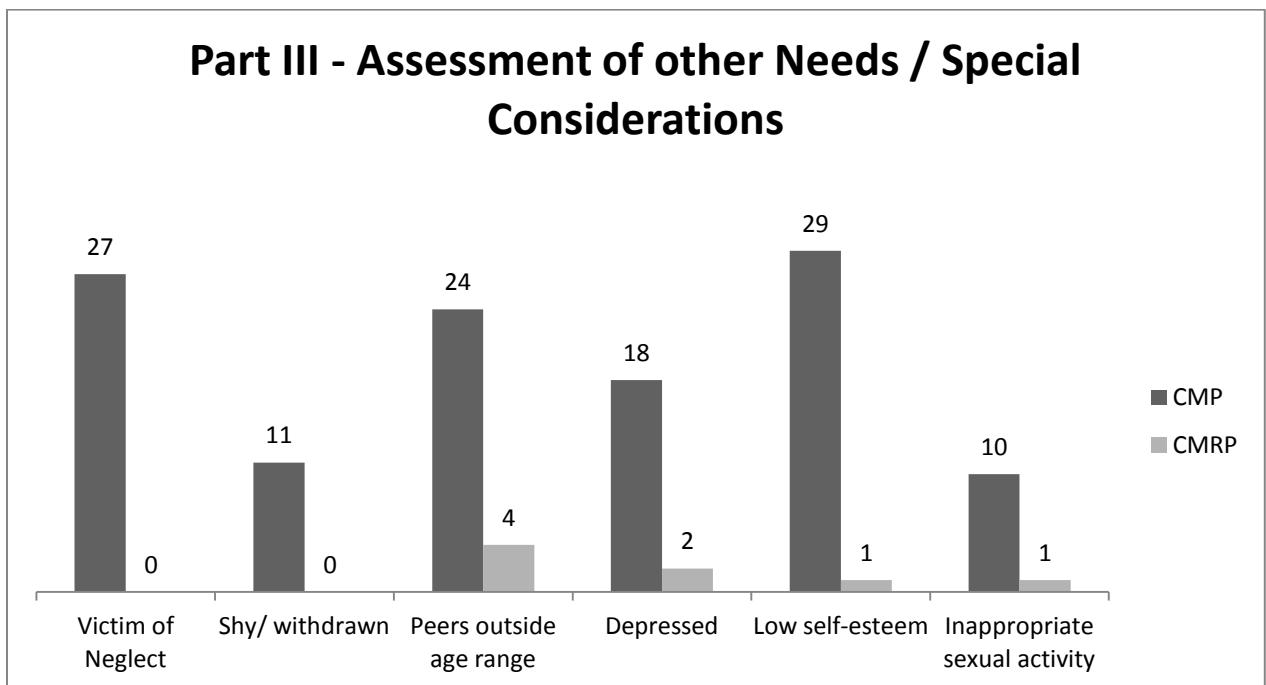
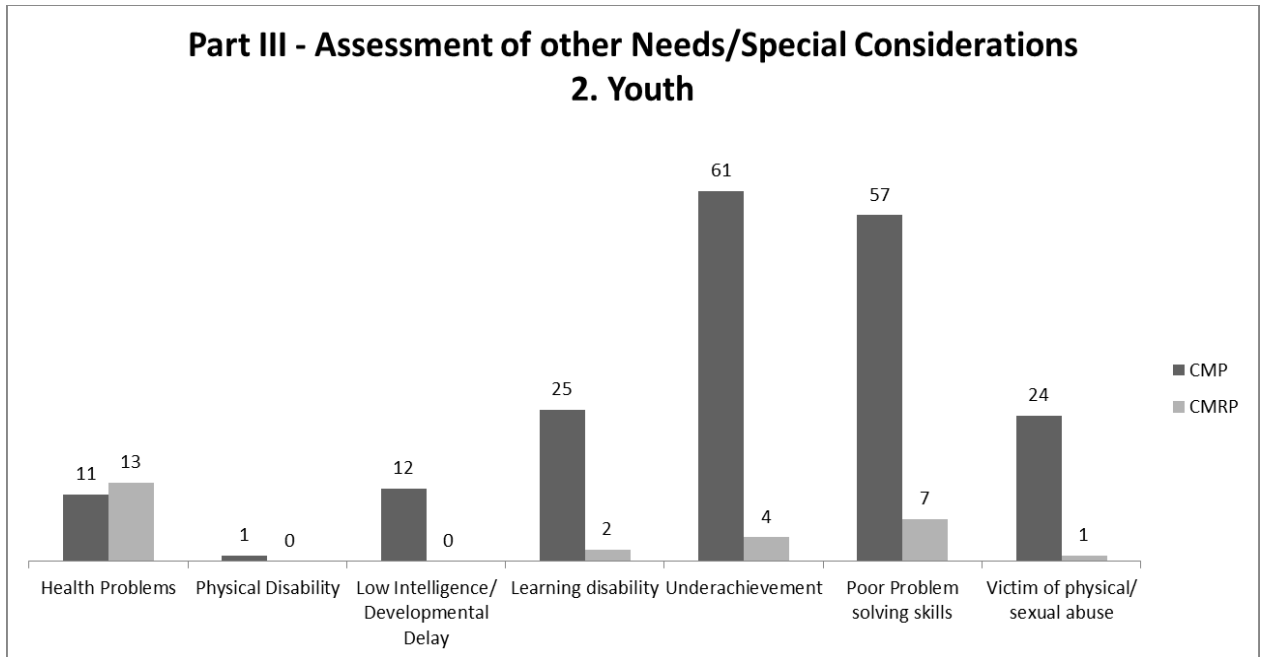
**Total Number of Criminogenic Needs Addressed in the CMP and Total Number of Criminogenic Needs addressed in the CMRP**

