

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

# PREDICTING OFFENDING WITHIN THE NEW ZEALAND YOUTH JUSTICE SYSTEM

Evaluating Measures of Risk, Need, and Psychopathy

Nicholas Patrick Mooney

A thesis submitted in partial fulfilment of the requirements  
for the degree of

Doctor of Clinical Psychology



Massey University  
Wellington, New Zealand

2010



# EXECUTIVE SUMMARY

Youth offending in New Zealand is an often touted problem. The reality is that, although many young people break the law as part of normal adolescent behaviour, the number of youth committing antisocial acts has decreased over the past decade. There is however one exception. The number of young people who exhibit patterns of persistent, chronic and violent offending behaviour is increasing. Recent theoretical approaches have attempted to conceptualise these complex young people by considering the numerous interacting causal factors associated with their offending. These models can inform appropriate assessment, treatment, and prevention strategies. To date, social learning models incorporating risk and need factors have been the best supported. However, new developmental approaches have also been applied, including the downward extension of psychopathy: an adult personality disorder associated with recidivistic offending and treatment non-compliance. Based on these theories, promising new actuarial risk assessment measures have been developed. These measures are being increasingly employed by youth justice systems internationally as a means of identifying and case managing persistent and serious offenders. However, these measures are not widely used in New Zealand, and virtually none have been empirically examined with New Zealand youth. This gap in evidence-based practice is perplexing given the international recognition and respect afforded to New Zealand's youth justice system. The current study therefore sets a number of objectives. Firstly, it aimed to identify a profile of youth offenders across the New Zealand youth justice system by providing data on demographics, offending behaviours, education/ employment status, and mental health using the Massachusetts Youth Screening Inventory - 2 (MAYSI-2). Secondly, the study evaluated

## EXECUTIVE SUMMARY

the predictive validity of three assessment measures of youth offending. These measures were the Youth Level of Service/ Case Management Inventory (YLS/CMI), the Youth Psychopathic Traits Inventory (YPI), and the Inventory of Callous/ Unemotional Traits (ICU). Finally, the study explored the utility of these measures within a restorative justice system whereby limited resources could be matched to those most at risk of re-offending.

Using a prospective study design, two samples aged between 14 and 17 were selected. These samples represented youth offenders at two opposing ends of the youth justice system. The “Diversion” sample initially consisted of 70 youth offenders whose matters had been diverted by Police Youth Aid Officers in Counties-Manukau. All measures were administered during a 90-minute initial assessment phase. After 6-months, 63 (90%) were followed up to complete a self-report measure of offending behaviour committed since the first assessment. The “Clinical” sample initially consisted of 59 youth offenders who had been referred for a psychological assessment by a Youth Court within the Auckland region. The YLS/CMI was part of the assessment process. A total of 44 (75%) of the clinical participants were followed up after six-months. All measures, including the self-reported offending measure, were administered to this cohort.

Male gender, Māori ethnicity, and previous police contact were overrepresented within both samples. Approximately 40% of participants from both samples were either not attending school or were unemployed. Theft and dishonesty index offences were the most prevalent for both samples, however nearly 60% of the clinical sample was charged with a violent offence. The MAYSI-2 mental health screen revealed that approximately half of both samples scored on the Caution range or above for Alcohol/ Drug Use, while over 30% of both samples reported difficulties with Anger and Irritability. Over 60% of the Clinical sample received a

## EXECUTIVE SUMMARY

formal clinical diagnosis, with conduct disorder and substance use disorders being the most prevalent. The two samples were merged to describe the results of the assessment measures. The YLS/CMI total produced fair internal consistency ( $\alpha = .79$ ). Total scores from the Clinical sample were significantly higher than the Diversion sample. Internal consistency was excellent for the YPI ( $\alpha = .92$ ) and fair for the ICU ( $\alpha = .77$ ). There were no significant differences in scoring between the two samples on these psychopathy measures. All three risk measures correlated with each other; while the re-test reliability of the YLS/CMI was significant (.79). Māori ethnicity was associated with higher total scores on the YLS/CMI and the YPI. Māori youth were also more likely to come into police contact during the six-month follow-up period. Medium to large associations were found between the three risk assessment measures and the seriousness of self-reported offences, contact with police, and contact with the youth court. Binary logistic regression, multiple regression, and Receiver Operator Curve (ROC) analyses confirmed the overall predictive validity of three measures, however the YLS/CMI total score was superior to the psychopathy screening measures across all analyses. Finally, results show that many participants who scored highly on the YLS/CMI received a higher level of intervention service during the follow-up period. However, a similar number of high risk youth received little or no services.

It was concluded that the YLS/CMI, the YPI, and the ICU have a high level of predictive validity over a short time frame. These findings have direct implications for assessment, prevention, and intervention practices. However, it is argued that new assessment measures relevant to both restorative justice practices and New Zealand's youth offenders be developed that compensate for the limitations of these generic international measures. Overall, this research has been successful in adding to the accumulating literature on youth offender risk assessment, as well as the conceptualisation of psychopathic traits within youth.

# ACKNOWLEDGEMENTS

I wish to express my sincerest gratitude to the young people and families who participated in this study. This research could not have been undertaken without your trust, willingness, and consideration of the other youth throughout New Zealand for whom you have represented.

I would like to thank my primary supervisor Professor Ian Evans. His insight, suggestions and support were invaluable contributions to the completion of this thesis. I would also like to thank my second supervisor, Dr Nick Wilson, whose expert knowledge and advice during this process was immeasurable. In addition, I would like to thank Professor Janet Leathem for her efforts to guide and encourage me throughout the clinical training programme.

I would like to acknowledge Linda Gow, Andrew Malone and all clinicians at the Regional Youth Forensic Services for their time, assistance and trust. My regards also go to Judge Tony Fitzgerald for allowing me access to the Intensive Monitoring Group. I would like to express my appreciation to all Counties Manukau police youth aid officers who assisted with this study. I am especially grateful to Senior Sergeant Mike Fulcher, Julee Browning and David Scott of the New Zealand Police for their assistance and endorsement of this project.

I would like to make mention of a number of people who offered support of various forms while I undertook my clinical training. Thank you to Carole Bennenbroek and the Otara youth justice team, Lucy Gilderslieve, Shannon Wetere, Emily Cooney, Sarah Schnellenberg, Barbara Manighetti, Rachel Kan, the Tory Street community team, as well as my Massey peers and teachers. Finally, I am especially grateful to my parents and my family. Their unwavering encouragement and understanding continues to inspire me to realise my goals.

# TABLE OF CONTENTS

Executive Summary.....	ii
Acknowledgements.....	v
Table of Contents.....	vi
List of Tables.....	viii
List of Figures.....	x
List of Appendices.....	xi
Preface.....	xii

## CHAPTER ONE

Introduction.....	1
A PROFILE OF YOUTH OFFENDING IN NEW ZEALAND.....	2
THE DEVELOPMENT OF YOUTH OFFENDING.....	12
THE ASSESSMENT OF YOUTH OFFENDING.....	27
THE NEW ZEALAND YOUTH JUSTICE SYSTEM.....	51
OBJECTIVES OF THE STUDY.....	61

## CHAPTER TWO

Method.....	62
RESEARCH PARTICIPANTS.....	63
MEASURES.....	67
PROCEDURE.....	75



## TABLE OF CONTENTS

### CHAPTER THREE

Results.....	85
THE PROFILE OF YOUTH OFFENDERS IN THIS STUDY.....	86
DESCRIPTIVE STATISTICS OF THE RISK ASSESSMENT MEASURES.....	90
CONVERGENT VALIDITY OF THE RISK ASSESSMENT MEASURES.....	100
THE SELF-REPORTED OFFENDING SURVEY.....	104
ASSOCIATIONS BETWEEN THE RISK ASSESSMENT MEASURES AND THE SELF-REPORTED OFFENDING SURVEY.....	108
PREDICTING SELF-REPORTED OFFENDING.....	111
MATCHING RISK LEVEL WITH INTERVENTION SERVICES.....	124

### CHAPTER FOUR

Discussion.....	127
PRIMARY FINDINGS OF THE RESEARCH.....	128
IMPLICATIONS OF THE RESEARCH FINDINGS.....	140
LIMITATIONS OF THE RESEARCH.....	146
CONCLUSIONS AND FUTURE DIRECTIONS.....	149
Postscript.....	152
References.....	154
Appendices.....	179

# LIST OF TABLES

## TABLE

1.	Description and Purpose of the Measures.....	67
2.	Initial Assessment Demographic Statistics for the Diversion and Clinical Samples.....	87
3.	Index Offending Characteristics for the Diversion and the Clinical Samples.....	88
4.	Mental Health Descriptive Statistics Identified in the Clinical Sample.....	89
5.	Descriptive Statistics and <i>T</i> Test Scores of the YLS/CMI for the Diversion and the Clinical Sample during Phase One of the Study.....	91
6.	Descriptive Statistics and Paired Sample <i>T</i> Test Results for the YLS/CMI Clinical Sample Phase One and Phase Two.....	93
7.	Descriptive Statistics for the YPI for the Diversion ( <i>N</i> = 70) and Clinical Follow-Up ( <i>N</i> = 44) Samples.....	95
8.	Descriptive Statistics and <i>T</i> Test Result of the ICU for the Diversion ( <i>N</i> = 70) and Clinical Follow-Up ( <i>N</i> = 44) Samples.....	96
9.	Percentage Rates of Scoring Levels across the MAYSI-II Domains for the Diversion (Initial Assessment/ Phase One) and Clinical (Follow-Up/ Phase Two).....	98
10.	Pearson Product-Moment Correlations between the YLS/CMI, the YPI and the ICU for the Diversion Sample ( <i>N</i> = 70).....	100
11.	Pearson Product-Moment Correlations between the YLS/CMI, the YPI and the ICU for the Clinical Sample ( <i>N</i> = 44).....	101
12.	Point-Biserial Pearson Product-Moment Correlations between the Three Risk Assessment Measures and Selected Descriptive Statistics for the Diversion Sample.....	102
13.	Point-Biserial Pearson Product-Moment Correlations between the Three Risk Assessment Measures and Selected Descriptive Statistics for the Clinical Sample.....	102
14.	Descriptive Statistics from Part One of the Self-Reported Offending Survey (SROS) Self-Reported Offending.....	105

## LIST OF TABLES

15.	Percentage Rates of Self-Reported Offending Survey Categories.....	106
16.	Descriptive Statistics for Self-Reported Seriousness of Offending Scores (SROS).....	107
17.	Pearson Product-Moment Correlations between the Three Risk Assessment Measures and Self-Reported Outcome Variables for the Total Sample ( $N = 107$ ).....	110
18.	Areas Under the Curves (AUCs) of the Receiver Operating Characteristic Analysis Comparing the YLS/CMI, YPI, and the ICU: Total sample – Police and Court Contact.....	112
19.	Logistic Regression Analysis: YLS/CMI, YPI, and ICU Total Scores Predicting Police Contact after Controlling for Ethnicity and Previous Police Contact ( $N = 107$ ).....	116
20.	Forward Stepwise Logistic Regression: Risk Measure Items Predicting Police Contact after Controlling for Ethnicity and Previous Police Contact ( $N = 107$ ).....	117
21.	Forced Entry Logistic Regression Analysis. YLS/CMI, YPI, and ICU Total Scores Predicting Police Contact During a Six-Month Follow-Up Period ( $N = 107$ ).....	118
22.	Forward Stepwise Logistic Regression: Risk Measure Items Predicting Court Contact after Controlling for Ethnicity and Previous Police Contact ( $N = 107$ ).....	120
23.	Summary of Hierarchical Regression Analysis for Risk Assessment Measure Total Scores Predicting Self-Reported Offending Behaviour in the Total Sample ( $N = 107$ ).....	122
24.	Summary of Forward Stepwise Multiple Regression Analysis for Risk Assessment Measure Total Scores and Individual Indices Predicting Self-Reported Offending Behaviour in the Total Sample ( $N = 107$ ).....	124
25.	Categorised Levels of Service Intervention Received by Participants ( $N = 107$ ) Level of Service Intervention and YLS/CMI Categories of Risk/ Need.....	125
26.	Relationship between the YLS/CMI Risk Categories and Level of Service During Follow-Up.....	126

# LIST OF FIGURES

## FIGURE

1.	The New Zealand Youth Justice System.....	52
2.	Flow diagram illustrating the procedure for participant recruitment and measure administration for the Diversion sample and the Clinical sample.....	76
3.	Distribution of Phase One YLS/CMI total scores for the Diversion sample ( $N = 70$ ).....	92
4.	Distribution of Phase One YLS/CMI total scores for the Clinical sample ( $N = 70$ ).....	92
5.	Distribution of Phase Two YLS/CMI Total Scores for the Clinical sample ( $N = 44$ ).....	91
6.	Distribution of YPI Total Scores for Diversion sample.....	92
7.	Distribution of YPI Total Scores for the Clinical sample.....	93
8.	Distribution of ICU Total Scores for the Diversion sample.....	97
9.	Distribution of ICU Total Scores for the Clinical sample.....	97
10.	Distribution of Seriousness of Offending Scores (converted to Z-scores) for the total sample who completed Phase Two of the study ( $N = 107$ ).....	107
11.	Receiver Operating Characteristic Curve of the YLS/CMI, the YPI, and the ICU as a function of sensitivity and specificity at identifying Police contact ( $N = 107$ ).....	113
12.	Receiver Operating Characteristic Curve of the YLS/CMI, the YPI, and the ICU as a function of sensitivity and specificity at identifying Court contact ( $N = 107$ ).....	113

# LIST OF APPENDICES

## APPENDIX

A.	INTENSIVE MONITORING GROUP CASE STUDY.....	184
B.	GEOGRAPHIC DISTRIBUTION OF PARTICIPANT REFERRALS.....	211
C.	MEASURES USED IN THE STUDY.....	213
D.	DEVELOPMENT OF THE SELF-REPORTED OFFENDING SURVEY (SROS).....	228
E.	CONSENT FORMS AND INFORMATION SHEETS: DIVERSION SAMPLE.....	238
F.	CONSENT FORMS AND INFORMATION SHEETS: CLINICAL SAMPLE.....	253
G.	ADDITIONAL RESULTS.....	266

# PREFACE

If I said that my interest in the field of forensic mental health came from taking lectures and readings throughout undergraduate psychology training, it would be a lie. In truth, this interest arose during my own experience of adolescence. Now I'm not saying that I was some hard core rebellious teenager, in fact, if there was a group at the opposite end of this spectrum then I would have blended in with them quite well. However, at the time I could never understand why the "cool" guys were the ones who "tagged" in public places and bragged about drag racing up the Pakuranga Highway on the weekends. For me, it just never really "felt" right when I tried to "pull a burn out" on the streets of Howick, or when we pushed over fully laden porto-loos on construction sites across Botany Downs. It didn't really make me popular either, and it certainly wasn't worth the anxiety of my parents finding out through the Police. Regardless, this deep seated desire for excitement and social approval ensured I repeated similar reckless and immature acts numerous more times throughout my adolescence, and I guess I have always wondered why. Additionally, it was as a teenager that I watched a lot of TV, movies, and read mostly crime novels. It intrigued me that these sensationalised mediums would often depict criminals as cold, calculating, and cunning individuals who were pursued by equally cunning and determined police detectives, spies, scientists, criminal profilers, and/ or some combination of the above. So for me, not only were bad guys being portrayed as "cool" but those that understood the bad guys were even "cooler". Since I clearly wasn't cut out for the former, perhaps studying psychology was to be my way of releasing an inner James Bond or Alex Cross? Obviously this hasn't happened yet, but the decision did set me on a long and challenging path that I have not yet regretted.

## PREFACE

After completing a Masters in Forensic Mental Health and learning about offenders from text books, my “real” training into the minds and behaviours of those who committed antisocial acts began by working at the Department of Child, Youth and Family Services (CYFS) as a Youth Justice Social Worker in Manurewa, South Auckland. I learnt a number of things from my time at CYFS that directly relate to this thesis topic. The first, and most difficult, was the need to dispel my personal judgements on who youth offenders were, and where they came from. I quickly learnt that not all youth offenders came from “bad” families, had “bad” attitudes, smoked cannabis, and hated school. These young people were all different, and as individuals, the paths that had led them to steal your car or rob your home were equally different. Very few were the sinister and violent individuals portrayed in popular media (although a small number most definitely fitted that bill). Many were likeable young men and women who were genuinely sorry for their mistakes, while some others had no remorse for their victims and did not particularly care for the work of those who were trying to help them. Many families were overly concerned and bent over backwards to help their son or daughter, while a small number stood back and were unwilling to become involved. Some identified heavily with their cultural and religious beliefs, while others were dismissive or vehemently against learning about their background. Some offended alone, while others offended in groups. Some were leaders, others were followers. Some were very capable students, while others had never completed intermediate school. Some were superb athletes and represented their codes domestically and internationally, while others were overweight, unhealthy, and had little interest undertaking any meaningful leisure activity whatsoever.