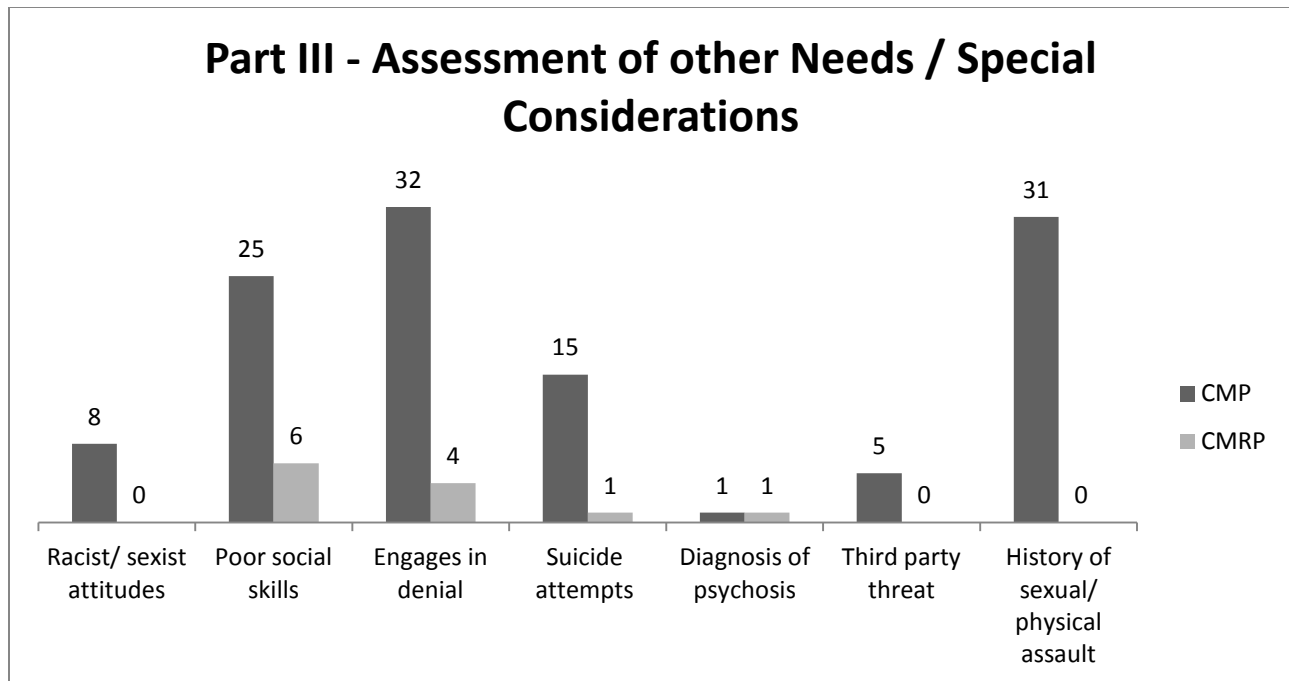
Criminogenic Need	Total Number Addressed in the CMP	Percentage	Total Number Addressed in the CMRP	Percentage
Family Circumstances / Parenting	22	24.71%	37	41.57%
Education / Employment	70	78.65%	81	91.01%
Peer Relations	15	16.85%	20	22.47%
Substance Abuse	50	56.17%	42	47.19%
Leisure Recreation	21	23.59%	20	22.47%
Personality / Behavior	40	44.94%	61	68.53%
Attitudes / Orientation	6	6.74%	27	30.33%

The figure below represents the findings from the second step in the analysis of research question three which was conducted to determine the frequency at which responsivity factors were identified in the RNA/CMP compared to those identified in the CMRP. The results highlight the significantly higher frequency of identification of responsivity factors in the RNA/CMP across all categories with one exception: health related problems.

Figure 3

**Frequency of Responsivity Factors Identified in Case Management Plans versus Case Management Reintegration Plans**





The third step in the data collection process for research question three was determining if the responsivity factors identified in the CMRP were incorporated into the case management goals of the facility case management plan. Overall, very few responsivity factors were identified or utilized in the facility case management plans. See Table 7 below.

Table 7

**Responsivity Factors Identified and Corresponding Percentage of Factors Addressed in Goals in the CMRP**

<b>Responsivity Factors</b>	<b>Total Identified in CMRP</b>	<b>Total Addressed in CMRP Goals</b>	<b>Percentage of Those Identified That Were Addressed</b>
Health problems	13	2	15%
Physical disability	0	0	N/A
Low intelligence / Developmental delay	0	0	N/A
Learning disability	2	2	100%
Underachievement	4	3	75%

<b>Responsivity Factors</b>	<b>Total Identified in CMRP</b>	<b>Total Addressed in CMRP Goals</b>	<b>Percentage of Those Identified That Were Addressed</b>
Poor problem solving skills	7	3	43%
Victim of physical / Sexual abuse	1	0	0%
Victim of neglect	0	0	N/A
Shy / Withdrawn	0	0	N/A
Peers outside age range	4	2	50%
Depressed	2	2	100%
Low self-esteem	1	0	0%
Inappropriate sexual activity	1	0	0%
Racist / Sexist attitudes	0	0	N/A
Poor social skills	6	2	33%
Engages in denial	4	0	0%
Suicide attempts	1	0	0%
Diagnosis of psychosis	1	0	0%
Third party threat	0	0	N/A
History of sexual / Physical assault	0	0	N/A
History of assault on authority figures	0	0	N/A
History of weapon use	0	0	N/A
History of fire setting	0	0	N/A
History of escapes	0	0	N/A
Protection issues	0	1	*
Adverse living conditions	0	2	*
Other	N/A	N/A	N/A
<b>Totals</b>	<b>47</b>	<b>19</b>	

\*CMRP Addressed Responsivity Factors that were not Identified in Section Four (*Identified Needs*) of the CMRP

The final analysis conducted for research question three was to compare how often responsivity factors were identified and addressed in the RNA/CMP versus those identified and addressed in the CMRP. The results suggested that in all categories with the exception of health, more responsivity factors were identified and addressed in the RNA/CMP than in the CMRP document. See Table 8 below.