It was not until I worked as a CYFS Youth Justice Family Group Conference (FGC) Co-ordinator that I began to think more seriously about how these individual differences could best be used to predict and prevent recidivism. I felt that many of the youth justice FGC plans

## PREFACE

I presented to the Youth Court differed very little and did not reflect the variability of either the young people, or the offences they committed. This personal reflection was exacerbated by two common frustrations that I shared with many of the youth justice social workers, youth advocates, and police youth aid officers who worked tirelessly with these young people. Firstly, my judgement alone was not a good predictor of recidivism. I was often surprised by some young people who failed their youth justice plans, as I was equally surprised by others who did not re-offend. Few resources were available to assist me in understanding which young people were more likely to re-offend, and why it was that this recidivism occurred. The second frustration was the lack of evidence-based intervention services available for these young people. Even when the needs were obvious, obtaining the scarce support from within the community was often difficult and expensive. In addition, many of these services did not provide adequate evidence of their effectiveness, which only served as a further grievance when the young people referred to them would reoffend.

I was involved with CYFS for three years prior to beginning my training as a clinical psychologist. During this time I had become aware that professionals who work with New Zealand's youth offenders would greatly benefit from not only more knowledge as to why our young people offend, but also how their individuality could be best assessed and managed. I also believed that the ability to predict youth at high risk of recidivism was of supreme importance given the lack of intervention services available. The young people most at risk of becoming adult offenders require the most urgent access to these limited resources in order to prevent further costs to themselves, their families, and their communities. Undertaking this doctoral thesis has afforded me the opportunity to combine my experience and interest in youth offending and shed light on some of my questions and concerns. As to whether this makes me "cooler" or not... well I guess I'll have to wait and see.





## CHAPTER ONE

# INTRODUCTION

*“I see no hope for the future of our people if they are dependent on the frivolous youth of today, for certainly all youth are reckless beyond words...”*

Hesiod - (8th Century BC)

*“This wasted potential is there for us all to see.... Rather than being the hope for our future these young people represent our future fears.”*

John Key - National Party Leader and future Prime Minister of New Zealand (January, 2008)

The above quotes illustrate our seemingly dogged perception that antisocial behaviour by children and young people is a problem within our communities. The timeless reality of these quotes was important for me to consider at the outset of a thesis about predicting youth offending. Section One contends that we must understand the reality of the “problem” before undertaking an assessment of a youth offender. Section Two describes relevant theories that attempt to explain the development of youth offending, with specific emphasis on young people who exhibit persistent and serious offending patterns. Section Three builds on these theories by reviewing the practical utility of risk assessment in managing youth offenders before describing the risk assessment measures used to predict offending in the current study. Section Four reviews how New Zealand’s communities manage young people who offend by using our widely respected restorative youth justice system. Specifically, I question how this system works to prevent recidivism, and how the wider use of risk assessment measures may have a role in the prediction and prevention of justice involved youth.

Please note that this thesis uses the terms “young people”, “young person”, “youth”, and “youth offender” to describe the population of interest. The term “young person” is used to align the document with relevant New Zealand legislation that defines those aged between 14 and 17 years using this label. Both the terms “young people” and “young person” are widely used within New Zealand and are synonymous with terms “adolescence” and “juvenile”.

## SECTION ONE

**A PROFILE OF YOUTH OFFENDING IN NEW ZEALAND**

---

**So, What's the Problem?**

Within New Zealand and around the world, criminal behaviour committed by children and young people appears to garner the public's attention and judgement more so than similar acts committed by adults. The modern media has often been criticised for "demonising" young people, using them to highlight the deterioration of modern society (Marsh & Melville, 2009; Muncie, 2004). Politicians often use youth offending to score political points, and collectively this contributes to a public perception that youth crime is not only problematic, but is continuing to worsen (Marsh & Melville, 2009). Specific tragedies such as the Jamie Bulger murder in the UK, the Columbine High School shootings in the US, and the murder conviction of 12 year old Bailey Junior Kurariki in New Zealand are easily recalled for this reason. However, although these extreme acts of violence encompass one reality of youth crime, such crimes do not reflect the full scope of offending by young people. In addition to this violent perception, our insight into the number of youth who offend maybe biased. A recent survey reported by Borum and Verhaagen (2006) found that the American public believed nearly half (43%) of all violent crime was caused by young people, whereas the available data estimates the actual rates are closer to 13%. Such findings parallel the continuing rise of fear over public safety in New Zealand during the past decade, although this is not specific to youth crime (Maxwell, 2009).

The negative prejudice towards youth offending needs to be recognised by the public, politicians, youth justice workers, and researchers alike if the true profile of youth crime is to be understood. Only when the true nature of this "problem" is better understood can effective assessment and intervention strategies be implemented.

### **How Can We Get a More Accurate Headline?**

The literature cited above demonstrates that appropriately conducted research could reduce the gaps between the public's perception and the reality of youth offending. Criminological research typically uses one of two differing methods. These are (1) official records of crime, such as police arrest and court records, and (2) surveys in which people are asked about their own involvement in crime, either as an offender or as a victim.

Official records can be imprecise, usually in terms of under or limited reporting, and are often based on *apprehensions* for criminal behaviour. Police apprehensions refer to the number of offences and not the number of offenders, meaning that an apprehension can be recorded without a charge being made. For example, an individual who steals 20 cars is counted as 20 apprehensions. Further imprecision arise because official records under represent less serious crimes that go unreported and/ or when a person is warned without being arrested. Consequently, crimes of a more serious nature can be over included, e.g., violent crime. Official records are also subject to demographic biases. People in lower socio economic groups are more likely to come to the attention of the police, while varying regional police policies or changes in legislation can influence the number of apprehensions and the types of crime being targeted (Andrews & Bonta, 2003). Specific issues include the fact that youth offenders are less experienced and engage in "binge" offending which increases likely of being caught, and that young people often offend in groups that generate many arrests for one criminal act (Hoge, 2005). Despite these difficulties, data from official records is advantageous because it is a convenient and readily available information source.

Self-report studies can capture incidents of offending that escape official statistics. This methodology reveals a higher rate of youth offending than official reports, and has the advantage of being collected directly and anonymously from the young person involved. For this reason, self-report data are generally considered more valid and reliable than data drawn from official records (Dicataldo, Zaitchik, & Provencher, 2009; Jolliffe, et al., 2003; Snyder & Sickmund, 2006). Nonetheless, self-report methods have limitations. Young people may not consider some actions as criminal behaviours and therefore not report this in a survey. Memory of offending may be poor, especially over lengthy time periods and there is also the risk that they may confuse their role of either offender or victim in specific instances, e.g., a school fight, or could embellish accounts of antisocial behaviour with “boastful” recall. Young people may also be unwilling to disclose particularly sensitive or violent crimes. Finally, gathering a large sample for a self-report study on an offending population can be difficult, time consuming, and expensive. Self-report studies with the victims of crime (i.e., victimisation studies) can further advance our understanding of youth offending, although these studies are limited by the same problems of other self-report methods.

Although the strengths and weakness of these two approaches can complicate our understanding by generating different results (Andrews & Bonta, 2003), combining the two approaches is a logical way to obtaining a more accurate perception of the true problem of youth offending in New Zealand.

**Official Records of Youth Offending: Is One in Seven *that* Bad?**

Official records of youth offending were drawn from the New Zealand Ministry of Justice for the period 1992 to 2008 (Ministry of Justice, 2010). The report states that in 2008, the apprehension rate for youth offenders was 1,572 per 100,000 young people. This equates to approximately one in seven of all apprehensions for that year. The total number of police apprehensions for youth has remained stable since 1992, however when the 21% increase of the youth population is taken into consideration, the figure in 2008 was the lowest number of apprehension rates since 1996. This confirms that fewer young people are coming to the attention of the police and the courts. In 2008 over half of all apprehensions were due to property offences, 61% of which involved burglary or theft. Violence accounted for 13% of all offences, while 5% of apprehensions were drug related. Nearly all categories of offending committed by youth have either declined or remained stable over the past decade, and although youth court appearances have risen, this rate has also remained stable over the past five years. The only exception to this was apprehensions for violent offending where there has been an increase of nearly 40%.

Despite these statistics showing a rise in violent crime, this increase does not represent a significant change in the percentage of young people apprehended for violence which has fluctuated between 9% and 12% since 1992. Moreover, the rate of violent apprehensions has increased for all age groups in New Zealand with the largest increase being that of 31 to 50 year olds (Ministry of Justice, 2010; New Zealand Police, 2010). To a large extent, this increase in observed violent offending by adults is attributable to operational changes by the Police as well as recent changes to domestic violence legislation. However, the specific concern relating to youth offending is that the observed increase in violent crime is being driven by a boost in serious and grievous assaults, as opposed to incidents of minor assault.

### **Self-Reported Youth Offending: What High School Students Had to Say**

Self-reported survey data has been produced by the Adolescent Health Research Group (AHRG) at the University of Auckland, New Zealand. The AHRG completed its first national health and well-being survey of New Zealand secondary school students in 2001 (the “Youth2000” survey) followed by a second survey in 2007 (the “Youth’07” survey). Youth2000 consisted of 9699 students while Youth’07 surveyed 9107 students. All students were aged between 13 and 18 years, and were identified from randomly selected schools throughout the country. The results of these two surveys have been presented and published extensively (AHRG, 2009). Included within the 622-items of the Youth’07 survey were questions on violence and anti-social behaviour that young people had committed, witnessed, or been a victim of within the past 12-months.

The results of these recently published items (AHRG, 2009) identified that most young people were not involved in antisocial behaviours over the past 12-months. Traffic offences were the most commonly reported law breaches (28%) while damage or tagging of other peoples property was less prevalent (20%). Violent behaviour was relatively common. Just under half (40%) of the males and one third (27%) of the female participants reported that they had hit or physically harmed someone, on purpose, in the past year. Over one quarter of male participants and 12% of females had been in a “serious fight,” while smaller numbers of students have carried weapons (9% of males and 3% of females), and used weapons to attack another person (4% of males and 1% of females). Nearly 8% of males and 4% of females admitted to being in some sort of gang. In total, nearly 15% of male students and 9% of female students had been in trouble with the police during the previous 12 months, most commonly due to driving infringements or fighting. When comparing the Youth’07 results with the Youth2000 survey, the rates of self-reported anti-social behaviour across most

categories were either stable or had slightly decreased. The only exceptions were small increases in rates of weapons being carried, involvement with gangs, and the rate of serious violence where the young person had intended to hurt another person (AHRG, 2009).

When considering the results of the Youth'07 survey, one obvious limitation was the methodological exclusion of young people who do not attend school. Therefore, these results are likely to be biased and reflect a lower prevalence of youth antisocial behaviour than is actually occurring throughout New Zealand.

### **Comparing the Official Records to the Self-Reports**

This brief review suggests the self-reported prevalence rates, i.e., youth offending within the general population, are higher than those derived from official arrest data. Nevertheless, both sources do show some similar trends over time. Contrary to the public's perception, overall antisocial behaviour committed by young people is not increasing and in many circumstances has decreased over the past decade. The only exception appears to be serious violent crime, although this is not specific to youth. These trends mirror research from the UK (Muncie, 2004) and the US (Office of Juvenile Justice and Delinquency Prevention [OJJDP], 2008; Williams, Tuthill, & Lio, 2008) which report a slowly declining rate of youth offending, albeit with minor increases in violent behaviour.

Although the majority of young people do not engage in violent behaviour, the increase in serious violence across all age groups in New Zealand goes some way towards explaining the public's misconceptions (New Zealand Police, 2010). While not refuting the official statistics, David Farrington refers to this decrease of youth offending in the UK as "an illusion" (Farrington, 2002, p 425). He attributes this to the increasing number of unrecorded



police warnings, and to an increase in the number of persistent and serious youth offenders who are responsible for a disproportionate amount of crime. Observations and reflections from New Zealand social commentators including Clinical Psychologist Nigel Latta (2007), Police Constable Glen Compain (2008), and Social Justice Advocate Celia Lashlie (2005) are likely to agree with Farrington's statement. There are currently 20 prisoners in New Zealand aged between 15 and 19 who have been convicted for either murder or manslaughter (Sunday News, April, 2010). What is more, nearly 1 in 10 young males has carried a weapon on them in the past 12 months, while just as many identify themselves as gang members. Youth offenders also a financial cost to the community. Although the exact price tag of processing a youth offender in New Zealand is unknown, it is estimated that in the US a youth offender can cost as much as US\$150,000 per year (Snyder & Sickmund, 2006). In summary, the efforts of New Zealand's youth justice professionals should be commended for the reductions in the number of youth committing minor crimes, however youth who persistently exhibit violent antisocial behaviour remains a problem worthy of further attention.

### **Youth Offending is Not Just *Our* Problem**

Youth offending is often portrayed as a problem that our society must deal with. What is often not discussed is that, similar to adult offending, youth offending is typically complex in nature and causality. Males are over-represented and account for over two-thirds of all youth offenders (AHRG, 2009; Ministry of Justice, 2010). Ethnicity data is also similar. Most apprehensions are for young people of either New Zealand European or Māori decent. Māori are the indigenous people of New Zealand. Despite constituting approximately 15% of the population, Māori youth consist of approximately 45% of all police apprehensions (Ministry of Justice, 2010). Nevertheless, some differences are also apparent. Unlike adults, most young people involved in the youth justice system still live with family members, who may

have their own difficulties to consider, and therefore maybe experiencing the poverty and inequality that is associated with criminal activity (Andrews & Bonta, 2003; Kramer, 2000). Additionally, youth offenders will be of school age and may have difficulties either learning or attending (Bruns, Moore, Stephan, Pruitt, & Weist, 2005; Kutash & Duchnowski, 2004). These young people are also more likely to re-offend, and re-offend faster, than their adult counterparts (Spier, 2002). Finally, it is estimated that less than 6% of all youth offenders commit the majority of youth crime (Snyder & Sickmund, 2006). This point is elaborated throughout Section Two of this chapter and further illustrates that youth offenders not only differ within themselves, but also from adult offenders in some important ways.

The overrepresented presence of health, mental health and substance abuse problems needs to be acknowledged within the youth offending field (Bender, Kim, & Springer, 2007). As in adult offenders, mental illness is strongly associated with recidivism in youth, and can interfere with intervention plans (Sullivan, Veysey, Hamilton, & Grillo, 2007). Up to 70% of incarcerated youth offenders are likely to be experiencing a serious mental disorder (Cocozza & Skowrya, 2000; Teplin, Abram, McClelland, Dulcan, & Mericle, 2002). Disruptive behavioural disorders (such as Conduct Disorder, Oppositional Defiant Disorder, and Attention Deficit Hyperactivity Disorder) are the most prevalent, followed by mood and anxiety disorder. In addition, between 40% and 50% of adjudicated youths meet the criteria for a substance abuse disorder (Teplin et al., 2002, Wasserman, Ko, & McReynolds, 2004). The AHRG (2009) also reported strong associations between violent behaviour and both cannabis use and binge drinking.

Only one New Zealand study was found (Richards, 1996) which reviewed the diagnosis of 100 youth offenders referred for a clinical assessment. Approximately 73% met the criteria for Conduct Disorder, 70% had a Substance Abuse Disorder, 13% were experiencing a Major Depressive Disorder/ Dysthymia, and 5% were diagnosed with Schizophrenia. Over a quarter (26%) had more than three diagnoses, while a further 60% had two diagnoses.

These rates of mental illnesses are approximately 3 times higher than for young people within the general population (Teplin, Abram, McClelland, Washburn, & Pikus, 2005). The numbers are even higher for female youth offenders, who are also more likely to receive multiple diagnoses (Cauffman, Lexcen, Goldweber, Shulman, & Grisso, 2007). One study reported that most female youth (99%) with a mental illness in a custodial setting also met the criteria for a substance abuse disorder compared to 69% of males (Randall, Henggeler, Pickrel, & Brondino, 1999). Both mental health and offending behaviour are associated with traumatic abuse and neglect. More than half of young people in youth forensic settings have experienced abuse (Veysey, 2008). The AHRG (2009) found a strong association between a young person's exposure to violence and both violent behaviour and violent victimisation. Young people who are exposed to abuse and violence within the home are also more likely to develop difficulties with anger, depression, and symptoms of post-traumatic stress disorder (AHRG, 2009; Veysey, 2008). In addition to mental health, many youth offenders also experience long-standing physical health problems that have never been addressed.

Although the DSM-IV-TR (APA, 2000) diagnosis of Conduct Disorder is common amongst youth offenders, not all young people who display antisocial behaviour meet the criteria for this mental illness. Young people with Conduct Disorder display a level of aggressive and destructive behaviour that causes disruption across environmental settings, such as their

school, home, and neighbourhood. The overriding feature of Conduct Disorder is the repetitive and persistent violation of social norms and the rights of others. Conduct Disorder consists of 15 symptoms. Taken independently, each symptom can cause distress without having to meet the full diagnostic criteria (Boxer & Frick, 2008). Consequently, youth who do not meet the criteria for this Conduct Disorder may still require an appropriate and intensive intervention to manage their risk of offending.

### **Concluding Comment**

The rates of young people exhibiting persistent and serious offending appear to be increasing throughout New Zealand. Although this is perceived as a costly problem for society, young people who become entangled in the youth justice system are prone to experiencing high rates of psychosocial impairments and emotional distress. Government, judicial, and mental health services from New Zealand and around the world acknowledge that the complex, pervasive, and unique issues associated with youth offending require specialised management strategies (Curtis, Ronan, Heiblum, Reid, & Harris, 2002; Maschi, Hatcher, Schwalbe, & Rosato, 2008). However, any intervention needs to be based on a comprehensive and theoretically grounded assessment of the criminal behaviour. Given the emphasis on youth offending as a “problem” it is perhaps not surprising that an inordinate amount of research has been undertaken to understand why it is that young people commit crime.