Table 8

**Responsivity Factors Identified and Corresponding Percentage of Factors Addressed in Goals in CMP and CMRP**

<b>Responsivity Factors</b>	<b>Total Identified in CMP</b>	<b>Total Addressed in CMP Goals</b>	<b>Percentage of Those Identified That Were Addressed</b>	<b>Total Identified in CMRP</b>	<b>Total Addressed in CMRP Goals</b>	<b>Percentage of Those Identified That Were Addressed</b>
Health problems	11	0	0%	13	2	15%
Physical disability	1	0	0%	0	0	N/A
Low intelligence / Developmental delay	12	2	17%	0	0	N/A
Learning disability	25	0	0%	2	2	100%
Underachievement	61	0	0%	4	3	75%
Poor problem solving skills	57	1	2%	7	3	43%
Victim of physical / Sexual abuse	24	0	0%	1	0	0%
Victim of neglect	27	1	4%	0	0	N/A
Shy / Withdrawn	11	0	0%	0	0	N/A
Peers outside age range	24	1	4%	4	2	50%
Depressed	18	0	0%	2	2	100%
Low self-esteem	29	0	0%	1	0	0%
Inappropriate sexual activity	10	0	0%	1	0	0%
Racist /Sexist attitudes	8	0	0%	0	0	N/A
Poor social skills	25	0	0%	6	2	33%



<b>Responsivity Factors</b>	<b>Total Identified in CMP</b>	<b>Total Addressed in CMP Goals</b>	<b>Percentage of Those Identified That Were Addressed</b>	<b>Total Identified in CMRP</b>	<b>Total Addressed in CMRP Goals</b>	<b>Percentage of Those Identified That Were Addressed</b>
Engages in denial	32	0	0%	4	0	0%
Suicide attempts	15	0	0%	1	0	0%
Diagnosis of psychosis	1	0	0%	1	0	0%
Third party threat	5	0	0%	0	0	N/A
History of sexual / Physical assault	31	0	0%	0	0	N/A
History of assault on authority figures	17	0	0%	0	0	N/A
History of weapon use	36	0	0%	0	0	N/A
History of fire setting	17	0	0%	0	0	N/A
History of escapes	16	0	0%	0	0	N/A
Protection issues	17	0	0%	0	1	*
Adverse living conditions	11	1	9%	0	2	*
Other	29	0	0%	N/A	N/A	N/A
<b>Totals</b>	<b>569</b>	<b>6</b>		<b>47</b>	<b>19</b>	

## **Chapter Five: Discussion**

### **Addressing the Research Questions**

One of the benefits of a retrospective chart review is that the researcher is able to extract information and document processes as they were constructed in a real world context. Although the primary focus of this study was an examination of how closely the structural components of the RNR model are adhered to, an analysis of particular elements of the case management process was also undertaken. Specifically, an examination of the number of RNA/CMPs forwarded to the facility from the community probation officer was documented. It was important to explore this information transfer process as it directly impacts youth receiving services, as well as significantly affecting the size of the sample used in this study.

One overarching result emerged from the sampling process. In this study there were 384 youth eligible files based on the study inclusion criteria: youth sentenced to more than 30 days and discharged from a secure custody facility between the fiscal years 2011 and 2014. According to YJSD policy, all 384 youth should have had the RNA/CMP sent to the facility within two days of admission. In actuality, only 142 or 36.97% of the plans were forwarded. If less than 40% of the RNA/CMP documents reached the facility, then more than half of the youth eligible for this study were underserved by probation officers prior to reaching the facility. Without access to the RNA/CMP, facility staff would be left to guess at the risk, need and responsivity factors, as well as case management goals of the youth. Interestingly, there were 153 or 39.84% of youth with a facility case management plan on file suggesting that facility staff did slightly better at providing youth with case management services than probation officers did at forwarding the RNA/CMPs. However, without the RNA/CMP informing facility staff as to what areas of criminogenic need

to target or what responsivity factors to consider it is difficult to tell if what is being constructed in the CMRP will actually improve youth outcomes or lead to reductions in recidivism.

Due to the parameters of this study, the researcher did not access probation officer files and therefore has no way of telling if the RNA/CMPs for the eligible youth were completed by the probation officer and thus available for forwarding to the facility. However, a statement contained within a report from Ontario's Auditor General (2012) noted that upon review "many of the required risk assessments and identified rehabilitation needs were not being documented". This casts suspicion on whether the RNA/CMPs were ever completed. This is of particular concern given that 47% of the youth in this study who met the study criteria scored in the very high or high risk category for re-offence (Table 3). Irrespective of the cause of the missing RNA/CMPs, what is apparent from the findings is that of the 384 eligible youth files 89 or 23.17% of youth had both an RNA/CMP and CMRP completed, indicating that over the four year period included in this study less than 25% of eligible youth received the case management services (RNA/CMP and CMRP) required by YJSD policy. These findings highlight that despite having an organizational policy in place that outlines the necessary steps for successful reintegration, youth were being denied basic service provision and ultimately the opportunity to participate in interventions and / or the services required for rehabilitation when youth moved between the community and the facility.

One obvious solution to issues of information and documentation transfer is to conduct a review of current policy and practice and then add a greater level of accountability and oversight to established processes. Although this is a reasonable response that would likely result in improvements, questions were raised during the first phase of the data cleansing for this project that queried whether broader system factors or pressures were perhaps impacting the case

management process. Since the inception of the *YCJA*, and in alignment with the *What Works* literature, sentencing and serving patterns have shifted the composition of youth justice in Ontario from a predominately custody-based system to a predominately community-based system with 93% of youth serving sentences in the community (MCYS, 2013). Theoretically, under this scenario custody sentences are reserved for those youth who have committed the most severe offences and / or have the highest risk, criminogenic and responsivity needs, therefore requiring the highest “dosage” of intervention (Andrews & Bonta, 2010).

The suggestion that YJSD should invest in a review of current case management practices to identify how to strengthen information and documentation processes to prevent the reoccurrence of results such as those detailed above, would appear to be an immediate necessity. However, it may also be important for future research to explore, both at an individual and at a system level, the impact of the changing composition of detention versus sentenced youth that have resulted from current sentencing practices.

**Research question one.** The contention that precipitated this study suggested that the principles of risk and need had garnered the most attention in both the literature and in practice relegating responsivity to the position of least identified among the three components of the RNR model. Luong and Wormith (2011) supported this position by providing evidence from a study conducted in a probation setting where 80% of the youth plans reviewed had no responsivity factors identified. Contrary to the results noted by Luong and Wormith, Table 3 provided an overview of the frequency of responsivity factors identified in the youth participant files from this study. As previously noted, data was available for extraction from the RNA/CMP for each of the three components of the RNR model on all 89 files. This finding suggests that when presented with the three components of the model within the confines of a structured assessment

tool, the probation officers in Ontario's youth justice system were likely to gather and document information aligning with all three components of the RNR model.

**Research question two.** Gathering and documenting information relating to the components of the RNR model is the essential first step to determining fidelity in this study. However, the necessary next step is to explore the utilization of the information gathered. To answer question two of the research study, results of data collected under the seven criminogenic need categories in the RNA/CMP were analyzed to gather a better understanding as to what percentage of the needs identified were addressed in the case management plans of youth. As Andrews and Bonta (2010) stressed the importance of prioritizing criminogenic needs falling within the high and moderated category, the following discussion will focus on those two areas.

Under the moderate risk level category the criminogenic need titled *Personality / Behaviour* was identified most frequently. This was followed by *Peer Relations, Family Circumstances / Parenting* and *Education / Employment*. In respect to which criminogenic need had the highest number of corresponding case management goals, *Education / Employment* ranked first despite the fact that this need category ranked fourth in identification. *Personality / Behaviour* was addressed the second most often followed by *Substance Abuse*, and then *Family Circumstances / Parenting* and *Peer Relations*.

In the high risk level category the criminogenic need identified most often was *Leisure / Recreation*. This was followed by *Education / Employment*, then *Substance Abuse* and *Peer Relations*. The criminogenic need that was addressed most often in the high risk category was once again *Education / Employment*, followed by *Substance Abuse*, then *Personality / Behaviour* and *Family Circumstances / Parenting*. Interestingly, although *Leisure / Recreation* was

identified 64 times out the 89 files as being the highest criminogenic need area, this category was not one of the top four needs addressed through case management goals.

A study conducted in 2009 by Vieira, Skilling and Peterson-Badali identified the domains of education, employment, family, substance abuse, peer relationships and personality as areas of priority for youth in the justice system. These domains were consistent with the areas identified on the 89 files examined in this project. However, what was also revealed by the findings from this study was the fact that often high and moderate needs were not being addressed through case management goals. In 2012, Ontario's Auditor General raised the same issue reporting that more than half of the files reviewed did not contain goals for at least one of the high criminogenic need categories. A study conducted by Flores, et.al. (2004) surveying correctional staff in Ohio revealed that 43.3% of respondents were found to not be using criminogenic needs identified in a standardized risk assessment tool to formulate case management goals. Luong and Wormith (2011) offered the explanation that underutilization of risk / need information in case management may be driven by "pessimism" among staff in respect to the actual impact that criminogenic needs-based plans have on recidivism. Taxman and Caudy (2015) provided a different explanation suggesting that the complexity of the needs in these categories may be a barrier to the application of the principles in practice.

An additional possibility was arrived at by examining the individual criminogenic need categories addressed most often in this study. Case management goals in youth justice Ontario ideally contain information that is based on the premise of *SMART* goal setting practices: specific, measurable, achievable, relevant, and time-framed (MCYS, 2013). If the case manager is faced with the challenge of writing a goal aligned with the formula outlined above, it may be that the individual simply chooses to write a goal that is more malleable to the process. For

example, the most frequently identified need area in the moderate category in this study was *Personality / Behaviour*, yet *Education / Employment* had the most corresponding goals. Perhaps it is much easier to write a goal that is specific, measurable, achievable, relevant, and time-framed for *Education / Employment* which has more easily defined steps leading to a tangible solution (i.e., enroll / attend school or find a job). This is further supported by the pattern that occurred in the high risk category. Again, the most identified criminogenic category was *Leisure / Recreation*, yet *Education / Employment* had the most corresponding goals.

This perspective is reinforced by findings from a study conducted by Haqanee, Peterson-Badali and Skilling (2015). In this study 29 probation officers in a large city in Ontario were interviewed for the purpose of exploring the rationale behind the reasons for risk assessment results failing to be incorporated into case management goals. Participants of the study noted that education was a relatively straightforward goal to identify, address and monitor the progress of in relation to other areas of need and therefore tended to be incorporated more often into case management plans.

The fact that MCYS has prioritized education in the current and previous Strategic Plan also cannot be ruled out as a factor impacting the choice of prioritizing education and employment in youth justice case management goals (MCYS, 2013). Additional research that focuses on micro-factors such as goal construction and goal choice, as well as macro-factors such as the influence of Ministry Strategic Plans, may help to shed light on this issue.

A similar lens as outlined above was applied to the responsivity component of the RNR model. In this instance the researcher sought to conduct an analysis beyond the mere identification of the responsivity factors documented in the RNA/CMP to examine the application of the information in the case management goals. The most frequently identified

responsivity factor was *Underachievement*. This was followed by *Poor Problem Solving Skills* and then *History of Weapon Use*. A total of 569 responsivity factors were identified across the 89 files. However, only on 6 occasions were any of the responsivity factors represented, either through an exact wording match or by implication, in the case management goals.

A failure to incorporate responsivity factors into case management goals is a concern given that these factors have the potential to impact a youth's success in programming and ultimately re-offence. McGuire (2013) stated that it is vital to identify the individual characteristic that will support success in programming as it is not simply a matter of "changing the methods that have been found to work, rather one of modifying their delivery or presentation to maximize engagement and participation" (p. 32). In practice, a scenario likely to result from not paying heed to responsivity factors is one where a youth is inappropriately matched to a program, as a result fails to successfully complete the program, is then documented as noncompliant, which leads to further charges being laid by the probation officer and / or a higher risk level classification. The fact that study results from this project found that 569 responsivity factors were identified yet addressed only six times reiterates the urgent need to explore this problem further in order to prevent situations like the one described above.

**Research question three.** The third research question in this study sought to take the test of fidelity beyond the confines of the RNA/CMP assessment tool to examine whether or not fidelity to the model would hold up when case planners were not provided with direct links to the components of the model through the structured assessments. Of the seven criminogenic need categories examined in this study, only two of the areas, *Substance Abuse* and *Leisure / Recreation*, had more goals addressed by the RNA/CMP. This finding suggests that, in general, the facility case management team did a better job of operationalizing the criminogenic need



areas into case management goals than the probation officer did when completing the RNA/CMP. This is of interest as the probation officer is a member of the facility case management team and therefore has input into the creation of the facility constructed goals. The probation officer was documented as being present 93.25% of the time at the CMRP meeting.

A number of inferences may be drawn from this finding. First, there is a process referred to as the “silo effect” that is said to occur within large organizations such as the youth justice system in Ontario (Auditor General of Ontario, 2012). This “silo mentality” has been described as “an attitude found in some organizations that occurs when several departments or groups do not want to share information or knowledge with other individuals” (Business Dictionary, 2015).