## SECTION TWO

**THE DEVELOPMENT OF YOUTH OFFENDING**

---

**Why Most Young People Do Dumb Things**

In a number of ways, the results of the Youth'07 survey (AHRG, 2009) report what many of us already knew. That is, that most young people at some time during their adolescence will break the law. It is likely that only the most conservative reader can not recall a time during this period of their own development when risk taking behaviour occurred and social norms were pushed. Such antisocial behaviour was likely to have been minor, limited to particular situational factors, and gone undetected. An important question to consider is why some youth appear to simply “grow out” of or desist from this antisocial behaviour, while a small number of others require interventions if they are to avoid a lifetime of offending.

The reality of normal human development is that we are all at our most violent and defiant at age 2 years, which with the exception of a few hiccups during adolescence, generally follows a course of increased decline (Tremblay, 2000 cited in Phares, 2008). One broad explanation for the behavioural problems exhibited by young people is related to the period of adolescence itself. Steinberg and Swartz (2000) state four interrelated developmental reasons why the period between 12 and 17 years occupies a critical time of human development. Firstly, adolescence is a period where our physical, social and emotional competencies undergo rapid and remarkable changes. It is also a time of tremendous impressionism by which environmental influences of peers, school, and family can have a significant impact on how a young person views themselves and behaves accordingly. However, despite this dynamic process, adolescence is also a time when pathways of further development are forged. These pathways become increasingly difficult to alter as the individual ventures on towards adulthood. Innate psychological and emotional changes, combined with

environmental influences experienced during adolescence are likely to have a lasting impact on patterns of behaviour. The final and most critical point is that development is remarkably variable, both within and between individuals, i.e., an individual's developmental changes are rarely linear. A 13-year-old who physically looks and acts like a 16-year-old will not necessarily have the corresponding social or emotional capabilities. Similarly, the influence of one young person's development makes it difficult to draw generalisations about the psychological capabilities of others who are the same age.

Our understanding of the causal factors that influence the onset of youth offending is complicated by the dynamic nature of "normal" adolescent development. A review of youth offending development by Steinberg (2009) concluded that there is now unquestionable evidence that psychological development, particularly social and emotional capabilities, continue to develop throughout adolescence and into young adulthood. The assessment, treatment, and prevention of young people involved in the youth justice system must consider this developmental context, both in terms of normative antisocial behaviour, and any influences associated with the increased likelihood of this behaviour occurring (Reynolds, Magidson, Mayes, & Lejuez, 2010). Although a minor level of antisocial behaviour may be age-appropriate, most youth offenders do not become adult offenders. And, as previously noted, we must consider that the majority of youth offending is committed by less than 10% of all youth offenders (Snyder & Sickmund, 2006). The level of offending by this small group is definitely *not* normative, and it is these youth offenders who must be the focus of accurate assessment and interventions (Boxer & Frick, 2008).

### **Causal Risk Factors of Youth Offending**

Current understanding of the causal factors associated with youth offending is largely drawn from longitudinal research studies undertaken over the past 30 years from the UK and North America (Krohn & Thornberry, 2003), as well New Zealand's own Dunedin Longitudinal Study (e.g., Moffitt, 1993) and the Christchurch Health and Development Study (e.g., Fergusson, Horwood, & Nagin, 2000). Despite concerns regarding the over inclusion of white male participants (Hart, O'Tool, Price-Sharps, & Shaffer, 2007; Krohn & Thornberry, 2003), these studies have identified a copious number of factors that increase an individual's probability of committing crime (McCord, Widom, & Crowell, 2001). An extensive review of this literature by New Zealand researcher Kay McLaren (2000) identified five domains of risk factors associated with youth offending. These domains were:

- *Individual Factors:* External factors included a childhood history of anger, aggression, antisocial and oppositional behaviour, illicit drug use, and being a victim of bullying. Internal factors consisted of a lower intellectual functioning, low attainment within school and social settings as evident by social skills deficits, impulsiveness, hyperactivity, restlessness, a limited ability to self-manage and problem-solve the consequences of offending; and an antisocial attitude that reflects positive thoughts of crime, a callous and unemotional temperament, violent behaviour, gang membership, alcohol abuse and illicit drug use.
- *Family Factors:* Included harsh or erratic parental discipline; a poor relationship with the parents that is characterised by coldness, parental rejection, or a lack of interest; physical and sexual abuse, as well as emotional neglect; parental discord, domestic violence, and young or single parenthood; poor parental monitoring and supervision; and parental criminality that includes antisocial attitudes and beliefs about crime, violence and drugs.

- *Peer Related Factors*: This included the tendency for antisocial youth to associate with other antisocial youth, poor social ties, gang membership and delinquent siblings, and a lack of positive leisure activities and role models.
- *School/ Work Factors*: Aspects included academic failure, truancy, and a failure to obtain qualifications or vocational skills. A young person's failure to form a meaningful attachment to school and the exhibition of antisocial behaviour towards other students and teachers were also identified as risk factors.
- *Community and Neighbourhood Factors*: Notably being raised in disorganised suburbs characterised by overcrowding, high rates of crime and violence, social and economic deprivation, poor housing, high unemployment, and the availability of drugs and guns. A lack of community closeness amongst residents is also a risk factor for youth offending.

These correlates of antisocial behaviour include factors that are intrinsic to the young person, present in the immediate social environment, and are connected within the broader background of the young person's life. Difficulties in understanding the causes of serious and persistent offending arise due to the sheer number, variability, interrelatedness and overlap amongst these factors. For example, it is easy to see how a young male who lives in a neighbourhood with high crime can readily meet other antisocial peers and fail to form a positive attachment to school because of maladaptive thinking patterns modelled by family and friends. The research clearly acknowledges that any theory which focuses on a single factor will be inadequate in explaining the causes and variance of antisocial behaviour (Lösel, 2003). Etiological theories of youth offending must consider the influence of these multiple risk factors if they are to be the foundation of efficacious assessment, treatment and prevention initiatives (Andrews & Bonta, 2003; Frick, 2006; Krohn & Thornberry, 2003).



### **A Social Learning Approach to Youth Offending**

The *General Personality and Social Psychological Perspective of Criminal Conduct* (GPSPP: Andrews & Bonta, 2003) is an attempt to comprehend the development and maintenance of chronic and severe youth offending by explaining the influence of specific causal risk factors through social learning theory (Andrews & Bonta, 2003; Hoge & Andrews, 1996). There are various levels of assumptions contained within the model which facilitate the complexities and variability amongst offenders.

The first level incorporates the immediate or proximal environment, i.e., the situation the young person finds themselves in when the offending occurs. At this level, the young person may learn to commit crime after balancing the environmental rewards and costs associated with offending. This learning is dependent on the influence of specific causal risk factors present at a second level within the model. What makes one young person decide to commit a crime over another in the same environmental situation is dependant on a complex interaction between these factors. The model is based on evidence that some risk factors have a greater influence on the development of offending and recidivism than others. A meta-analysis on the general and violent recidivistic behaviour of mentally disordered offenders by Bonta, Law, and Hanson (1998) identified the “Big Four” and the “Big Eight”, otherwise known as the most influential risk factors in the research literature (Andrews & Bonta, 2003).

The “Big Four” risk factors are included within this second level. These risk factors are; *Antisocial Cognitions/ Attitudes, Antisocial Peers and Associates, Previous Acts of Antisocial Behaviour, and Antisocial/ Psychopathic Personality*. A young person’s antisocial attitudes, values, and beliefs determine any decisions to engage in antisocial activity, as well as to what extent these are undertaken (Hoge & Andrews, 1996). Antisocial peers and associates include

the young person's friends, parents, siblings, and others in the immediate environment that may influence or encourage offending behaviour through modelling and/ or by providing positive reinforcement for the behaviour (Andrews & Bonta, 2003). Antisocial peers can also promote the development of procriminal attitudes and beliefs towards offending (Hoge, & Andrews, 1996). As a social learning theory, the model's inclusion of previous antisocial behaviour as a risk factor reflects the significance of the young person's learning experiences (Andrews & Bonta, 2003; Hoge & Andrews, 1996). These experiences can influence the peer groups and attitudes towards crime. The last of the "Big Four" encompasses the young person's antisocial personality traits. This may include the young person's level of aggressiveness, impulsivity, callousness, lack of empathy, neuroticism, intelligence, and ability to manipulate others. The model assumes that youth bring these stable traits into each situation where offending behaviour may or may not occur (Hoge & Andrews, 1996).

The third level of the model incorporates the remaining four causal risk factors of the "Big Eight". These are *Difficult Circumstances within the Home Environment*, *Difficult Circumstances at School or Work*, *Lack of Leisure Activities*, and *Substance Misuse* (Andrews & Bonta, 2003). These final four areas of risk influence offending through their moderating impact on the "Big Four" (Andrews & Bonta, 2003). For example, truancy and a lack of prosocial leisure activities could influence a young person to gravitate towards an antisocial peer group where access to illicit substances is more prevalent.

The GPSPP model is based on the longitudinal causal risk factor research, as well as studies examining the effectiveness of interventions for reducing recidivism (Andrews & Bonta, 2003). This approach is similar to the medical model of predicting physical illness, whereby the model recognises that youth offending is the result of accumulated risk factors interacting

with each other over time. Balancing the rewards and costs of committing crime is specified by the diverse personal and environmental conditions that mediate decisions to offend (Andrews & Bonta, 2003). However, as was identified at the start of this section, adolescent development over time is different, both within individuals and between individuals. This model struggles to accurately explain the causal processes by which some young people develop their offending behaviour, and the processes underlying the cessation of their offending. The recent youth offending literature has called for a need to move beyond simply identifying risk factors, and move towards conceptualising how these factors interact within a developmental framework (Farrington, 2006; Frick & Viding, 2009). Fortunately, numerous developmental life course theories have been proposed offering explanations of this underlying complexity and common pathways (Farrington, Ttofi, & Coid, 2009, Guerra, Williams, Tolan, & Modecki, 2008).

### **Developmental Life Course Explanations of Youth Offending**

Developmental Life Course (DLC) theories focus on the periodic pathways or trajectories of offending behaviour by examining the types of crime committed by different groups of young people of the same age, the presenting risk factors present at different ages, and the impact of life events over the course of the development (Farrington, 2006). These theories allow us to identify when young people begin to offend, how long they offend for, any changes in the frequency of offending, and finally, when or if the offending behaviour finally ended. Young people whose development follows similar pathways can then be investigated to see what risk factors moderate or mediate the offending behaviours.

The large and heterogeneous list of causal risk factors have led to numerous attempts to define subtypes of youth offenders based on particular developmental patterns and pathways

of offending behaviour (Frick & Marsee, 2006). This search for subtypes recognises concepts of “equifinality” and “multifinality”. Multifinality acknowledges the possibility that multiple behavioural outcomes, i.e., offending, can result from single causal factors (Frick & Viding, 2009). Equifinality recognises that multiple causal pathways can lead to the same behavioural outcome, i.e. chronic or serious antisocial behaviour (Kotler & McMahon, 2005). This overlaps with Andrews and Bonta’s (2003) GPSPP model by emphasising the potential differences or “weighting” in risk factors. These factors can change, impacting young people differently over a life course that may result in antisocial behaviour (Guerra et al., 2008; Livingston, Stewart, Allard, & Ogilvie, 2008). However, DLC theories take this view further by acknowledging that some risk factors may play a causal role in offending behaviour for some youth, but not in others. DLC conceptualisations of offending therefore have important implications for the assessment and the choice of appropriate interventions for youth offenders (Frick, 2007).

### **When Being Early Isn’t a Good Thing: Child vs. Adolescent Offending Pathways**

One approach to defining different subgroups of youth offending is Moffitt’s (1993) taxonomy. Using the results of New Zealand’s Dunedin longitudinal study, Moffitt distinguished between young people who begin exhibiting chronic and severe antisocial behaviour in childhood, the “life course persistent offenders”, and those young people who begin exhibiting excessive antisocial behaviour with the onset of adolescence, the “adolescent limited offenders” (Loeber & Farrington, 2000; Moffitt, 1993). This approach has been incorporated into the diagnostic nomenclature for Conduct Disorder in the most recent versions of the DSM, including the DSM-IV-TR (APA, 2000). Recent research has identified a number of important disparities between these two subgroups besides the onset period of antisocial behaviour (Frick & Viding, 2009). One of the most consistent differences

is that young people in the life course persistent group show a stable and costly pattern of more severe, aggressive, and chronic antisocial behaviour than the adolescent limited group (Dandreaux & Frick, 2009). Using the birth cohort data from 539 New Zealand adult males at aged 26, Moffitt and colleagues report that more than half of the 45 men who displayed significant conduct problems *prior* to adolescence now had a criminal conviction compared to one-third of those whose significant conduct problems were confined to adolescence (Moffitt, Caspi, Harrington, & Milne, 2002). Further, the life course persistent group was significantly more likely to be convicted for violent offences as an adult when compared to both the adolescent onset-group and a control group with no history of conduct problems.

More relevant to DLC theories, however, is that these two groups appear to develop along diverging pathways differentiated by the presence of several important risk factors. These factors have been summarised in detail elsewhere in the literature (cf Lösel, 2003; McKlaren, 2000; Thornberry & Krohn, 2005; Wilmshurst, 2009; Zara & Farrington, 2009). Briefly, risk factors associated with the adolescent-onset subgroup are more likely to involve social processes that reflect an exaggeration of normative adolescence. Antisocial behaviour is reinforced through misguided attempts to obtain excitement, autonomy and status in a way that is encouraged by peers (Moffitt, 1993). Consequently, prevalent risk factors include antisocial peers, illicit substance misuse, few close social ties, school truancy, and inadequate parental supervision. Normative boundary pushing is exaggerated by a higher disregard for traditional values and societal rules. Antisocial behaviour dissipates as reinforcements for social conformity increase, e.g., job opportunities. In contrast, risk factors for life course persistent youth offenders include a childhood disposition of hyperactivity, a difficult temperament, aggressiveness, cognitive deficits including lower verbal intelligence, antisocial attitudes, and insecure attachment. The family environment is likely to be unstable

with the presence of emotional neglect, physical abuse, a lower socio-economic status, poor attachment to a low decile school, neighbourhood crime, and a parental history of offending.

DLC pathways advocate differences between the two youth offending subgroups in understanding the causes of offending behaviour. For example, Moffitt (1993) proposed that children in the life course persistent group develop problem behaviour through a transactional process of a difficult temperament in an inadequate family environment. This dysfunctional process leads to long lasting vulnerabilities that inhibit healthy, normal psychosocial development. It therefore becomes more difficult for members of the life course persistent subgroup to cease offending behaviour when faced with the positive rewards of conformity. Longitudinal research has consistently identified Moffitts' taxonomy (Krohn & Thornberry, 2003). Strengths of this approach include its ability to clearly outline the correlates of offending behaviour while explaining offending pathways. Nevertheless, there are concerns that the life course persistent subgroup is too broad and contains many risk factors that are not specific to the subgroup, e.g., a number of studies have identified parental factors as risks for both sub-groups (Andrews & Bonta, 2003; McCord, Widom, & Crowell, 2001; Thornberry & Krohn, 2005). Further, defining the two groups relies on describing the behaviours and the developmental pathways, with less focus being placed on the psychological dimensions related to offending (Kotler & McMahon, 2005; Vein & Beech, 2006). This is problematic when it is considered that two of the Big Four areas of risk are a young person's personality and their attitudes towards crime.

Fortunately, developmental psychologists have continued to delve further into the causal pathways of the most severe youth offenders by once again applying the concept of equifinality to further differentiate the life course persistent subgroup (Frick, 2007; Frick &

Viding, 2009). So far these findings question whether it is possible to assess and differentiate life course persistent offenders from “fledgling psychopaths” whom may be responsible for the most persistent and violent offending committed by young people (Lynam, 1996; 1997).

### **Psychopathy and Youth Offending Pathways**

The term “psychopath” is often used in the movies, television, and media to describe seriously violent and mentally unstable adult offenders. Although this can be sensationalised, the psychological construct of psychopathy has become very important to the study of chronic and severe offending behaviour (Hare, 2006; Patrick, Fowles, & Krueger, 2009). Although disagreement exists over the exact factor structure of psychopathy (Andershed, Köhler, Louden, & Hinrichs, 2009), the disorder is generally defined as a stable condition comprising a constellation of three main symptom dimensions: interpersonal, affective, and a socially deviant lifestyle (Cook & Michie, 2001; Hare & Neumann, 2008; Hare, 1999; 2006). On an interpersonal level, psychopaths can be superficial, arrogant, grandiose, domineering, manipulative, callous, and deceitful. Affectively they lack empathy, guilt, and anxiety, are short-tempered, and are unable to form interpersonal bonds. Consequently, they are impulsive, irresponsible, and indifferent to social norms (Hare, 1999).