This effect was highlighted earlier in this paper in respect to the finding that identified the issue of the RNA/CMP not being shared between the probation officer and the facility. It is possible then that although the probation officer authored the original case management goals and was in attendance at the facility meeting, their approach to the facility case management goal construction is “hands off” allowing the facility to dictate what and how goals will be addressed during the youth’s custodial stay resulting in a lack of alignment between the two plans.

In contrast to the “silo effect”, the increase in the areas of criminogenic needs being addressed by the facility may be related to a ‘wraparound approach’ phenomenon (YJSD, Annual Report, 2014). Wraparound is “characterized as a mechanism through which the multifaceted needs of children and youth are matched to integrated services and supports through a team-created individualized plan” (Government of Alberta, 2010, p. 2). The finding identified above may speak to the fact that when a team of individuals come together from across professional disciplines and across the youth justice services continuum, the results are more comprehensive case management goals for youth in respect to the criminogenic need categories.

The second part of the analysis conducted for research question three was the examination of the number of responsivity factors identified in the facility CMRP. Unlike the finding discussed above that revealed a pattern suggesting that the facility case management team addressed more goals for the criminogenic need categories than their probation officer counterparts, the opposite appears to be true with respect to responsivity factors. Findings from the RNA/CMP analysis indicated that probation officers identified a total of 569 responsivity factors across the 89 participant files. Findings from the analysis of CMRP responsivity factors documented a total of 47 responsivity factors. The fact that probation officers are provided with a checklist of responsivity factors in the RNA/CMP, and the facility case management team is required to either transfer the identified factors directly from the RNA/CMP document or extract the information from the RNA/CMP narrative, may explain the significant difference in identification. However, to reiterate what has been stated previously, the probation officer has the opportunity to influence the content of the CMRP document at the facility planning meeting. This finding speaks to a need for further investigation into the forces at work within case management reintegration meetings and their impact on case management planning.

Another finding of interest in respect to the identification of responsivity factors is revealed by conducting an analysis on each of the factors individually. Study results suggested that for each factor, the probation officer identified the factor more frequently than the facility except for *Health Problems* where the facility identified the factor 13 times compared to the 11 times noted by probation officers on the RNA/CMP. Intuitively it makes sense that more healthcare issues would be identified at the facility as each youth is seen by a nurse, nurse practitioner, or a doctor upon admission (YJSD, 2010). What is surprising is that only on two

occasions were additional problems noted at the facility level. Further research may help to determine if the difference is related to identification or documentation practices.

The third part of the analysis for research question three sought to determine how many of the responsivity factors identified in the CMRP were then addressed in the facility case management goals. An analysis of the factors that were both identified and addressed through the CMRP goals indicated that *Learning Disabilities* and *Depression* were addressed 100% of the time, followed by *Underachievement*, *Peers Outside Age Range*, and *Poor Problem Solving Skills*. Much like the situation with onsite healthcare, the facilities also have onsite schooling, onsite or contracted clinical staff (psychologists, social workers and psychiatrists), as well as onsite programming to identify and address issues such as poor problem solving skills. This may account for the difference in the ability of facility staff to address the identified responsivity factors.

The final analysis conducted for research question three was a comparison of how often responsivity factors identified in the RNA/CMP were addressed versus those addressed in the CMRP. Of the 47 responsivity factors identified in the CMRP, 19 of the factors were addressed in the goals. This finding suggests that although the facility case management team did not identify as many responsivity factors, they addressed 40.42% of the factors that were identified in the goals compared to the probation officers who only addressed 1.05% of the identified factors.

Explanations for the absence of individual responsivity factors in case management goals are not readily available in the literature. Taxman and Pattavina (2013) suggested that the current gap in the literature in respect to responsivity should constitute an urgent need among the academic justice community. They point to the fact that previous research, on which the RNR

model was based, purports that high risk offenders benefit from high doses of correctional programming and thus have been sentenced and assigned accordingly. However, their contention is that the current RNR model “does not consider the degree to which individual needs may “trump” criminal justice risk factors, the relevance of non-criminogenic factors such as mental illness and housing stability that may affect success in the community, and key demographic key factors (such as age and gender) that affect offending patterns” (p.vi).

Adding to this discussion, Peterson-Badali, McCormick, Vitopoulos, Davis, Haqanee and Skilling (2015) noted that approximately 90% of justice-involved youth meet the criteria for at least one mental health disorder and that under the RNR model mental health is subsumed within the principle of responsivity. If probation officers and facility staff are not identifying or utilizing responsivity information then not only do they run the risk of setting youth up for failure in respect to programming, but they may be neglecting the need for serious mental health intervention.

Much of the current research has addressed the topic of responsivity as an afterthought by simply reminding case managers to take into account the principles of general and specific responsivity after identifying and addressing the criminogenic needs and risk factors of the offender (Taxman & Pattavina, 2013). Andrews and Bonta (2010) appear to have done little to rectify this practice. In fact, they may have added to the problem by relegating the principle of specific responsivity to a one page nod in the summary and conclusions section of their seminal works prefaced with the statement, “we have not developed the principle of specific responsivity to any serious degree” (p. 507). The passage that follows is also void of any direction to students, case managers or practitioners as to how to operationalize the concept in program assignment or goal setting. This is congruent with the results found in this study which highlighted the minimal

importance currently given in case management goals by probation officers and facility staff in respect to specific responsivity factors.

### **Answering the Question of Fidelity**

The results of this study pointed to a number of areas where a failure of application of the RNR model has occurred in the context of youth justice in Ontario. Specifically, the results suggest that despite the ability of probation officers to identify and document information gathered under the three components of the RNR model, the application of the information continues to be a struggle. Facility staff in the direct operated sites proved slightly better at making use of the identified needs in the criminogenic categories, but fell short when it came to both the identification and utilization of responsivity factors. The findings seem to concur with the contention made by researchers that posited that the responsivity principle is indeed the most underutilized of the three principles when it comes to real world implementation of the model (Craig, Dixon & Gannon, 2014).

Analysis of the data collected for this study also pointed to issues with information sharing between the probation officers and their facility counterparts on the front end of the case management process as evidenced by the lack of RNA/CMPs provided to the facility. Current youth justice case management policy directs the probation officer to attend the CMRP meeting providing a second opportunity for the probation officer to forward and then align the information from the RNA/CMP with what is input into the CMRP document. Study results reported that the presence of the probation officer at the CMRP meeting appeared to have had a positive impact on the number of facility case management goals created to address the criminogenic need categories, but did not increase the number of responsivity factors identified or utilized. Goggin and Gendreau (2006) offered support to frontline staff struggling with the

ongoing issues surrounding responsivity by indicating that “it does not follow that it is the least important, but perhaps the hardest to implement” (p. 221).