Similarly to young people who offend, adult offenders are also not all identical. Psychopathy is a distinct personality disorder that is not listed as a diagnosis within the most recent editions of the DSM due to its overlap with Antisocial Personality Disorder (Antisocial PD), although many aspects of psychopathy are referred to in the explanation of Antisocial PD (APA, 2000). Antisocial PD is an Axis II disorder defined by a pattern of disregard for the rights of others, and an inability to conform to social norms marked by impulsive, irresponsible, aggressive, and reckless behaviour. This nomenclature fails to accurately

identify those most at risk of recidivism because it emphasises antisocial behaviour, not antisocial cognitions, attitudes, and interpersonal facets. Antisocial PD tends to identify a highly heterogeneous sample that is relatively uninformative regarding the causal processes and appropriate interventions. For example, Hart and Hare (1996) found that the diagnostic rate of Antisocial PD can reach over 80% in prison populations, while only 15-25% will meet the criteria for psychopathy. The relationship between the two disorders is thus asymmetrical. Psychopaths are likely to meet the criteria for Antisocial PD but the reverse is not true.

Psychopathy is an informative and useful construct for adult offenders. Not only is this small group more persistent criminals than non-psychopathic offenders, they are also more violent (Hare, 1999; Porter & Porter, 2007). Psychopathy has also been associated with increased sexual offending (Quinsey, Rice & Harris, 1995), non-treatment compliance and institutional misconduct (Harris & Rice, 2006), as well as illicit substance misuse (Taylor & Lang, 2006) and mental health concerns (Blair, Mitchell, & Blair, 2005). Psychopathy has thus become one of the most important considerations for predicting chronic and serious offending in adults (Hart, Kropp, Hare, 1998; Porter & Porter, 2007; Rice & Harris, 1995).

The significance of psychopathy in adult offenders has led to an explosion of research over the past 20 years in applying the psychological construct to children and young people (Salekin, Rosenbaum, Lee, & Lester, 2009; Vaughn & Howard, 2005). This interest is largely based on the assumptions that, as a personality disorder, psychopathy must manifest throughout the persons development (Frick, 2002; Lynam, 2002). However, this idea is controversial with many researchers questioning the practical and ethical implications of diagnosing children and young people as psychopaths. The pejorative labelling effects of this diagnosis may have negative implications. Both lay people (Edens, Guy, & Fernandez,



2003), and judges (Jones & Cauffman, 2008) have been found to stigmatise youth offenders diagnosed with psychopathy as being more dangerous, less amenable to treatment, and deserving of harsher punitive measures (including the death sentence), than if the same offender was not diagnosed with psychopathy.

Other concerns relate to adolescence as being a period of considerable developmental change that is transient and variable both between, and within, an individual. Consequently, children and young people who display traits at the higher end of the normative scale, i.e., sensation-seeking, reward dominant behaviour, impulsivity, irresponsibility, lack of empathy etc., could score higher on measures of psychopathy (Edens, Skeem, Crusie, & Cauffman, 2001; Hart, Watt & Vincent, 2002; Johnstone & Cooke, 2004; Seagrave and Grisso, 2002; Spain, Douglas, Poythress, & Epstein, 2004). These authors question the stability of these traits in youth psychopathy, whether psychopathy can be accurately measured, and whether it is actually “psychopathy” that researchers are studying (Salekin et al., 2009).

While most researchers agree with the above concerns, many still advocate the use of the psychopathy clinical construct with children and young people (Farrington, 2005; Frick, 2002; Hart, Watt, & Vincent, 2002; Lynam, 2002; Salekin & Lochman, 2008). The surge of interest in this topic has quelled many of these concerns, and recent reviews of the literature acknowledge that psychopathy does appear to be a valid and reliable construct in children and adolescents (Declercq, Markey, Vandist, & Verhaeghe, 2009; Kotler & McMahon, 2005; Salekin & Lochman, 2008; Salekin et al., 2009; Vaughn & Howard, 2005). Features of psychopathy in young people appear to mirror those of adults, and evidence indicates modest stability of the construct (Salekin et al., 2009). For example, psychopathic traits in non-referred children were moderately stable (.53) over a four-year period (Frick et al., 2003).

The early identification of these young people will assist professionals to better conceptualise the problem and meet the specific needs of those most at risk of developing psychopathy (Frick, 2002; Salekin, Rodgers, & Machin, 2001). Implementing these strategies effectively relies on understanding the etiology of psychopathy in children. To date, a number of theories have attempted to explain the development of psychopathy by extending the concept of equifinality and differentiating the life course persistent offenders into further sub-groups.

One constructive theoretical approach that has been widely accepted within the psychopathy literature has investigated the role of *Callous/Unemotional* (CU) personality traits. The CU traits model recognises that adult psychopathy is distinguishable from Antisocial PD by the presence of interpersonal and affective deficits. Employing a developmental psychopathology approach, Paul Frick and colleagues (Frick, O'Brian, Wootton, & McBurnett, 1994; Frick & Ellis, 1999) identified callous and unemotional interpersonal styles in children characterised by a lack of guilt, empathy, and shallow emotional responses. It is hypothesised that antisocial problems result because the CU traits obstruct conscience development and moral socialisation skills (Frick & Marsee, 2006). CU traits result from a dispositional temperament of low behavioural inhibition. The features of this temperament include low emotional reactivity (e.g., unable to recognise sad facial expressions), reward-dominant behaviour resulting in poor responsiveness to punishment, and little or no anxiety when threatened or presented with a novel stimuli (Frick & Ellis, 1999; Johnstone & Cook, 2004; Kochanska, 1993). It is not difficult to see how a child or young person with this unique temperament may be prone to serious offending, and thus require specialised interventions to meet these unique needs. For example, it was noted earlier that poor parenting practices are a risk factor strongly associated with life course persistent offenders. However, Wootton, Frick, Shelton, & Silverthorn (1997) found that this was not the case for life course persistent children *with*

CU traits. Consequently, a parent focused intervention for children or young people with CU traits may be ineffective when compared with similarly antisocial youth without CU traits.

There has been extensive research validating the presence of CU traits in children and young people across cultures, genders, ethnicities, as well as clinically referred, adjudicated, and non-referred community samples (for reviews see: Frick, 2007; Frick & Marsee, 2006; Frick & Viding, 2009). Consistent results include the identification of a small subgroup of life course persistent youth (approximately 25%) with elevated CU traits exhibiting dispositional and behavioural difficulties consistent with adult psychopaths (Christian, Frick, Hill, Tyler, & Frazer, 1997; Dadds, Fraser, Frost, & Hawes, 2005; Dandreaux & Frick, 2009; Frick, Stickle, Dandreaux, Farrell, & Kimonis, 2005; Kimonis, et al., 2008).

### **Concluding Comment**

The GPSPP of Criminal Conduct (Andrews & Bonta, 2003) and Developmental Life Course (DLC) explanations overlap and synthesise the many causal factors of youth offending. Both approaches focus on multiple pathways through which offending behaviour may develop. DLC theories however emphasize varying risk factor interactions which lead to a broad range of positive and negative outcomes for an individual across the lifespan (Guerra et al., 2008). The presence of CU traits for some life course persistent offenders is a promising DLC approach that helps to explain psychopathic-like presentations in a small group of serious and violent youth that maintains their risk over time. Such theoretical explanations can assist youth justice professionals to understand the complexity of these multiple causal pathways, and tailor appropriate interventions to meet the needs of the youth offenders (Cottle et al., 2001; Salekin, 2002). However, this practice is reliant on the accurate identification of these causal risk factors using empirically grounded and validated approaches to assessment.

## SECTION THREE

**THE ASSESSMENT OF YOUTH OFFENDING**

---

**Why Assess Risk: Prediction, Prevention or Both?**

The title of this thesis includes the words *predicting offending*, however this heading does not accurately depict the entire purpose of assessing risk within a youth justice system. The ability to predict who within our society is likely to do serious harm to others is extremely important. However, as we will see in Section Four of this chapter, New Zealand's youth justice system employs procedures to avoid locking away high risk youth and emphasises the expectation that these young people be managed within the community. Therefore, while it is still necessary for the youth justice system to predict which young people are likely to offend in the future, the true purpose of assessing risk concerns doing whatever is possible to prevent this from happening.

The assessment of a young person's risk of recidivism is the process of identifying the dispositional and environment causal factors that are likely to result in further antisocial acts (Schmidt, Hoge, & Gomez, 2005). Given the sheer number of these causal factors, and the complex way in which they interact, the results of a risk assessment allows professionals to make decisions that help manage the offender and prevent further re-offending (Hoge, 2002; Vincent, Terry, Maney, 2009). Andrews, Bonta and Hoge (1990) propose that any clinical decisions regarding the assessment and management of youth offenders be based on four principles of case classification. These principles are underlined within the GPSPP model (Andrews & Bonta, 2003) described in Section Two, which recognises risk assessment as essentially a process of balancing the rewards and costs associated with offending behaviour (Bonta & Andrews, 2007). These principles are; the *Risk Principle*; the *Need Principle*; the *Responsivity Principle*; and finally the *Professional Override Principle*.

The *risk principle* states that recidivism can be predicted by the young person's level of risk. The likelihood of reoffending is reduced when the level of intervention services provided matches the level of recidivism risk, i.e., those young people identified as being most likely to re-offend should get more intensive interventions than those identified as lower risk.

The *need principle* of assessment and intervention emphasises that youth justice interventions should focus on the risk factors that are associated with the offending, i.e., the "Big Eight". However a distinction is made between *Static* risk factors and *Dynamic* risk factors. Static risk factors are factors which cannot be changed, such as the young person's previous offending behaviour. The need principle is primarily concerned with *criminogenic needs*, or dynamic risk factors which can be changed, and if changed, will reduce the risk of re-offending. *Protective* factors are often discussed within the same context of criminogenic needs. These factors are strengths available to the young person that may prevent future offending if they are efficiently accessed. Protective factors and criminogenic needs are often described as being at opposite ends of the same continuum (Guerra et al., 2008), i.e., high levels of intelligence and school engagement can prevent offending behaviour, while low intelligence and truancy adds to the risk.

The *responsivity principle* concerns those factors that may not directly relate to offending behaviour, but need to be considered in intervention planning (Bonta & Andrews, 2007; Hoge & Andrews, 1996). A young person's motivation to engage in therapy, a lack of empathy for victims, mental illness, rapport with a service provider, or cognitive deficits are all examples of responsivity factors that may either deter or assist engagement with an intervention. Effective intervention requires young people to learn new skills while replacing old, unfavourable behaviours. The responsivity principle encourages intervention providers to

look past the primary risk factors and recognise individual strengths and weaknesses which may facilitate new skill development. Moreover, despite psychopathy's reputation as a significant risk factor of offending behaviour, a number of authors consider the interpersonal/affective traits of psychopathy to be responsivity factors, as opposed to risk or need factors (Andrews & Bonta, 2003; Bonta, 2002; Decoene & Bijttebier, 2008). Consideration of these traits allows service providers to contemplate the deficits associated with the disorder, such as behavioural inhibition and lack of anxiety. This last point leads to the *professional override principle* which simply states that final decisions about the case management of a youth offender should lie with the responsible clinician subsequent to the consideration of a valid and reliable assessment of the presenting risk factors (Hoge & Andrews, 1996).

The risk, need, and responsivity (RNR) model allows professionals to make informed decisions that emphasise both the prediction and the prevention of youth offending (Bonta & Andrews, 2007). The model requires professionals to reliably predict offending behaviour so that youth offenders can be accurately categorised. Evidence supporting the use of the model will be briefly reviewed prior to a review of some approaches currently used by youth justice professionals to assess the causal factors of youth offending.

### **Matching Risk, Need, and Responsivity to Youth Offender Interventions**

Efforts to prevent reoffending have come a long way since the 1950's, 60's and 70's when it was widely believed that "nothing worked" for persistent and serious offenders (Cullen, Smith, Lowenkamp, & Latessa, 2009). This belief amongst professionals and policy makers resulted in a "get tough" approach that led to an increase in prison numbers and lengthier prison terms. However, it was not until studies on offender recidivism began to accumulate that professionals started to question the validity of punitive sanctions. Smith, Goggin, and

Gendreau (2002) completed the first meta-analysis examining the effectiveness of prison sentences and intermediate. Using 117 studies that included 442,471 adult participants, they concluded that punitive interventions (i.e., prison sentences, and intermediate sanctions such as drug testing, boot camps, and electronic monitoring) were not associated with a reduction of recidivism. In fact, they found longer term prison sentences led to a small increase in the likelihood of recidivism. Overall, offenders who were imprisoned were 7 percent more likely to reoffend than community-based offenders. These results are consistent with a meta-analysis by Andrews and Bonta (2003) whereby there was a 3 percent increase in recidivism when punitive sanctions were imposed. Treating youth like adults, or applying punitive sanctions, opposes what the literature reports on the psychological capabilities of these young people (Steinberg, 2009). Punishment will not change offending that is perpetuated by a lack of social, emotional, or cognitive competencies. So, if “getting tough” is not effective in reducing recidivism, how have other attempts to rehabilitate offenders fared?

It was the poor success rates of punitive sanctions that prompted the development of the RNR model. Subsequent research has strongly supported matching risk, need, and responsivity factors to adult and youth offenders as a means of preventing recidivism (Bonta & Andrews, 2007; Taxman, Thanner, & Weisburd, 2006; Viera, et al., 2009). An earlier meta-analysis of 154 intervention comparisons by Andrews, Zinger, Hoge, Bonta, Gendreau, and Cullen (1990; cited in Andrews & Bonta, 2003) found that intervention programs which addressed criminogenic risk factors produced an average recidivism reduction rate of 53% when compared with control groups. These results were similar for programmes that targeted youth offenders. The meta-analysis also found that community interventions were significantly more effective at reducing recidivism than those interventions within institutions. These promising results are supported by a second meta-analysis (Lipsey, Wilson, & Cothorn,

2000), which included 200 studies examining the effectiveness of interventions in preventing youth recidivism. On average, intervention programmes of any sort led to a 12% reduction of recidivism. However, programmes that included interpersonal counselling, behavioural programmes, community-based teaching family homes, or interpersonal skills training, were found to reduce recidivism by as much as 40%. Positive gains were also found when there was a good match between the young person, the intervention service, and programme concept. Intervention programmes that were not specific or did not target the causal factors of the offending, such as wilderness camps, boot camps, early probation, and drug abstinence initiatives, consistently resulted in weak or limited effects on youth recidivism.

Andrews and Dowden (2006) conducted the first meta-analysis to focus on the risk principle, i.e., the application of more intensive services to higher risk offenders. The meta-analysis included 225 studies consisting of 374 intervention comparisons. Once again the results showed that any form of intervention is preferable to punitive sanctions for youth offenders. Moreover, interventions that adhered to the risk principle produced significantly larger effect sizes than those interventions which did not. The average effect of recidivism reduction was 10% greater for higher risk individuals than for lower risk individuals, meaning that larger treatment gains can be made with high risk offenders if a sufficiently high integrity of services is applied. Overall, interventions with low risk offenders produce small differences in recidivism and therefore may be a waste of resources. Finally, adherence to the risk principle enhanced the effectiveness of interventions which focussed on the offender's criminogenic needs and responsivity factors (e.g., cognitive-behavioural programmes). These authors concluded that "the therapeutic effects of this principle are limited to clinically and psychologically appropriate treatment" (Andrews & Dowden, 2006, p. 97). These results are consistent with those reported in a large study by Lowenkamp, Latessa, and Holsinger (2006)



on two independent studies of 97 correctional programmes which consisted of 13,676 youth offenders. In addition to providing more services to higher risk offenders, Lowenkamp and colleagues (2006) note that youth at higher risk of recidivism benefited more from being kept in intervention programmes for longer periods than lower risk groups. The adult psychopathy literature also provides support for the risk principle. Although traditionally regarded as “untreatable”, a review of 42 studies found a reduction in psychopathic traits to be negatively associated with longer and more intensive intervention programs (Salekin, 2002).

The brief review above clearly supports the use of the RNR principles in the intervention of youth offenders. Not only are more intensive services more beneficial for higher risk youth, but the greater number of RNR principles applied within an intervention is associated with further reductions in recidivism (Bonta & Andrews, 2007). Of greater importance is that the likelihood of recidivism can be reduced further by matching a tailored intervention approach to a youth offender’s specific risk level, criminogenic needs, and responsivity factors (Bonta & Andrews, 2007; Taxman et al., 2006). Matching youth to specific services also brings the professional override principle into play by emphasising the importance of therapeutic integrity, and recognising the young person’s individual characteristics and attributes. The value of matching appropriate services was recently examined in a study by Vieira, Skilling, and Peterson-Badali (2009) using 122 youth offenders. The results showed that youth who had less than one-third of their identified criminogenic needs met were 18 times more likely to reoffend (and to reoffend quicker) than those youth offenders who had the majority of their needs met via the appropriate intervention services.

The application of the RNR model is, in many ways, common sense. The model, and the results supporting its application, is mirrored in Kaye McLaren's (2000) comprehensive literature review on "what works" for youth offenders. This aptly named report, "Tough is not Enough", identified that sanctions designed to be punitive and/ or that do not focus on the young persons' causal factors of offending, are detrimental and a waste of resources. Summarising "what works", McLaren (2000) notes that interventions which generalise across multiple environments (e.g., cognitive-behavioural interventions), and target numerous causal factors of offending, have proven the most effective with youth offenders. She also acknowledges the risk principle by asserting that chronic and persistent youth offenders should be rehabilitated using intensive evidence-based practices such as multi-systemic therapy (Curtis, Ronan, Heiblum, & Crellin, 2009).

Despite the abundant empirical evidence supporting the RNR model in the treatment of offenders, the model has been critiqued on a number of points by Ward and colleagues (e.g., Ward, 2002; Ward & Brown, 2004; Ward, Mann, & Gannon, 2007; Ward & Stewart, 2003). Ward proposes that the treatment of offenders requires a more holistic approach which will equip offenders with the necessities to live rewarding lives without having to commit antisocial acts. While acknowledging the contribution of RNR to offender interventions (Eccleston & Ward, 2006), Ward and colleagues consider the model as no more than a risk management approach. Specific concerns involve an offender's responsivity to interventions (Ward et al., 2007). Ward and colleagues note that the RNR model assumes that all offenders are motivated to change, does not emphasise that intervention providers conceptualise the offending to guide engagement with offenders, does not emphasise the therapeutic relationship, and adopts a one-size-fits-all approach whereby criminogenic needs are pulled from a "pin cushion" without providing offenders with the resources to improve their lives.

The Good-Lives Model (GLM) addresses these concerns by adopting a strengths-based perspective that aims to manage risk while promoting a life worth living (Ward & Stewart, 2003). Intervention plans need to be well-designed and tailored to the individual which address criminogenic needs in conjunction with basic human needs, e.g., developing self-respect, creating a sense of meaning through work or leisure activities. The overall goal of the GLM is to assist the offender to create a new, more positive view of themselves (Ward, 2002). Ward and colleagues do not argue for the GML to replace the RNR model, but instead ask professionals to incorporate the holistic strengths-based approach into existing practice (Ward, Melser, & Yates, 2007). Unlike the RNR model, the GLM is relatively new and lacks empirical support. While acknowledging that the principle of responsivity needs further clarification and research, proponents of the RNR principles believe Ward's views of the model are narrow (Ogloff & Davis, 2004). Their point appears to be valid in the sense that risk reduction which focuses on reducing specific causal factors can encapsulate and improve additionally related responsivity factors (Schwalbe, 2004). For example, non-engagement with school can be addressed by building on a young person's interest in cars and helping him to obtain a panel beating apprenticeship. This would still be a strengths-based approach that enhances self-esteem. Further, the focus on non-criminogenic needs without addressing criminogenic needs will not reduce the risk of recidivism (Bonta, 2002). For example, increasing the self-esteem of a persistent youth offender without targeting the causal factors of his offending will only help to create a more confident youth offender.

In summary, a risk assessment that adheres to the principles of risk, need and responsivity can prevent further offending by guiding interventions which change the causal influences of the behaviour. Higher risk youth offenders are likely to obtain more positive outcomes when subjected to more intensive interventions (Bonta & Andrews, 2007). In contrast, exposing

low risk youth offenders to high levels of intervention can be detrimental and actually increase risk due to issues of labelling and the forced association with higher risk youth (Lowenkamp, et al., 2006). Risk assessment can therefore guide the efficient use of the community's scarce resources by increasing the accuracy of clinical decision making for all levels of risk (Jung & Rawana, 1999; Schmidt, Hoge, & Gomez, 2005). An accurate assessment of specific causal factors can also enhance the effectiveness of an intervention service aimed at youth offenders (Andrews & Bonta, 2003, Vieira et al., 2009), although poor implementation of these practices will nullify any benefits of adhering to the model (Bonta & Andrews, 2007). Since effective clinical decision making is reliant on identifying causal risk factors, it is consequently important that youth justice professionals are able to accomplish this with as much accuracy as possible (Bonta, 2002; Thompson, 2001).

### **The Assessment of Risk: Clinical vs. Actuarial Prediction**

Historically, the assessment of recidivism risk has been from unstructured clinical judgements. Decisions are generally based on the professional's experience, intuition, "gut feeling", or by using a semi-structured system to identify causal factors (Hanson, 2009; Thompson & Putnins, 2003; Vincent et al., 2009). Historically, unstructured clinical judgement has been relied upon extensively by court systems (Andrews & Bonta, 2003). The approach is beneficial in that it requires few resources and affords clinicians the flexibility to explore and formulate the causes of offending (Vincent et al., 2009). However, evidence supporting the sole use of clinical judgement is poor. Clinical judgements are prone to the inherent biased beliefs, imperfections, and idiosyncrasies of the individual professional, thus creating low reliability and inter-rater agreement (Douglas, Cox, & Webster, 1999). It is now widely accepted that court systems incorporating clinical judgements on risk when making decisions are "conducive to the formulation of irrational judgements" (Hoge, 1999, p. 253).

To overcome the concerns of clinical judgement, a plethora of actuarial risk assessment measures have been produced with the purpose of more accurately identifying causal risk factors. Actuarial measures can be defined as “structured, quantitative, and empirically linked to a relevant criterion” (Bonta, 2002, p. 356). For youth justice purposes, actuarial risk assessment measures are used to predict negative outcomes for youth offenders with the additional intention of differentiating young people by their level of risk (Schwalbe, 2004). The first recorded use of an actuarial approach for offenders was in 1928 when Ernest Burgess (cited in Onifade, Davidson, Livsey, et al., 2008) itemised 21 risk factors from the records of 3,000 adult paroles in Illinois, USA. Higher scores on the instrument outperformed prison psychiatrists in predicting recidivism. Despite this early initiative, the uptake of actuarial measures by justice and correctional settings was slow, with wider use only evident during the past two decades. For example, within American Youth Courts, the use of actuarial risk measures has risen from 33% in 1990 to 86% in 2003 (Schwalbe, 2007). This change in the mentality of risk assessment was likely a response to two issues. Firstly, the 1990’s saw an increase of “get tough” on crime policies adopted by the American Justice System. This is related to the second issue which was the consistent finding that actuarial assessment was significantly more adept than clinical judgement at predicting recidivism. For example, a meta-analysis by Grove and Meehl (1996) compared unstructured clinical judgement versus actuarial measures in 136 studies. The results identified professional judgement to be a greater predictor of recidivism in only 8 of these studies (less than 6%).

Actuarial risk assessment measures vary in size and the factors they assess. Earlier measures, many of which are still used today, focus on static risk factors. Although the predictive validity of these measures is superior to clinical judgement (Andrews & Bonta, 2003), they offer little in the way to structured clinical decision making because the causal factors they

assess cannot be changed. Subsequent measures focussed on the importance of identifying dynamic criminogenic needs, while the most recent measures include a larger number of items which combine predominantly criminogenic needs with the intention of formulating a case management plan from the results (Andrews & Bonta, 2003; Baglivio, 2009). Importantly, a meta-analysis of 28 studies by Schwalbe (2007) revealed that these latter measures were marginally better at predicting youth recidivism than earlier measures that assessed static factors alone.

Beyond the ability to predict recidivism, the use of actuarial risk assessment measures presents a number of advantages for youth justice systems (Hoge, 2002; 2008; Schwalbe, 2009). These measures emerge from the theoretical explanations of youth crime which incorporate the known risk factors associated with youth offending. They can systematically discriminate between lower risk and higher risk youth, which can then inform professionals on how to implement the appropriate level of intervention. These measures have the potential to act as screening tools for youth offenders who require a more intensive or specialised assessment, and they allow researchers to control for risk when evaluating the effectiveness of an intervention. Further, structured actuarial assessment measures ensure consistent information processing and decision making across the youth justice system. Many of these assessment measures are standardised by including either a structured or semi-structured interview schedule. Because of the complex developmental etiology of youth offending, these measures can also help professionals to organise their assessment by including multiple domains of risk factors (Bonta, 2002).

### **Assessment Measures of RNR and Psychopathy for Youth Offenders**

Most of the literature validating the use of actuarial risk assessment is concerned with adults. Unfortunately, using adult measures with youth offenders is problematic. Firstly, adult measures do not adequately account for the developmental complexities of youth offending. Secondly, youth offenders lack the documented extensive criminal history of static risk factors contained in many adult risk assessment instruments (Meyers & Schmidt, 2008). These issues prompted the development of a number of actuarial measures to assess youth recidivism, however very few have been subjected to rigorous validation studies (Schwalbe, 2007). Two measures that have received a reasonable amount of empirical attention and are widely used within the field of youth risk assessment are the Youth Level of Service/ Case Management Inventory (YLS/CMI; Hoge & Andrews, 2002) and the Psychopathy Checklist: Youth Version (PCL:YV; Forth, Kosson, & Hare, 2003). Both of these measures are grounded in the etiological research of offending. They are also both adapted versions of extensively validated adult measures with modifications based on the youth offending population's developmental contexts. However, administering the PCL:YV has proven problematic for some groups of youth, resulting in the development of a number of new screening measures of psychopathic traits. Two promising examples to be discussed are the Youth Psychopathic Traits Inventory (YPI; Andershed, Kerr, Stattin, & Levander, 2002), and the Inventory of Callous-Unemotional Traits (ICU; Frick, 2004).

#### *The Youth Level of Service/ Case Management Inventory*

The YLS/CMI is a standardized risk assessment measure for youth offenders grounded within the RNR principles of the GPSPP model (Andrews & Bonta, 2003). The YLS/CMI combines the principles of both actuarial decision making and clinical decision making as an alternative to purely clinical judgments of a youth offenders causal risk factors. The measure

was developed as a youth version of the Level of Service Inventory – Revised (LSI-R; Andrews & Bonta, 1995), an assessment measure of risk and need factors within adult offenders. The LSI-R is a widely used instrument in the adult correctional and parole systems throughout North America and the United Kingdom (Kroner & Mills, 2001). There is also considerable psychometric support for the use of this instrument (see Bonta, 2002 for a review). The first downward extension to youth offenders was the Youth Level of Service Inventory (YLSI; Andrews, Robinson, & Hoge, 1984; cited in Hoge, 2005) which contained 112 risk/ need items. The items of the YLS/CMI were selected from the YLSI after the psychometric studies of the YLSI revealed 42 of the 112 items consistently showed significant correlations with indexes of offending (Hoge, 2005). These 42 items make up eight subscales: History of Criminal Conduct, Family Circumstances and Parenting, Current School or Employment Problems, Criminal Peer Affiliations, Alcohol or Drug Problems, Leisure and Recreation, Personality and Behaviour, and Antisocial Attitudes and Orientation.

Before making a final judgement on an offender's risk, the YLS/CMI encourages administrators to consider other needs or special circumstances that are not covered by the 42 items. Clinical judgement is then incorporated into the measure with the inclusion of a “professional override” feature prior to allowing the administrator to record a case management plan with the recommended level of professional contact required. Several variants of the YLS/CMI have been developed. These include a screening version of instrument (YLS/CMI:SV; Hoge & Andrews, 2001), and the Australian Adaptation of the YLS/CMI (YLS/CMI-AA; Hoge & Andrews, 1995, cited in Thompson & Pope, 2005). The recent meta-analysis by Schwalbe (2007) identified the YLS/CMI as the most widely used and empirically validated risk assessment measure for youth offenders.



*Psychopathy Checklist: Youth Version*

The PCL:YV is a 20-item clinician-administered measure designed to assess the interpersonal, affective, and behavioural domains of psychopathy in young people aged between 12 and 18 years. Like its adult equivalent, the Psychopathy Checklist-Revised (PCL-R; Hare, 2003), the PCL-YV relies on information gathered from multiple sources, including a semi-structured interview, file review, and collateral information. Some items of the measure, as well as the instructions, are adapted to be developmentally appropriate. Evidence supporting the psychometric properties of the PCL:YV is favourable, and there is sufficient support for the measure's ability to predict antisocial behaviour, including both general and violent recidivism (Edens, Campbell & Weir, 2007)

There are a number of concerns with administering the PCL:YV. Firstly, the factor structure of the measure includes the antisocial behaviour factor of the PCL-R. The predictive power of PCL:YV may therefore be associated with this criminal component as opposed to the core personality traits (Cauffman, Kimonis, Dmitrieva, & Monahan, 2009). However this concern is not consistent within the literature. For example, using receiver operating characteristic (ROC) analyses in relation to the reoffending of 69 incarcerated young adults, Wilson (unpublished) found that Factor one scores had an area under the curve (AUC) = .72 for length of reimprisonment and that factor 3 had an AUC = .75 for any reoffending. In contrast, the AUC for Factor 4 (past antisocial behaviour) had lower values for any reoffending (AUC = .66), violent offending (AUC = .66), reimprisonment (AUC = .69), and length of reimprisonment (AUC = .62). This may indicate that the PCL:YV factors that do not directly assess past antisocial behaviour can add value to the prediction of future offending (personal communication, 2010, N Wilson).

Other concerns of using the PCL:YV is that it is expensive, requires at least two hours to complete, and administrators need to be extensively trained clinicians (Murrie & Cornell, 2002; Vaughn & Howard, 2005). Because the PCL:YV requires a history of antisocial activities, its validity is questionable with non-offending youth, or youth offenders with only limited offending histories (Sharp & Kine, 2008). Additionally, the PCL:YV has yet to be extensively validated in community settings. Studies of community samples may assist researchers identify sub-threshold symptoms to increase diagnostic accuracy and treatment planning (Andershed et al., 2002; Sharp & Kine, 2008). These concerns have led to the increasing development and use of self-report questionnaires to study psychopathy in young people (Sharp & Kine, 2008).

#### *The Youth Psychopathic Traits Inventory*

The YPI is a self-report psychopathy measure theoretically based on the PCL:YV, and specifically designed to address many of the challenges that make the self-report of psychopathic traits difficult. Firstly, because deceitfulness, lying, and manipulation are core symptoms of psychopathy, it is hard to get truthful responses to questions about clearly negative personality characteristics. Second, at least in the adult population, psychopaths tend to lack insight into their own behaviour. Thus, even though they may lack empathy to an objective observer, they may not see themselves as callous, and might not endorse these traits positively (Andershed et al., 2002; Andershed, Kerr, & Stattin, 2002). With these concerns in mind, the authors of the YPI developed a measure that tried to present these traits as admirable to a person with psychopathy, while also tempting these young people not to lie.

The YPI is a 50-item self-report measure made up of 10 subscales: Dishonest Charm, Grandiosity, Lying, Manipulation, Callousness, Unemotionality, Remorselessness,

Impulsivity, Irresponsibility, and Thrill Seeking. Factor analyses of the 10-subscales have identified three theoretically meaningful factor structures: a Grandiose/ Manipulative factor; a Callous/ Unemotional factor; and an Impulsive/ Irresponsible factor (Andershed et al., 2002; Larsson, Andershed, & Lichtenstein, 2006). This fits the three-factor model of psychopathy proposed by Cook and Michie (2001). The developers have described the YPI as the next generation of psychopathic-trait self-assessment measure due to its use of multiple items to measure each core personality trait, its attempt to minimise social desirability effects, and its sole focus on affective/ interpersonal core traits (Andershed, Hodgins, & Tengström, 2007). The YPI therefore recognises the biological etiology of psychopathy that influences the young person throughout development (Andershed et al., 2002).

#### *The Inventory of Callous-Unemotional Traits*

The ICU is a measure of a young person's level of callous and unemotional traits. The content of the ICU was drawn from the six callous/ unemotional items present on the Antisocial Process Screening Device (ASPD; Frick & Hare, 2001) - an earlier measure which attempted to identify psychopathy in children. The APSD has been widely used to assess psychopathic traits in children in young people (Frick & Marsee, 2006). However, the six negatively framed callous/ unemotional items have demonstrated only moderate internal consistency (Kimonis et al., 2008).

The ICU was developed in recognition of the importance of identifying callous/ unemotional traits, and the role that these traits might play in differentiating a sub-group of life-course persistent youth offenders. To create the ICU, Frick and colleagues (Frick, Bodin, & Barry, 2000) identified the four items that loaded consistently onto the callous/unemotional scale of the APSD (i.e., "Is concerned about how well he/ she does school work", "Feels bad or guilty

when he/ she does something wrong”, “Is concerned about the feelings of others”, “Does not show feelings or emotions”) in both community and clinic referred samples. Three positively (e.g., “easily admits to being wrong”) and three negatively worded (e.g., “shows no remorse when he/ she has done something wrong”) items were developed from each original item leaving a 24-item scale with an equal number of items worded in each direction on a 4-point Likert scale. Factor analysis has revealed a three factor structure: Callousness, Uncaring, and Unemotional (Essau, Sasagawa, & Frick, 2006).

### **Predicting Youth Offending with the YLS/CMI, the YPI, and ICU**

The advantages of actuarial assessment rely on psychometric properties of the measures (Schwalbe, 2007). Measures which lack predictive validity may have high error rates and misdirect court resources by mislabelling youth offenders (Bonta, 2002; Douglas et al., 1999). Predictive validity concerns a measures ability to identify differences in the recidivism rates of high risk and low risk youth, as well recognise significant relationships between risk level and recidivism. Bonta (2002) notes that the predictive validity of actuarial measures can be improved both by combining multiple measures, and by using different methods of assessment that focus on multiple causal factors. This approach, which is utilised by the YLS/CMI, considers both the complex development of youth offending and the professional’s clinical experience to guide interventions for a youth offender.