In an effort to provide a complete analysis of the issue of fidelity to the RNR model, it is important to consider that what may at first appear as a failure in application may in fact be difficulty with translation of the theoretical knowledge to practice. Polaschek (2012) stated that “regardless of how clearly or carefully a theory is presented, there is always potential for important aspects of it to be lost in translation” (p. 9). Accepting this point is significant as it shifts the responsibility for the breakdown in application of the model away from the case manager and correctional system, as well as away from the notion of an inherent flaw in the model, back toward the proponents of the model.

Andrews, et al. (2011) have continued to refine and evolve the principles of RNR since first publishing the model in the early 1990s. Additionally, a concerted effort to move towards presenting the language and content in a way that it is more accessible to a wider audience by toning down the technical aspects of the supporting research appears to have been made over the previous decade. However, as the principles were teased apart in order to offer a more fulsome explanation, dearth seems to have been replaced by volume (a total of 18 RNR principles are now in existence). Polaschek (2012) cautioned that a consequence of volume may be that the current generation of policy-makers or therapists will not undertake a reading of the relevant materials resulting in a superficial or inaccurate understanding of the model leading to an eventual breakdown occurring between translation and practice. Added to this is the continued absence of direction with respect to clarifying and operationalizing the principle of responsivity.

McGrew, et.al. (1994) stated that fidelity in the context of justice systems refers to determining how well the RNR model has been implemented to “assess conformity with

prescribed elements and non-prescribed elements of the model (p. 316). Findings from the examination of the 89 participant files in this study suggest that fidelity to the RNR model in the ‘real world’ context is difficult to achieve regardless of whether adherence to the model components is guided by the use of a structured assessment instrument or applied through rote knowledge. Based on the information gleaned from this study it would appear that Youth Justice Ontario appears to struggle with RNR fidelity in their case management processes. However, difficulties noted in the literature such as theoretical translation issues and the historical place of primacy given to the risk and need principles suggest that the blame for a lack of fidelity to the RNR model is likely attributable to more than one culprit.

### **Limitations**

Like all studies, this study has a number of limitations that require consideration. First, this study was limited to male youth serving secure sentences of more than 30 days in directly operated secure facilities in Ontario, Canada, between the fiscal years of 2011 and 2014. As such, the generalizability to other geographical locations, youth not serving secure sentences, and female or adult offender populations is limited. Secondly, the parameters of the study were restricted to measuring the fidelity of the direct operated secure custody context to the RNR model and may not be reflective of an open custody or community setting. The study parameters also account for the lack of descriptive or demographic information included in the findings and discussion, as well as for the results being reported aggregately as opposed to reporting at an individual level. Third, the study was conducted using a retrospective chart review format. This format, although providing a glimpse into the “real world” workings of the direct operated secure facilities in Ontario, reflects a snapshot of a specific period of time and as such does not

represent changes which may have occurred outside of the research study time period or that may have occurred in recent YJSD practices.

One of the major limitations of the chart review process is that the data contained within the charts was originally constructed and recorded for a purpose other than research. As a result, the researcher is restricted to whatever data is available, regardless of the quantity or quality, to answer the research questions. In respect to this research project, an original sample of 384 was reduced to 89 eligible files during the data cleansing phase. This reduction in file eligibility occurred before any analysis of the chart information took place resulting in reduced generalizability based solely on sample size despite the fact that the original sample was of the entire population during the relevant time period examined. Lastly, it should also be noted that the researcher was a registered psychologist and a Youth Justice employee at the time of writing. Although it is not possible for any researcher to remove themselves completely from their frame of reference when conducting research, those reading these results or wishing to replicate this study should be aware of the above mentioned circumstances of the researcher.

### **Future Research**

This study was focused on an examination of fidelity to the RNR model in the Ontario youth justice system using a retrospective chart review process. Fowler (2009) indicated that this method of research is typically selected in order to make inferences about possible relationships and to gather preliminary data to support further research and experimentation. The findings of this study allowed the researcher to draw inferences based on the patterns that emerged. Further increasing our understanding of RNR fidelity would benefit by exploring the impact of areas such as sentencing patterns, macro-system level policy and practices, as well as examining micro factors such as goal setting and knowledge translation issues. To gain a deeper understanding of



why the principle of responsiveness continues to present challenges to frontline staff more research must be undertaken. Areas for future consideration might include examining levels of staff knowledge of responsiveness related terms, evaluating how responsiveness is incorporated into training for justice staff, conducting an analysis of current responsiveness information collection, documentation and application processes, and finding ways to demonstrate the importance of the responsiveness principle in order to elevate the principle's status within the RNR model.

## Chapter Six: Concluding Thoughts

This study set out to test fidelity to the RNR model in the direct operated youth justice system in Ontario, as well as to examine the contention that the principle of responsivity is the least understood and therefore least utilized component of the model. To achieve this understanding three research questions were explored. The first research question looked at what information was collected in the RNA and how closely this information mapped onto the RNR model. The second question assessed to what extent the information from the RNA was incorporated into the case management plans of youth. The third question examined how the collected information from both the RNA/CMP informed the case management plan within the facility.

The key findings from this study suggested that fidelity to the RNR model can be achieved by case managers, in respect to the identification of information that aligns with each of the three principles, when provided with an outline of the model within the confines of a structured assessment tool. However, operationalization of the information into case management goals proved to be less successful. This finding is more poignant when it comes to responsivity. Results of this study indicated that although responsivity factors can be identified when probation officers were provided with a checklist included in the assessment instrument, the utilization of those factors was almost nonexistent in the case management goals. The results became direr when the use of a checklist was not provided. In this instance, neither identification nor utilization of responsivity factors occurred.

What I have learned from the results of this project is that it is too simplistic to reduce the blame for a lack of fidelity to the RNR model to any singular source. If improved outcomes for youth and reductions in re-offence are the goal, then Youth Justice in Ontario must commit to

closing information and documentation gaps, providing ongoing training for staff, and increasing accountability and monitoring practices. However, the authors of the RNR model also need to heed critics calls to adequately and clearly translate the model components in general, and the principle of responsivity specifically, as well as providing frontline correctional staff with clear direction on how to utilize the concepts in practice.