Risk prediction research concedes that simple correlations between the young person’s score on a measure and an offending outcome variable can be misleading. Correlations do not account for the base rates of recidivism, nor do they identify false positive or false negatives, which are obviously crucial to predictive validity (Onifade, Davidson, Livsey, et al., 2008). Therefore, receiver operating characteristic (ROC) analyses are commonly reported. ROC

analyses are considered superior to other analytical methods of prediction as they are deemed relatively independent of base rates and selection ratios (Rice & Harris, 1995). ROC analyses work by plotting the true positive rate (sensitivity) against the false positive rate (1-minus specificity) to compute an area under the curve (AUC) without reference to specific cut-offs points. The AUC in the ROC plot indicates the measure's diagnostic efficiency and its effect size. An AUC of 1 indicates a perfect measurement prediction, whereas an AUC of .5 indicates that prediction is no better than merely guessing. In addition to correlations and ROC analyses, a number of authors emphasis the importance of examining the incremental validity of a measure (Viljoen, Elkovitch, Scalora, & Ullman, 2009). This may be important for professionals constrained by time and do not want to administer a measure which does not add to predictive ability. Also, if measures such as the PCL:YV add no predictive value beyond the less stigmatising YLS/CMI, then an argument against its use could be made (Viljoen et al., 2009).

*Predictive Validity of the Youth Level of Service/ Case Management Inventory*

The validity of the YLS/CMI in the identification of high risk young people has been extensively evaluated in recent years. The YLS/CMI total score has been found to significantly correlate with a variety of index offences including new convictions, institutional infractions, and both general and violent recidivism (Betchel, Lowenkamp, & Latessa, 2007; Catchpole & Gretton, 2003; Marshall, Egan, English, & Jones, 2006; Onifade, Davidson, Campbell, et al., 2008; Onifade, Davidson & Campbell, 2009; Schmidt, Hoge, & Gomez, 2005; Thompson & Pope, 2005). A number of large reviews and meta-analysis involving the YLS/CMI have also been recently undertaken. Schwalbe's (2007) meta-analysis of 28 studies evaluating the predictive validity of youth risk assessment measures reported AUC scores across the 11 studies validating the YLS/CMI ranging from .57 to .75

(with a mean score of .64). A meta-analysis by Olver, Stockdale, and Wormith (2009) reviewed three risk assessment measures, the YLS/CMI, PCL:YV, and the SAVRY (Structured Assessment of Violence Risk for Youth). A total of 19 studies examining the YLS/CMI were identified which included 5722 participants. AUC scores ranged to .50 to .75. The mean association with general recidivism was moderate ( $r = .32$ ). This was comparable to results from the PCL:YV ( $r = .25$ ) and the SAVRY ( $r = .33$ ). More recently, Rennie and Dolan (2010) found the YLS/CMI total score to correctly predict recidivism in 66% of 140 incarcerated English male youth (AUC = .66). This was consistent with their literature review of the YLS/CMI's predictive validity, which found AUC scores ranging from .64 to .73 (Rennie & Dolan, 2010).

Categorical analyses of the measure's predictive validity show that participants who score higher on the YLS/CMI are more likely to offend (Jung & Rawana, 1999; Onifade, Davidson, Campbell, et al., 2008), and re-offend faster (Rowe, 2002) than youth identified as lower risk on the measure. Studies examining the convergent validity of the YLS/CMI further confirm its predictive potential. Olver et al.'s (2009) meta analysis identified five studies examining the predictive accuracy of both the YLS/CMI and the PCL:YV by comparing results of the measures within the same samples. Both the YLS/CMI and the PCL:YV were significantly associated with general recidivism and violent recidivism, although there was variable differences in the effect sizes across these studies (AUC scores ranging from .50 to .75). A similar trend was found in studies comparing the YLS/CMI with the SAVRY. YLS/CMI total scores have also been correlated with other actuarial risk assessment measures (Catchpole & Gretton, 2003; Viljoen et al., 2009; Welsh, Schmidt, McKinnon, Cattha, & Meyers, 2008). Moderate to high associations have generally been between the YLS/CMI and both the PCL:YV ( $r = .48$  to  $.77$ ), and the SAVRY ( $r = .58$  to  $.64$ ).

In a New Zealand prospective study of 69 incarcerated young adult males aged between 16 and 19 years (Wilson & Rolleston, 2004), the YLS/CMI demonstrated convergent validity by significantly correlating with the PCL:YV ( $r = .62$ ), the Risk of re-Conviction of re-Imprisonment (ROC\*ROI) measure ( $r = .55$ ), the Risk Screen Youth Offending (RYSO) scale ( $r = .70$ ), as well as the total number of convictions ( $r = .44$ ), and criminal versatility ( $r = .45$ ). ROC analyses revealed the YLS/CMI to correctly predict 68% of participants who re-offended. This was in addition to 63% of those who went on to commit a violent offence, and 71% of those who were re-imprisoned after an average of 8 months post-release.

The reviewed literature supports the use of the YLS/CMI with young people as a measure which, on average, predicts offending 14% better than chance (Schwalbe, 2007). However the wide ranging variability of the effect sizes suggests the measure needs to be trialled on specific groups of interest before being incorporated into policy (O' Leary & Halton, 2009).

#### *Predictive Validity of the Youth Psychopathic Traits Inventory*

Studies examining the validity of the YPI have slowly begun to accumulate since its development in 2002. The YPI total score has demonstrated moderate to high correlations with both general and violent offending, aggression, substance misuse, institutional infractions, impulsivity, and an earlier onset of antisocial behaviour in both community and adjudicated samples of young people (Andershed et al., 2002; Campbell, Douchette, & French, 2009; Cauffman, Kimonis, Dmitrieva, & Monahan, 2009; Declercq, Markey, Vandist, & Verhaeghe, 2009; Dolan & Rennie, 2006; Dolan & Rennie, 2007; Hillege, Das, & de Ruiter, 2010; Poythress, Dembo, Wareham, & Greenbaum, 2006). Prospective studies of the YPI are limited. Skeem and Cauffman (2003) found the YPI to significantly predict self-reported institutional infractions after a one month follow-up period ( $AUC = .66$ ), which was

superior to the PCL:YV ( $AUC = .55$ ). Additionally, Cauffman et al. (2009) found small associations between the YPI and both self-reported offending behaviour and official records of offending after both a six month and twelve month follow-up period.

A number of studies have compared the YPI with the PCL:YV. Skeem and Cauffman (2003) concluded that the YPI was dimensionally similar to the PCL:YV, but that there was only a 68% chance that a youth labelled as psychopathic by the PCL:YV would score high on the YPI. Andershed et al. (2007) found moderate correlations ( $r = .30$  to  $.51$ ) between conceptually related YPI and PCL:YV factor scores. Furthermore, a cross tabulation of groups based on the total scores of the two instruments largely supported the categorical validity of the YPI. Although the predictive findings are consistent for both genders, a number of studies have found males to score higher than females on the YPI (Andershed et al., 2007; Declercq et al., 2009; Hillege et al., 2010). This is consistent with findings using the PCL: YV (Edens et al., 2007), and suggests that psychopathic traits may manifest differently between boys and girls. Separate norms for the YPI may therefore be required.

Overall, the YPI appears to be a promising measure for professionals to screen for psychopathic traits associated with greater risk of recidivism. However, prospective research on its predictive validity is lacking, and it remains unclear whether it can contribute to the prediction of risk above and beyond the established YLS/CMI or the PCL:YV.

#### *Predictive Validity of the Inventory of Callous/ Unemotional Traits*

The ICU is the newest of these three measures. Similarly to the YPI, the ICU was designed for research purposes. However, given its function to detect callous and unemotional personality traits, and the relationship that these traits have with antisocial behaviours (see



Section Two for a review), it is possible that the ICU could be used as a predictive measure of recidivism akin to the PCL:YV. No prospective studies have examined the predictive validity of the ICU. Nonetheless, the construct validity of the measure alludes to its potential in predicting youth offending. Correlations between the self-report version of the ICU total score and a self-report measure of antisocial behaviour have generally found moderate sized correlations ranging from  $r = .26$  to  $r = .46$  in both large European community samples (Essau et al., 2006; Roose, Bijttebier, Decoene, Claes, & Frick, 2009) and American youth offending samples (Dandreax & Frick, 2009; Kimonis, Frick, Munoz & Aucoin, 2007; Kimonis et al., 2008). However, Kimonis et al. (2008) did not find a relationship with previous records of arrest. These studies also report small to moderate correlations between the ICU total score and measures of aggression, conduct disorder, emotional reactivity, and psychosocial impairment. Convergent validity of the ICU has been identified by its significant relationship to the 6-item APSD callous/ unemotional scale,  $r = .45$  (Kimonis et al., 2008). White, Cruise, and Frick (2009) found that a combination of the self-report and the parent report versions of the ICU were significantly associated with a measure of sexual offending risk, as well as the YLS/CMI total score and all but one of the eight risk factor domains. However, the self-report total score of the ICU was not associated with the YLS/CMI total score.

No prospective studies on the predictive validity of the ICU were identified, and the measure has yet to be compared with either the YPI or the YLS/CMI in either a community or general adjudicated setting.

### **So, Can We Use These Measures In New Zealand?**

The research reviewed above identifies the YLS/CMI, the YPI, and the ICU as potentially useful measures that could be helpful in identifying New Zealand's high risk youth offenders, while also guiding effective intervention practices. However, none of these measures are routinely used in New Zealand, and only one of them (the YLS/CMI) had been empirically examined with a moderate sized group of young people who were already in adult correctional facilities (Wilson & Rolleston, 2004). If we are to put these psychometric measures into practice here in New Zealand, we must first consider the important issue of generalisation. In other words, the ability of a risk assessment measure to predict offending across diverse samples which vary by gender, culture, and ethnicity (Olver et al., 2009). Many of the risk assessments measures available today were developed and normed in either Canada (e.g., the YLS/CMI and the PCL:YV) or the USA (e.g., the ICU). The YPI was developed in Sweden and extensive examination of its utility in different international samples has begun, predominantly in the northern hemisphere. Miller and Lin (2007) caution the use of youth offender risk assessment measures without local validation. They found that a generic pre-validated risk assessment measure was significantly less predictive than both the professional judgement of local probation officers and a locally developed risk assessment measure. Miller and Lin (2007) concluded that generic risk assessment measures fail to include variables that are particularly relevant to the unique settings and urge that all measures be extensively validated and adapted accordingly to best suit both the local youth justice system, and the individual young people whom the measure will eventually serve.

This issue of generalisation is particularly important for New Zealand due to the over representation of Māori youth in the youth justice system. Risk assessment measures should exclude the inherent biases and thus reduce any disparity between genders or ethnic groups,

however there is mixed evidence of this actually being the case (Onifade et al., 2009; Schwalbe, Fraser, Day, & Cooley, 2006; Thompson, 2006). Validating a risk assessment measure would need to take into consideration Māori and Pacific youth, and ensure that any measure used is equally valid for all New Zealand youth offenders.

### **Concluding Comments**

The assessment of causal risk, need and responsivity factors, including psychopathic traits, is likely to be a valid and reliable way of identifying persistent and serious youth offenders within New Zealand. These measures, which are grounded in etiological theory, could potentially guide prevention and intervention programmes for certain groups of high risk youth. However, not only is the use of these measures limited within New Zealand, but many of these international validation studies have used either incarcerated youth, or community samples specifically for research purposes. Generalising risk assessment measures to New Zealand requires examining their predictive validity in “the real world”. The final section of this chapter describes New Zealand’s unique youth justice system and questions how the use of these measures could contribute to the prevention of recidivism, and the successful reintegration of these young people back into their communities.

## SECTION FOUR

**THE NEW ZEALAND YOUTH JUSTICE SYSTEM**

---

**How Does New Zealand Manage its Youth Offenders?**

Like many other countries, New Zealand has a history of institutionalising/ incarcerating youth offenders as either a means of controlling crime, or as a welfare approach whereby locking away these young people was believed to be for their own good. It was during the 1970's and 80's when research revealed that institutionalising youth offenders, for what ever reason, was not preventing further offending (Muncie, 2004). Moreover, many young people were criminalised for what were essential care and protection issues, and little importance was given to the role that families and communities could play in supporting these young people to overcome their offending. In response, New Zealand sought to develop a new approach that emphasised the need to keep children and young people with their families, in their communities, and in contact with their culture (Maxwell, 2007a).

The current New Zealand youth justice system is set out in the Children, Young Persons, and Their Families Act 1989 ("the Act"). The Act established new objectives and principles for youth justice and set up an innovative system of responding to young people who offend. While the system sought to hold young people accountable for their offending, it was an objective of the Act that every effort be undertaken by the police to divert young offenders away from courts and legal custody. Additional objectives included: implementing procedures and services that are culturally appropriate; include and encourage the young person and their family members to participate in the legal process while supporting them to take responsibility for the offending; to take into account the needs of the victim by including them in the legal process; and to objectively facilitate responses aimed at providing appropriate intervention and reintegration of the young persons identified needs.

### The Process of the New Zealand Youth Justice System

Figure 1 outlines New Zealand's youth justice system for young people aged 14 to 16. The age of criminal responsibility in New Zealand is 10, however children under the age of 14 cannot be criminally prosecuted except for the offences of murder or manslaughter. Child offenders aged 10 to 13 are generally dealt with by the Family Court on the basis that their offending is usually associated with matters of care and protection. A young person who commits offences beyond the age of 16 is dealt with in the same manner as an adult, that is, in either the District Court or the High Court, depending on the seriousness of the offence.

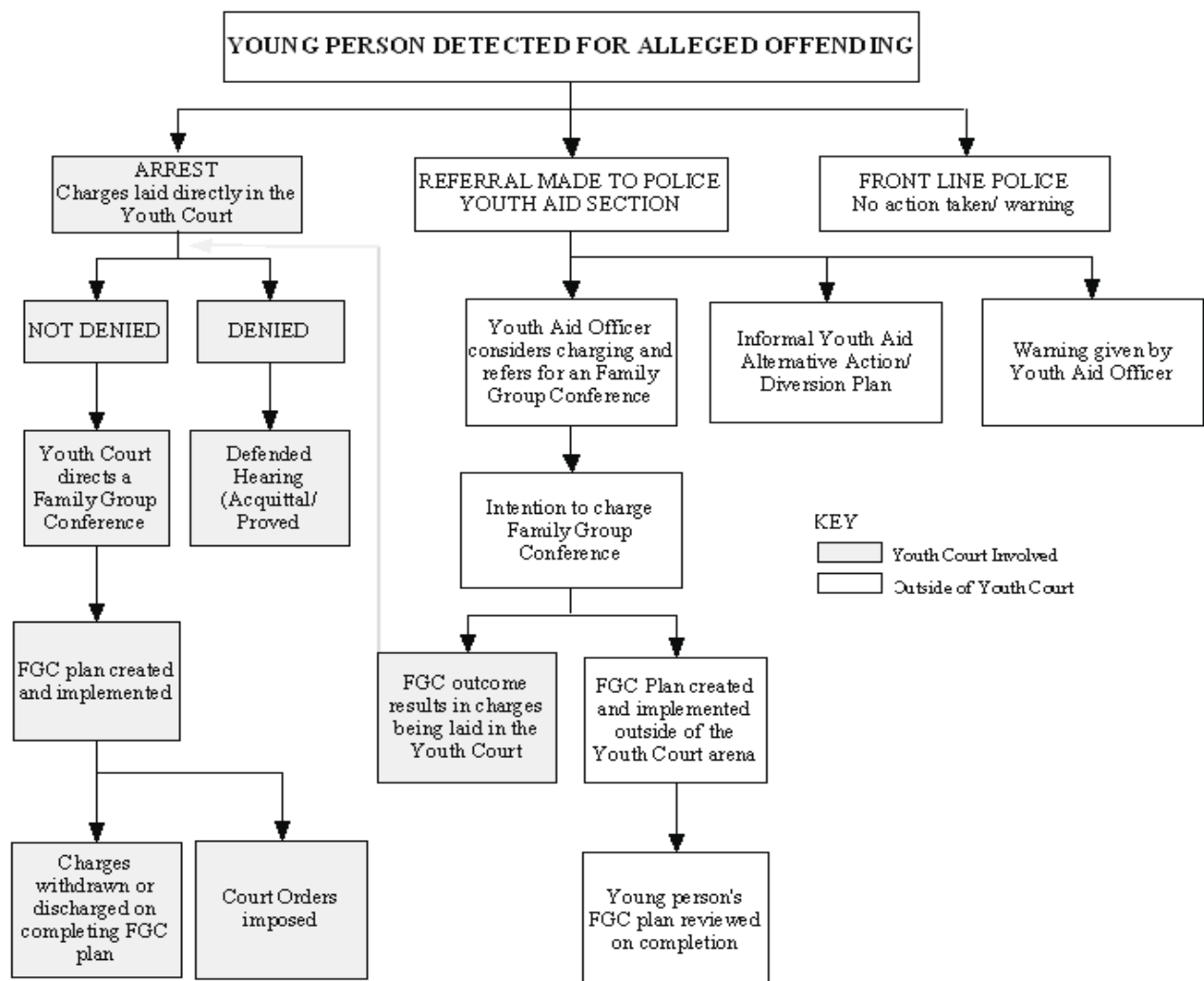


Figure 1. The New Zealand Youth Justice System.

The New Zealand police are the frontline entry point into the youth justice system (Maxwell, Robertson, & Anderson, 2002). Police officers have three options available when they suspect a young person of offending. These include: giving the young person a warning and taking no further action; arresting the young person and laying the matters directly into the Youth Court; or referring the young person to their local police youth aid section. Youth aid officers are specialised police officers who play an important role within the youth justice system by working alongside the young person, the family, the victims, and all other youth justice professionals. This approach to policing youth offenders is unique to New Zealand (Becroft, 2009). The youth aid officer may respond to a youth offender in a number of ways. He or she may choose to warn the young person with consultation to the family. They may also choose to create a diversionary plan with the young person and the family in accordance with the principles and objectives of the Act (Maxwell, 2007). This serves as an alternative to more formalised action. The content of the diversion plan is limited only to the imagination of the participants involved (Levine, Eagle, Tuiavi'i, & Roseveare, 1998). These diversion plans are followed up by the officer to ensure no further action is required. A final option available for youth aid officers is to consider charging the young person in the Youth Court. However, because every effort must be taken to divert the young person away from court, a referral is first made for a family group conference (FGC) in which the outcome will either be a diversionary plan or transfer to the Youth Court where charges are formally laid.

The Youth Court is part of the District Court although it is restricted to alleged youth offenders only. All young people receive a lawyer (known as a youth advocate) who has been specially trained in the Act (Morris, Maxwell, & Shepherd, 1997). Young people who either admit guilt, or are found guilty, are directed by the Youth Court to participate in an FGC with the intention of developing a plan in line with the principles and objectives of the Act. FGC

plans need to be approved by the Youth Court Judge, and may include a number of sentencing options. These range from lower tariff orders including admonishment, fines, reparation, and victim compensation, through to higher tariff supervision orders, community work, supervision with activity orders, and supervision with residence. The Youth Court does have the power to transfer matters to the District Court depending on the young person's history and the seriousness of the offending, however this rarely occurs. FGC plans that are completed usually result with the charge(s) being withdrawn or discharged.

Of all young people apprehended by the New Zealand Police in 2008 only 29% were prosecuted in a court of law (Ministry of Justice, 2010). The remaining 71% of offenders were diverted away from the court by either receiving a warning (23%), completing a diversion plan (39%), completing an intention-to-charge FGC plan (6%), or were resolved by other means (3%). Although the proportion of young people presenting in the Youth Court has increased slightly over the past decade, the implementation of the Act has not only dramatically decreased the number of young people in custody, but has resulted in New Zealand having one of the lowest number of youth offenders appearing before a youth court in the Western world (Morris & Maxwell, 2003).

### **Applying Restorative Justice through the Family Group Conference**

The principles and objectives set out in the Act clearly convey the values of restorative justice (Maxwell, 2007). The term "restorative justice" is difficult to define due to its varied application in different settings around the world and is often considered as a sense of values or ideals as opposed to a single set of concrete practices or processes (Menkel-Meadow, 2007; Johnston & Van Ness, 2007; McCold, 2006). Marshall (1996, cited in McCold, 2006) of the Restorative Justice Consortium (UK) gives a broad definition of restorative justice as a

process whereby all parties with a stake in a particular offence can come together with the intention of collectively resolving issues arising from the aftermath of the offence, and its implications for the future. Restorative justice values acknowledge that antisocial behaviour breaches the relationships between individuals in the community, particularly those of the victims, the offender, and the offender's family. In essence, restorative justice promotes a sense of responsibility for the offender, and allows all participants to mend the relationships and determine the outcome with minimal involvement from the state. Resolution of offending behaviour is not concerned with the infliction of pain and revenge through incarceration and punishment, but essentially the re-establishment of good order and the promotion of good outcomes for all participants (Villa-Vicencio, 2006).

The use of diversion practices and FGCs are the key mechanisms for applying the values of restorative justice throughout the New Zealand youth justice system. The emphasis of these values is attributed to the large influence that Māori culture has on New Zealand society. For Māori (as it is for many other indigenous peoples), conflicts were traditionally managed in family and community meetings (Maxwell, Morris, & Hayes, 2006). The recognition of the overrepresentation of Māori within the justice system, as well as the problems associated with institutionalisation, led policy makers to integrate these traditional conflict resolution methods within the Act. The widespread application of FGCs within the New Zealand youth justice system has been recognised as the first example of a Western system that makes a restorative justice solution central to determining the response to offending, while enabling the sanctions of the court to be available when necessary (Johnston & Van Ness, 2007).

The role of FGCs as a mechanism of restorative justice is to both avoid prosecution and determine how youth offenders should be managed (Maxwell & Morris, 1993). The FGC is a



meeting at a time and place chosen by the young person's family and arranged by a Youth Justice Coordinator. He or she acts as a facilitator and mediator between the presenting participants, and is responsible for providing a report of the conference outcomes. An FGC is attended by the young person, the family (including wider family), the victim, the police youth aid officer, the youth advocate (should one have been appointed), and any other person the young person may wish to have present. The youth justice coordinator can also invite (with the families' permission) service providers such as social workers, educators, and psychologists, who can present the conference members with information relevant to formulating a plan. The FGC process ensures that the principles and objectives of the Act are adhered to while facilitating decision making. Therefore, in addition to pushing for diversion, being culturally appropriate, seeking accountability, and encouraging participation, the FGC is also the forum in which causal risk factors of offending can be discussed, and where plans can be developed which will provide a youth offender with access to services and programmes that are best set-up to meet any identified needs (Braithwaite, 2002).

### **Reducing Recidivism with Restorative Justice**

A pertinent question to consider is whether the restorative justice approaches employed by the New Zealand youth justice system are effective in reducing youth offending. Outcome studies evaluating restorative justice practices have consistently shown that, when the programme procedures are carried out correctly, these approaches are perceived as fair by participants, fair by the victims, and offenders are more likely to comply with the criminal sanctions imposed (Maxwell, Kingi, Robertson, Morris, & Cunningham, 2004; Maxwell, 2007; Hayes, 2007; Umbriet, Coats, & Vos, 2002). This is promising given that the primary goals of restorative justice practices are concerned with holding offenders accountable and creating a more satisfying experience of the legal process for all parties involved. However,

the most prominent interests of policy makers and the public alike concern recidivism as an outcome. Despite crime reduction not being a primary goal of restorative justice (Maxwell, Morris, & Hayes, 2007; Morris, 2004), the principles of the approach remain theoretically grounded in the prevention of future offending (Hayes, 2007). However, what these authors emphasize is that it is unrealistic to expect that a 60 to 90 minute FGC on its own will lead to a significant change in a young person's likelihood to reoffend, especially for high risk youth. Nonetheless, considerable research on the effects of restorative justice on recidivism has been undertaken.

Meta-analyses of the restorative justice outcome literature (Bonta, Jesseman, Rugge, & Cormier, 2006; Latimer, Dowden & Muise, 2005) have revealed that these programmes yield an average of 7% reduction in reoffending, compared to non-restorative justice programmes. Programmes using FGC's revealed a reduction average of 9% (Bonta et al., 2006). Despite being encouraging, the effect sizes across all studies were variable, with some reporting reductions in reoffending by as much as 38%, while other programmes actually led to increases in reoffending by as much as 23% (Latimer et al., 2005). The meta-analyses also revealed that most outcome studies were completed on low-risk offenders. This finding highlights two concerns with the restorative justice outcome literature. Firstly, many of these programmes are voluntary, therefore the research is plagued by self-selection biases. A related second point is that many of these programmes are not offered to high-risk young people. This creates uncertainty as to whether restorative justice practices reduce recidivism in high-risk youth offenders, and what it is exactly about the procedures that contribute to recidivism reduction (Bonta et al., 2006; Umbriet et al., 2002). It is not surprising that low risk youth respond well to restorative justice programmes because they are expected to have fewer criminogenic needs. This would not be the case for a higher-risk youth offender.

Some of this uncertainty is clarified by New Zealand research where FGC's are mandatory regardless of the level of risk (see Maxwell, 2007b for a review). Maxwell et al's (2004) analysis of FGC's of over 1,000 New Zealand youth offenders found that in addition to good FGC procedures, reoffending was less likely when: young people expressed remorse for their actions; when offending behaviour was identified early and effectively managed; when young people were actively engaged with education; when programmes were implemented that assisted in the effective reintegration of young offenders into their communities (e.g., assistance with access to education and employment); and when punitive sanctions were avoided. Unfortunately this study also found that very few New Zealand youth offenders actually participated in positive or effective intervention programmes. This finding is not unique. Bonta et al's (2006) meta-analysis noted that only 11 of the 39 studies reported evidence of a treatment intervention provided in addition to the restorative justice programme. Moreover, the authors note that when an intervention was applied, it was often inappropriate to the young person's identified level of need.

This brief review of the outcome literature has highlighted a number of relevant issues. Restorative justice practices which reduce recidivism by an average of 7% are not as effective as comprehensive interventions identified by Lipsey et al (2000), which reduce recidivism by as much as 40% when risk, need, and responsivity factors are targeted (see Section Three for a review). Similarly, Maxwell et al.'s (2004) results suggest that restorative justice approaches and effective intervention practices could compliment each other and produce even greater reductions in recidivism. This may lead to further improvement of the primary goals of restorative justice as a consequence (Latimer et al., 2005; Maxwell & Morris, 2006). For example, in addition to reducing recidivism, Rugge and Scott (2009) found restorative justice programmes improved the physical and mental health of offenders

when these needs were identified. These improvements were associated with both the offender's and the victim's satisfaction. A further issue is the legal system's role as an agent of therapeutic improvement. This is conceptualised by the theory of therapeutic jurisprudence. Therapeutic jurisprudence draws the justice system's attention to psychological processes that impact on an offender, thus allowing the necessary risk, need and responsivity causal factors to be identified and addressed (Bergin, 2002; 2004; Winick, 2003; Wexler, 2006). Therapeutic jurisprudence is often viewed within the scope of the wider restorative justice definition, and there are certainly aspects of therapeutic jurisprudence present within the principles of the Act (Becroft & Thompson, 2007). For example, Section 4 (f) of the Act asserts that youth offenders are dealt with in a way that acknowledges their needs and that gives them an opportunity to develop in responsible and socially acceptable ways. The ability of the youth justice system (including all youth justice professionals) to comprehend the principles of risk, need, and responsivity, and then match appropriate services to the young person's level of risk through the FGC process demonstrates an evidence-based structure of adhering to evidence-based intervention approaches. A well-known application of therapeutic jurisprudence is the model adopted by special courts, often known as Drug Courts. The case study in Appendix A provides a more detailed description of therapeutic jurisprudence within the New Zealand youth justice system by evaluating the Intensive Monitoring Group (IMG) – an Auckland-based problem solving youth court for offenders with complex behavioural and mental health concerns.

### **Concluding Comment**

If evidence-based interventions, FGCs, and the existing principles and practices of the New Zealand youth justice system can combine to significantly reduce youth offending, it is crucial that this package is applied based on the results of a validated actuarial risk

assessment measure. Only five studies identified in Bonta et al's (2006) meta-analysis used a risk assessment measure as part of the restorative justice programme. Validated risk assessment measures are not widely used within the New Zealand youth justice system. Mental health professionals have the option of using any measure they choose and there are no actuarial risk assessment measures validated for New Zealand youth offenders.

Currently, the New Zealand police are attempting to validate the Youth Offending Risk Screening Tool (YORST), a 13-item brief screening tool containing static and dynamic causal factors (personal communication, 2007, M Atkinson). Completing the YORST requires communicating with multiple agencies across the youth justice system and having access to their databases. The Department of Child, Youth and Family also have established the Towards Wellbeing Assessment, however this is a lengthy tool that focuses on care and protection needs and disregards many causal factors of youth offending. No research has yet been published on the effectiveness of these measures. The lack of a recognised risk assessment measures in New Zealand more than 20 years since the establishment of the current youth justice system is surprising. The principles and objectives by which the Act is structured can allow professionals to identify a youth offender's criminogenic needs during either the creation of a diversion plan or an FGC (Maxwell & Morris, 2006). I concur with Bonta et al's (2006, p. 117) comment that "It may not be the role of the restorative justice facilitators to deliver treatment programming; yet it would be useful if they would recognise the need for treatment and the type of programming that would assist in reducing offender recidivism, and make the appropriate referrals for treatment". In order for New Zealand's youth justice professionals to recognise these needs, they must have access to assessment measures that have been proven valid and reliable with our young people.

## SECTION FIVE

**OBJECTIVES OF THE STUDY**

---

Based on the reviewed literature throughout this chapter, it is proposed that youth reoffending can be further reduced with the introduction of evidence-based risk assessment measures to the restorative justice practices of the New Zealand youth justice system. This proposition will be supported by achieving the following objectives:

- The primary objective was to investigate the predictive and incremental validity of the Youth Level of Service/ Case Management Inventory (YLS/CMI), the Youth Psychopathic Traits Inventory (YPI), and the Inventory of Callous/ Unemotional Traits (ICU). Of additional interest was the influence that the causal risk, need, and psychopathic traits identified by these three measures has in predicting reoffending. It was critical that this validation study was conducted within the community. An ecologically valid “real world” sample would allow any conclusions to be based on the day-to-day practice of youth justice professionals.
- This study also recognises the role that risk assessment has in *preventing* further offending. Given the potential to guide appropriate treatment and prevention strategies, the study also explored what types of interventions were currently being applied within the community *without* the guidance of risk assessment measures.
- An additional objective was to alleviate the lack of information available on the basic profile of New Zealand youth offenders. This study will provide data on the demographics, offence types, and mental health concerns experienced by youth offenders in this country.

## CHAPTER TWO

# METHODOLOGY

The research objectives posed by this study were answered by recruiting two samples of youth offenders. These two samples represent opposite ends of the youth justice spectrum. The first sample, the “Diversion” sample, was made up of youth offenders from the Counties-Manukau District. These participants were all identified as having offending matters that were diverted away from the Youth Court. Participants in the second sample, the “Clinical” sample, had offending matters before the Youth Court and were referred to a specialist mental health service for an assessment. Participants from both samples were subject to an assessment (*Phase One*) and followed-up six-months later (*Phase Two*). The practical utility of risk assessment within New Zealand’s youth justice system is demonstrated by a small case study evaluation of a special youth court, the Intensive Monitoring Group (IMG). Participants for the IMG study were recruited from the Clinical sample. The procedure of this evaluation is not described in this chapter. The case study is presented in Appendix A.

## SECTION ONE

**RESEARCH PARTICIPANTS**

---

**The “Diversion” sample: Counties-Manukau Police Youth Aid**

Participants for the first sample were identified by Police Youth Aid Officers working within the Counties-Manukau District, more commonly known as “South Auckland”. Counties – Manukau has a population of approximately 470,000 and is one of the fastest growing and most culturally diverse cities in New Zealand. New Zealand Europeans are the most predominant ethnic group, however New Zealand Māori, Pacific, and Asian ethnic groups are all over-represented compared to the general population (Police Development Group, 2007). When compared to the rest of New Zealand, Counties-Manukau has a larger proportion of the unemployed, household overcrowding, and single parent families. There are higher numbers of younger people (with approximately 100,000 school students), and twice as many lower decile schools. Youth in Counties-Manukau have higher rates of school stand downs and expulsions, school truancy, youth crime, crime victimisation, and traffic accidents when compared to their national counterparts (Police Development Group, 2007). Counties-Manukau has eight specialist police youth aid sites. Youth aid officers from seven of these sites took part in recruitment. These sites were Otahuhu, Manurewa, Papatoetoe, Mangere, Howick, Otara, and Papakura. These sites are identified in Figure A1 in Appendix B.

Candidates for the Diversion sample consisted of young people who had committed an offence and come into contact with Counties-Manukau youth aid. On admission of guilt, these young people had been placed on either a police alternative action plan, or had been referred to a Family Group Conference (FGC) where the outcome had been a police diversion plan pursuant to Section 247 (b) of the Children, Young Person, and their Families Act, 1989. This legal process is exhibited in Figure 1 of the Introduction chapter.



### **The “Clinical” sample: Regional Youth Forensic Service (RYFS)**

The Regional Youth Forensic Service (RYFS) is a forensic mental health service provided by the Auckland District Health Board (ADHB) and is based at Greenlane Hospital, Auckland City. The service was developed in response to an identified gap in accessing mental health assessments for young people presenting before the Courts. These specific young people present with significant criminogenic risk factors, mental health difficulties, as well as other psychosocial issues that may impact on their offending. Typical problems include difficulties with conduct and behaviour, care and protection, relationships, mood disorders, trauma, suicidal ideation and self-harm, autistic spectrum disorder, eating disorders, psychosis, and learning difficulties. RYFS therefore provides specialist mental health treatment, assessment and reports for young people involved within the youth justice system. These young people would otherwise be unable to access mainstream mental health services. Additionally, many of these services are not specialised to provide assessments and reports on forensic matters. RYFS also provides a key liaison role with other services within the youth justice system, including Youth Courts, FGCs, and youth justice residential facilities.