On a final note, I want to commend the Youth Justice system in Ontario for being open to inviting researchers into the system for the purpose of identifying areas requiring improvement. This willingness speaks to a commitment by the Ministry to continuous system improvement and ultimately better outcomes for youth. An unexpected result of this project was brought to the attention of the researcher through the opportunity to read multi-jurisdictional justice research. What became clear was that although there is room for improvement in Canadian correctional services in general, including Ontario's youth justice system, all of the pieces needed for successful reintegration and reductions in re-offence are available. This is in contrast to many jurisdictions that are in the preliminary stages of implementing the RNR model in any meaningful way. With a continued desire and commitment to change I firmly believe that Ontario Youth Justice is well on the way to becoming an exemplar of RNR model fidelity.

## References

- Allison, J.J., Wall, T.C., Spettell, C.M., Calhoun, J., Fargason, C.A., Kobylinski, R.W., Farmer, R. W., & Kiefe, C. (2000). The art and science of chart review. *Journal of Quality Improvement, 26(3)*, 115-136.
- Andrews, D. A., & Bonta, J. (2006). *The Psychology of Criminal Conduct* (4<sup>th</sup> ed.). New Providence, NJ: Matthew Bender & Company, Inc.
- Andrews, D.A., & Bonta, J. (2007). *Risk-Need-Responsivity of Offender Assessment and Rehabilitation*. Correctional Service of Canada.
- Andrews, D. A., & Bonta, J. (2010). *The Psychology of Criminal Conduct* (5<sup>th</sup> ed.). New Providence, NJ: Matthew Bender & Company, Inc.
- Andrews, D.A., Hoge, R.D., & Leschied, A. (1992). *A review of the profile, classification, and treatment literature with young offenders: A Social and Psychological Analysis*. Toronto, Ministry of Community and Social Services.
- Burgess, R.L., & Akers, R. L. (1966). *A differential association-reinforcement theory of criminal behavior*. *Social Problems, 14(2)*, 128-147.
- BusinessDictionary (2015). Definition of 'Silo Mentality'. Retrieved from <http://www.businessdictionary.com/definition/silo-mentality.html>.
- Chen, H. (1990). *Theory-driven Evaluations*. Thousand Oaks, CA: Sage Publications.
- Craig, L.A., Dixon, L., & Gannon, T. (Ed.). (2014). *What Works in Offender Rehabilitation: An Evidence-based Approach to Assessment and Treatment*. West Sussex, UK: Wiley-Blackwell.
- Creswell, J. (2005). *Educational research: Planning, conducting and evaluating quantitative and qualitative research* (2nd ed.). Pearson Education Ltd.

- Fitzgerald, C.S. (2011). Historical Theories of Crime and Delinquency. *Journal of Human Behavior in the Social Environment, 21*, 297-311.
- Flores, A.W., Lowenkamp, C.T., Holisinger, A.M. & Latessa, E.J. (2006). "Predicting Outcome with the Level of Service Inventory-Revised: The Importance of Implementation Integrity." *Journal of Criminal Justice, 34*, 523-529.
- Fowler, F.J. (2009). *Survey Research Methods*. (4<sup>th</sup> ed.). Sage Publications, Inc.
- Gearing, R. E., Mian, I.A., Barber, J., & Ickowicz, A. (2006). A Methodology for Conducting Retrospective Chart Review Research in Child and Adolescent Psychiatry. *Journal of Canadian Child and Adolescent Psychiatry, 15*(3), 126-134.
- Gendreau, P., Andrews, D.A., Goggin, C., & Chanteloupe, F. (1992). *The Development of Clinical and Policy Guidelines for the Prediction of Criminal Behavior in Criminal Justice Settings*. Unpublished manuscript available from the Department of Psychology, University of New Brunswick, St. John, New Brunswick.
- Gendreau, P., Goggin, C., French, S., & Smith, P. (2006). "Practicing Psychology in Correctional Settings." In I.B. Weiner & A.K. Hess (Eds.), *The Handbook of Forensic Psychology, 3<sup>rd</sup> ed.* (pp. 722-750). Hoboken, NJ: Wiley.
- Goggin, C., & Gendreau, P. (2006). The implementation and maintenance of quality services in offender rehabilitation programs. In C.R. Hollin & E.J. Palmer (Eds.), *Offending Behavior Programmes: Development, application, and controversies* (pp. 209-246). Chichester, UK: John Wiley & Sons.
- Gossner, D., & Wormith, J.S. (2007). The Prediction of Recidivism Among Young Offenders in Saskatchewan. *The Canadian Journal of Police and Security Services, 5*, 1-13.

- Government of Alberta. (2010). Integrated Supports for Children, Youth and Families: A Literature Review of the Wraparound Process. Retrieved from [http:// www.cup.ualberta.ca/wp.../Wraparound-Research-Summary-2010.pdf](http://www.cup.ualberta.ca/wp.../Wraparound-Research-Summary-2010.pdf).
- Haquanee, Z., Peterson-Badali, M., & Skilling, T. (2015). Making ‘What Works’ Work : Experiences Addressing the Criminogenic Needs of Juvenile Offenders. *Journal of Offender Rehabilitation, 1*, 37-59.
- Hoge, R., Andrew, D. A., & Leschied, A. (2008). Ministry of Children and Youth Services Risk/Need Assessment Scoring Guide. *Ministry of Children and Youth Services*, 1-26.
- Kelly, J.A., Heckman, T.G, Stevenson, L.Y., & Williams, P.N. (2000). Transfer of research-based HIV prevention interventions to community service providers : *Fidelity and adaptation. AIDS Education and Prevention, 12*, 87-98.
- Latessa, E., Listwan, S., & Koetzle. (2014). *What Works (and Doesn't) in Reducing Recidivism*. Waltham, MA: Anderson Publishing.
- Lilly, R. J., Cullen, F.T., & Ball, R.A. (2001). *Criminological Theory: Context and Consequences* (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage.
- Lipsey, M. (1999). “Can Rehabilitative Programs Reduce the Recidivism of Juvenile Offenders? An Inquiry into the Effectiveness of Practical Programs.” *Virginia Journal of Social Policy and the Law, 6*, 611-641.
- Lipsey, M., Howell, J.C., Kelly, M.R., Chapman, G., & Carver, D. (2010). *Improving the Effectiveness of Juvenile Justice Programs: A New Perspective on Evidence-based Practice*. Center for Juvenile Justice Reform, Georgetown University, Washington, DC.
- Lowenkamp, C.T., Latessa, E.J., & Smith, P. (2006). “Does Correctional Program Quality Really Matter? The Impact of Adhering to the Principles of Effective Interventions”. *Criminology and Public Policy, 5*, 575-594.

- Luong, D. (2007). *Risk Assessment and Community Management: The Relationship Between Implementation Quality and Recidivism*. Master's Dissertation, Department of Psychology, University of Saskatchewan, Saskatoon, Saskatchewan.
- Luong, D. & Wormith, J.S. (2011). Applying risk/need assessment to probation practice and its impact on the recidivism of young offenders. *Criminal Justice and Behavior*, 38, 1177-1199.
- Marshall, W. L., Marshall, L.E., Serran, G.A, & O'Brien, M.D. (2011). *Rehabilitating sexual offenders: A strengths-based approach*. Washington, DC: American Psychological Association.
- McGrew, J.H., Bond, G.R., Dietzen, L., & Salyers, M. (1994). Measuring the fidelity of implementation of a mental health program model. *Journal of Consulting and Clinical Psychology*, 62, 670-678.
- McGuire, J. (2013). 'What Works' to reduce Re-offending 18 Years On. In L. Craig, L. Dixon., & T. Gannon. (eds.). *What Works in Offender Rehabilitation: An Evidence-Based Approach to Assessment and Treatment*. (pp. 20-49). Maldan: MA. Wiley-Blackwell.
- Ministry of Children and Youth Services. (2013). Results-based Plan Briefing Book. Retrieved from [http://www.children.gov.on.ca/htdocs/English/about/Results\\_2011-2012.aspx](http://www.children.gov.on.ca/htdocs/English/about/Results_2011-2012.aspx).
- Moore, M. (2011). Psychological Theories of Crime and Delinquency. *Journal of Human Behavior in the Social Environment*, 21, 226-239.
- Mowbray, C., Holter, M., Teague, G., & Bybee, D. (2003). Fidelity Criteria: Development, Measurement, and Validation. *American Journal of Evaluation*, 24(3), 315-340.

- Nee, C., Ellis, T., Morris, P., & Wilson, A. (2012). Addressing Criminality in Childhood: Is Responsivity the Central Issue? *International Journal of Offender Therapy and Comparative Criminology*, *XX*, 1-27.
- Office of the Auditor General of Ontario. (2012). Annual Report: Section 3.31: Youth Justice Services Program. Retrieved from [http://www.auditor.on.ca/en/reports\\_2012\\_en.htm](http://www.auditor.on.ca/en/reports_2012_en.htm).
- Peterson, Badali, M., McCormick, S., Vitopoulos, N., Davis, K., Haqanee, Z., & Skilling, T. (2015). Mental Health in the Context of Canada's Youth Justice System. *Canadian Criminal Law Review*, *5*, 4-12.
- Polaschek, D. (2011). Many sizes fit all: A preliminary framework for conceptualizing the development and provision of cognitive-behavioral rehabilitation programs for offenders. *Aggression and Violence Behavior*, *16*, 20-25.
- Sarre, R. (1999). *Beyond "What Works?" A 25 Year Jubilee Retrospective of Robert Martinson*. Paper presented at the History of Crime, Policing and Punishment Conference. Charles Stuart University, Canberra, Australia.
- Shichor, D. (1997). Three strikes as a public policy: The convergence of the new penology and the McDonaldization of punishment. *Crime and Delinquency*, *43*, 470-492.
- Siegel, L.J., Welsh, B.C., & Senna, J.J. (2006). *Juvenile delinquency: Theory, practice and law*. Belmont, CA: Thomson/Wadsworth.
- Skinner, B.F. (1963). Operant behavior. *American Psychologist*, *18*(8), 503-515.
- Shoemaker, D.J. (2005). *Theories of Delinquency: An examination of explanations of delinquent behavior*. New York, NY: Oxford University Press.



- Tanasichuk, C., & Wormith, S.J. (2009). *The Predicative Validity of the Level of Service Inventory-Ontario Revision (LSI-OR) with Aboriginal Offenders*. Paper presented at the Annual Meeting of the Canadian Psychological Association, Montreal Quebec.
- Taxman, F., & Caudy, M. (2015). Risk Tells Us Who, But Not What or How: Empirical Assessment of the Complexity of Criminogenic Needs to Inform Correctional Programming. *Criminology and Public Policy*, 14, 71-103.
- Taxman, F., & Pattavina, (2013). *Simulation Strategies to Reduce Recidivism: Risk Need Responsivity (RNR) Modeling for the Criminal Justice System*. New York, NY: Springer.
- Trochim, W., & Donnelly, J. (2008). *The Research Methods Knowledge Base (3<sup>rd</sup> ed.)*. Mason, OH: Atomic Dog, a part of Cengage Learning.
- Vieira, T.A., Skilling, T.A., & Peterson-Badali, M. (2009). Matching court-ordered services with treatment needs predicting treatment success with young offenders. *Criminal Justice and Behavior*, 36, 385-401.
- Vitopoulos, N.A., Peterson-Badali, M., & Skilling, T. (2012). The Relationship Between Matching Service to Criminogenic Need and Recidivism in Male and Female Youth: Examining the RNR Principles in Practice. *Criminal Justice and Behavior*, 39, 1026-1040.
- Wolfgang, M.E. (1979). Real and Perceived Changes of Crime and Punishment. In S.F. Landau & L. Sebba (Eds.), *Criminology in Perspective: Essays in honor of Israel Drapkin* (pp. 27-38). Lexington, MA: Lexington Books.
- Wright, D.B., & Schwartz, S.L. (2010). Conformity effects in memory for action. *Memory and Cognition*, 38, 1077-1086.

6, P., & Bellamy, C. (2012). *Principles of Methodology: Research Design in the Social Sciences*. Thousand Oaks, CA: Sage.

Youth Justice Services Division (2010). *Youth Justice Services Division Policy Manual*. Ministry of Children and Youth Services, Government of Ontario, Ontario, Canada.

Youth Justice Services Division (2014). *Stepping Up: A Strategic Framework to Help Ontario's Youth Succeed Annual Report*. Ministry of Children and Youth Services, Government of Ontario, Ontario, Canada.