The population covered by RYFS includes both child offenders (aged 10 to 13 years) and youth offenders (age 14 to 16 years, including 17 year olds who offend at 16). These young people must be involved within the youth justice system (or the Family Court if under 14 years old) and are required to be living within the wider Auckland region (including those who are currently residing in an Auckland-based Youth Justice residence). Referrals to RYFS usually request an assessment of a young person’s mental state, offending behaviour, their fitness to plead before the Court, or a combination of these issues.

The wider Auckland region includes the Counties-Manukau District, Auckland City, the Waitakere District, North Shore, and the Rodney District north of Auckland (see Figure A2 in Appendix B). As of 2006 approximately 1.5 million people reside within this greater Auckland region. There are six district court houses within this region, all of which hold a Youth Court. Young people included in the Clinical sample were required to have offending matters before a Youth Court. Referrals to RYFS are most commonly made by the Youth Court Judges, however referrals can be made by youth advocates, CYFS workers, or police youth aid officers. A young person became a potential candidate for the Clinical sample if an assessment and report was completed that included an evaluation of the risk of recidivism.

### **Inclusion/ Exclusion Criteria**

Each participant in either group was aged 14, 15, or 16 at the time of their offending thus making them eligible to be charged in Youth Court. They also had to have participated effectively in the assessment process. Young people were excluded if they had significant physical (e.g., hearing) or intellectual disabilities due to ethical committee concerns over their ability to effectively consent and participate in the research. There were also additional individual sample criteria.

#### Participants in the Diversion sample needed to:

- Have been completing a youth justice diversion plan or alternative action plan within Counties-Manukau.
- Have admitted to being guilty of the offending behaviour.

Contact with the Police or the Youth Court subsequent to becoming a participant of the study (i.e., for new offending) did not exclude the participant.

### Participants in the Clinical sample needed to:

- Have offending matters before the Youth Court.
- Have admitted guilt, or have been found guilty by the Youth Court.
- Have completed an assessment with RYFS with an estimate of recidivism risk.

Participants for the study must be living within the greater Auckland region and have spent more time than not living within the community during the follow-up phase (i.e., not incarcerated in a youth justice residential facility).

### **Referral Sources**

The Diversion sample was drawn from 92 referrals by Counties-Manukau Police Youth Aid during the four month period of 01 January 2008 and 30 April 2008. All referrals were followed up with a total of 70 young people (76%) agreeing to participate in *Phase One*. All participants agreed to take part in *Phase Two* six months after *Phase One*. A total of 63 participants (90% of the initial sample) were successfully followed up. The remaining 7 participants could not be located. The Clinical sample was derived from an audit of 83 referrals for RYFS assessments from Youth Courts within the greater Auckland region during the 10-month study period of July 2007 to 30 April 2008. Of these 83 referrals, 70 had an estimate of recidivism risk, therefore meeting the criteria for *Phase One*. A total of 59 of these 70 participants met the inclusion criteria for *Phase Two*. Of the 24 excluded from *Phase Two* of the study, 8 lived outside of Auckland, 11 were assessed as cognitively impaired, 4 had spent most of the follow-up period in custody, and 1 was involved in the Diversion sample. A total of 44 of the 59 (75%) participants successfully completed *Phase Two* six-months after the RYFS assessment. Six declined participation and nine could not be located.

## SECTION TWO

## MEASURES

A brief description and purpose of the five measures used in the study is shown in Table 1.

Table 1.

**Description and Purpose of the Measures**

NAME: AUTHOR: DESCRIPTION: PURPOSE:	Youth Level of Service/ Case Management Inventory (YLS/CMI). Hoge & Andrews (2002). Standardised actuarial measure of a young person's criminogenic risk, need and responsivity factors. The measure identified a young person's risk of recidivism and guides intervention. To examine the psychometric properties of this measure for New Zealand youth offenders. To examine the measures ability to predict self-reported offending behaviour.
NAME: AUTHOR: DESCRIPTION: PURPOSE:	Youth Psychopathic Traits Inventory (YPI). Andershed, Kerr, Stattin, & Levander (2002). Self-report measure of adolescent psychopathic-type traits. To examine the psychometric properties of this measure for New Zealand youth offenders. To examine the relationship between psychopathic-traits with risk of recidivism, and self-reported offending behaviour.
NAME: AUTHOR: DESCRIPTION: PURPOSE:	Inventory of Callous-Unemotional Traits (ICU). Frick (2004). Self-report measure of callous and unemotional traits. To examine the psychometric properties of this measure for New Zealand youth offenders. To examine the relationship between callous and unemotional traits with risk of recidivism, and self-reported offending behaviour.
NAME: AUTHOR: DESCRIPTION: PURPOSE:	Massachusetts Youth Screening Instrument – Version 2 (MAYSI-2). Grisso & Barnum (2000). Self-report screening instrument of mental health concerns. To identify the rate of mental health concerns present in community samples of New Zealand youth offenders. To explore the relationship between mental health concerns with risk of recidivism, and self-reported offending behaviour.
NAME: AUTHOR: DESCRIPTION: PURPOSE:	Self Reported Offending Survey (SROS). Mooney (Unpublished). Self-report measure of offending behaviour and service involvement. To record the participant's adherence to youth justice plans, contact with authorities, and service involvement. To record the participant's seriousness of self-reported offending behaviour.

Example items from the YLS/CMI and the MAYSI-2 are presented in Appendix C, along with complete copies of the YPI, the ICU, and the SROS.

### **Focus Group for Measures**

Nine young people participated in a 90-minute focus group undertaken in the development of the methodology to ascertain whether New Zealand youth offenders could understand each of the items contained in the proposed measures. None of the proposed measures were developed in New Zealand and only the MAYSI-2 (Grisso & Barnum, 2003) is used regularly within the New Zealand Youth Justice system. These young people were all aged between 14 and 17 years old and had recent youth justice involvement. Six (67%) of the participants were male, while 3 (33%) were New Zealand Māori. The focus group identified no difficulties in understanding the content of any of the proposed measures.

### **Descriptive Data Sheet**

A Descriptive Data Sheet was developed to record information. This form is in Appendix C along with the definition and operation of each variable. Information recorded on the Descriptive Data Sheet includes the dates for *Phase One* and *Phase Two* took place, as well as the participants study ID number, referrer, age, ethnicity, current education/ employment status, previous police history, self-reported index offences, and legal status. Index offence(s) as well as the number of index offences were recorded. The categories of offending are derived from the New Zealand Department of Corrections (Department of Corrections, 1992). These responses are then marked in the corresponding boxes. The instrument was to be completed by the administrator only. Participants were asked each item orally and their answers recorded.

### **The Youth Level of Service/ Case Management Inventory (YLS/CMI)**

The YLS/CMI (Hoge & Andrews, 2002) was purchased from Multi-Health Systems for the purpose of this study. The measure is regularly used by RYFS, and is intended to be administered when youth offenders first enter the youth justice system. The measure can be completed in 35 to 45 minutes by using the standardised interview provided and/or a file review. A brief training session is required before use. The 42-item checklist was completed following administration of the standardised interview. Mental health professionals involved with the Clinical sample completed the measure after a clinical assessment and file review. Each item on the YLS/CMI was coded as either present or absent, with total possible scores ranging from 0 to 42. Scores are then categorised to risk level scores of low (0 to 8), medium (9 to 22), high (23 to 34), or very high (35 to 42).

Psychometric data obtained on the YLS/CMI (as well as its variants) has identified the instrument as suitable for assessing the causal risk, need, and responsivity factors of youth offending (Hoge, 2005). Internal consistency coefficient values for the total score range from  $\alpha = .8$  (Gretton & Catchpole, 2003; Marczyk et al., 2003; Marshall et al., 2006) through to  $\alpha = .9$  (Onifade, Davidson, Campbell et al., 2008; Rowe, 2002; Thompson & Pope, 2005). Coefficient alpha values for the subscales range from  $\alpha = .56$  to  $.77$  (Schmidt et al., 2005),  $\alpha = .64$  to  $.86$  (Welsh et al., 2008),  $\alpha = .69$  to  $.79$  (Thompson & Pope, 2005),  $\alpha = .60$  to  $.82$  (Rowe, 2002). Interrater reliability for the total score and individual subscales is high (Schmidt et al, 2002; Thompson & Pope, 2005).

### **The Youth Psychopathic Traits Inventory (YPI)**

Permission to use the YPI (Andershed et al, 2002) was obtained from the lead author. The YPI is a 50-item self-report measure designed for young people aged 12 to 18 years old. The

measure is designed to be completed by the young person, or it can also be read out aloud by an administrator who records the responses. Young people were asked to rate the degree to which each individual item applies to them using a four-point Likert scale (1 = “Does not apply well at all”; 2 = “Does not apply well”; 3 “Applies fairly well”; and 4 “Applies very well”). Answers are added to derive a total score. There are no cut-off scores available for the measure. Scores from the ten subscales were also calculated.

Few studies to date have examined the reliability properties of the YPI. Internal consistency values for the total score and the ten subscales range from  $\alpha = .66$  to  $.93$  (Andershed et al., 2002),  $\alpha = .67$  to  $.88$  (Dolan & Rennie, 2006), and  $\alpha = .65$  to  $.83$  (Poythress et al., 2006).

#### **The Inventory of Callous-Unemotional Traits (ICU)**

Permission to use the ICU (Frick, 2004) was obtained from the measure’s author. The self-report version was used in this study. Parent and teacher versions are also available for research purposes. Participants were asked to rate the degree to which each of the 24 individual items applied to them using a four-point Likert scale ranging from 0 (“not at all true”) to 3 (“definitely true”). Twelve of the ICU items are reverse scored. Results are tallied to produce a total ICU score. The three factor scores were also tallied. There are no cut-off scores available for the measure. The ICU can be completed by the young person or read aloud and recorded by the administrator. The ICU is a recently published measure, however several studies have already evaluated its psychometric properties in both large adolescent community samples (Essau et al., 2006; Roose et al., 2009) as well as smaller adjudicated samples (Dandreax & Frick, 2009; Kimonis et al., 2007; Kimonis et al., 2008). The ICU total score has shown adequate internal consistency of between  $\alpha = .77$  and  $\alpha = .81$  in studies to date.

### **Massachusetts Youth Screening Instrument – Version 2**

The MAYSI-2 (Grisso & Barnum, 2000) is a brief self-report measure that can be administered to youth offenders at any entry or transitional point within the youth justice system (Grisso & Quinlan, 2005). The measure is designed to identify thoughts, feelings, or behaviours that may be indicative of a mental illness which requires clinical services. The MAYSI-2 was designed to meet the needs of youth justice intake workers who require a standardised, reliable, and valid screening instrument that is feasible (brief, simple, requiring no clinical expertise) for use with every young person entering the system (Grisso & Quinlan, 2005). The measure is widely used throughout North America, Australia, and New Zealand. The MAYSI-2 consists of a 52-item “Yes/No” questionnaire, a scoring key, and a scoring summary form. The items are separated into seven core scales. These are: Alcohol/ Drug Use; Angry/Irritable; Depressed/Anxious; Somatic Complaints; Suicidal Ideation; Thought Disturbance (males only); and history of Traumatic Experiences. Young people are asked to circle which yes/no answer has been true for them “within the past few months” on six of the scales, and “ever in your whole life” on the Traumatic Experiences scale. The MAYSI-2 can be completed by the young person, or the assessor can read out each item and record the answer. All items answered “Yes” are added for each of the scales using the scoring key and scoring summary form. There is no MAYSI-2 total score generated. All scales are treated as independent. The scores for each subscale are compared to a cut-off score. Lower scores represent a “Normal” level of distress. The “Caution” score indicates a “clinical level of significance”, while scores above “Warning” range signify that the youth has scored higher than 90% of the normative sample at youth justice intake (Grisso & Quinlan, 2005).

Originally developed in 1994, the second version of the MAYSI was finalised and published in 2000. The measure was normed on 1,279 Massachusetts young people aged between 12



and 17 years who were at various stages of the youth justice system. The development of the MAYSI-2 is extensively detailed in the most recent technical manual (Grisso & Barnum, 2003) as well as in a review by Grisso and Quinlan (2005). Internal consistency values of the normative sample ranged from  $\alpha = .61$  to  $.86$  for the subscales (Grisso & Barnum, 2003), and the measure has adequate test-retest reliability (Grisso, Barnum, Fletcher, Cauffman, & Peuschold, 2001).

### **Self Reported Offending Survey (SROS)**

The SROS was developed for this study to record the multiple dependent outcome variables available on participants in this study. Established offending self-report measures were considered (Thornberry & Krohn, 2000), however these instruments use a broad definition of delinquency and fail to measure the cost to society of persistent offending. The SROS was created to measure offending behaviour that New Zealand police youth aid officers dealt with on a daily basis, while recognising the cumulative seriousness of the recidivistic offending. For the purpose of this study “seriousness of offending” reflects the cost to society by accounting for (a) the number of times each offence was committed, and (b) the seriousness score assigned to each index offence as recognised by the New Zealand Department of Corrections computerised actuarial static risk measure RoC\*RoI (Risk of re-Conviction X Risk of re-Imprisonment; Bakker, Riley, & O’Malley, 1999).

The SROS was developed in consultation with New Zealand police youth aid officers, youth advocates, youth justice social workers, and forensic mental health clinicians. A literature review on self-report offending measures was undertaken. The SROS incorporates the four key aspects of a reliable and valid self-report measures identified by Thornberry and Krohn (2000). Firstly, a self-report measure should include a broad variety of criminal acts which

include both serious and less serious crimes. Secondly, it is recommended that less severe acts should not be calculated in any total seriousness score due to concerns that prolific offenders will significantly skew results. Thirdly, a frequency scale should be used to record individual item responses so that prolific offenders can be isolated from less prolific offenders. Lastly, self-report measures should include follow-up questions to avoid uncertainty and ensure that both participants and administrators comprehend each self-reported offence. For example, play fighting should not be confused as common assault.

The SROS comprises two separate parts and total administration time ranges from 10 to 15 minutes. Part One consists of three questions. All responses are verbalised by participants and recorded by the administrator before being scored on Likert scales. Any positive answers require elaboration and are recorded. Young people are questioned as to whether they have had contact with either police or the Court for new offending in the past six-months, whether they completed or have adhered to their youth justice plan, and what level of service interventions have been received over the past six-months while completing their youth justice plans. Only the highest level of intervention is recorded in the case of multiple answers. Part Two of the SROS asks participants to report on offending they have committed over the past six-months for which they *may or may not have been caught*. Part Two contains eight offending categories consisting of 31 separate offending items. Each offending category contains a number of items that were selected during the development of the measure:

- |                                     |   |
|-------------------------------------|---|
| 1) Violence or Threats of Violence: | Five items  |
| 2) Wilful Damage:                   | One item  |
| 3) Arson/ Wilful Damage by Fire:    | One item  |
| 4) Theft/ Dishonesty:               | Nine items  |
| 5) Offences against Good Order:     | Five items  |
| 6) Traffic Offences:                | Four items  |
| 7) Sexual Offences:                 | One item  |
| 8) Drug related offences:           | Three items (two items have separate scores depending drug class procured or sold). |

Each item was read to the participant. A voluntary response of the number of times the participant has engaged in each activity is encouraged. The number of self-reported incidences for each offence is then coded according to a Likert scale (0 = No offences; 1 = One or Two times; 2 = Three to Five times; 3 = Six to Nine times; 4 = Ten times +). Each of the 31 self-reported offending items has a score allocated to it that represents the seriousness of the offence. The only exception is two of the drug related offences that considers the classes of drugs procured and sold. Likert scores are multiplied by each seriousness score then totalled to reveal a final “Seriousness of Self-Reported Offending Score”. Thornberry and Krohn (2000) state that self-report measures have difficulty in obtaining a normal distribution of scores due to the small percentage of offenders who commit a large percentage of crime. The SROS attempts to limit this difficulty by not including minor delinquent acts that will only exacerbate a prolific offender’s seriousness score. There are no cut off scores, and all seriousness scores were standardised before conducting statistical analyses.

A copy of the SROS, as well as a detailed description of the measure’s development is provided in Appendix C. As the SROS is a new measure designed for this study there are no previous psychometric properties to report. Thornberry and Krohn’s (2000) review of self-report offending measures conclude that this method of collecting information has acceptable reliability and moderate to high validity, especially for less serious offences, and for offences committed during a short time period.

## SECTION THREE

**PROCEDURE**

---

This section describes the procedures undertaken to recruit and administer the research measures in both *Phase One* and *Phase Two* for the Diversion sample and the Clinical sample. There are distinct differences in the procedures used to recruit and collect data from these two samples. *Phase One* for the Diversion sample consisted of a 90-minute testing session where all risk assessment instruments were administered. *Phase Two* was a 15-minute administration of the SROS six-months after *Phase One*. Practical implications prevented the same procedure being used with the Clinical sample. It was not appropriate to assess young people for research purposes at the same time that they were being assessed by RYFS clinicians. Nor was it appropriate for RYFS clinicians to administer the full complement of measures on my behalf for the purposes of research only. The procedure of participant recruitment and measure administration to the Clinical sample was designed with these limitations in mind. Figure 2 presents a flow diagram of the procedure for participant recruitment and the implementation of *Phase One* and *Phase Two* for the studies two samples. All information sheets and consent forms used in the recruitment process are included in Appendix C.

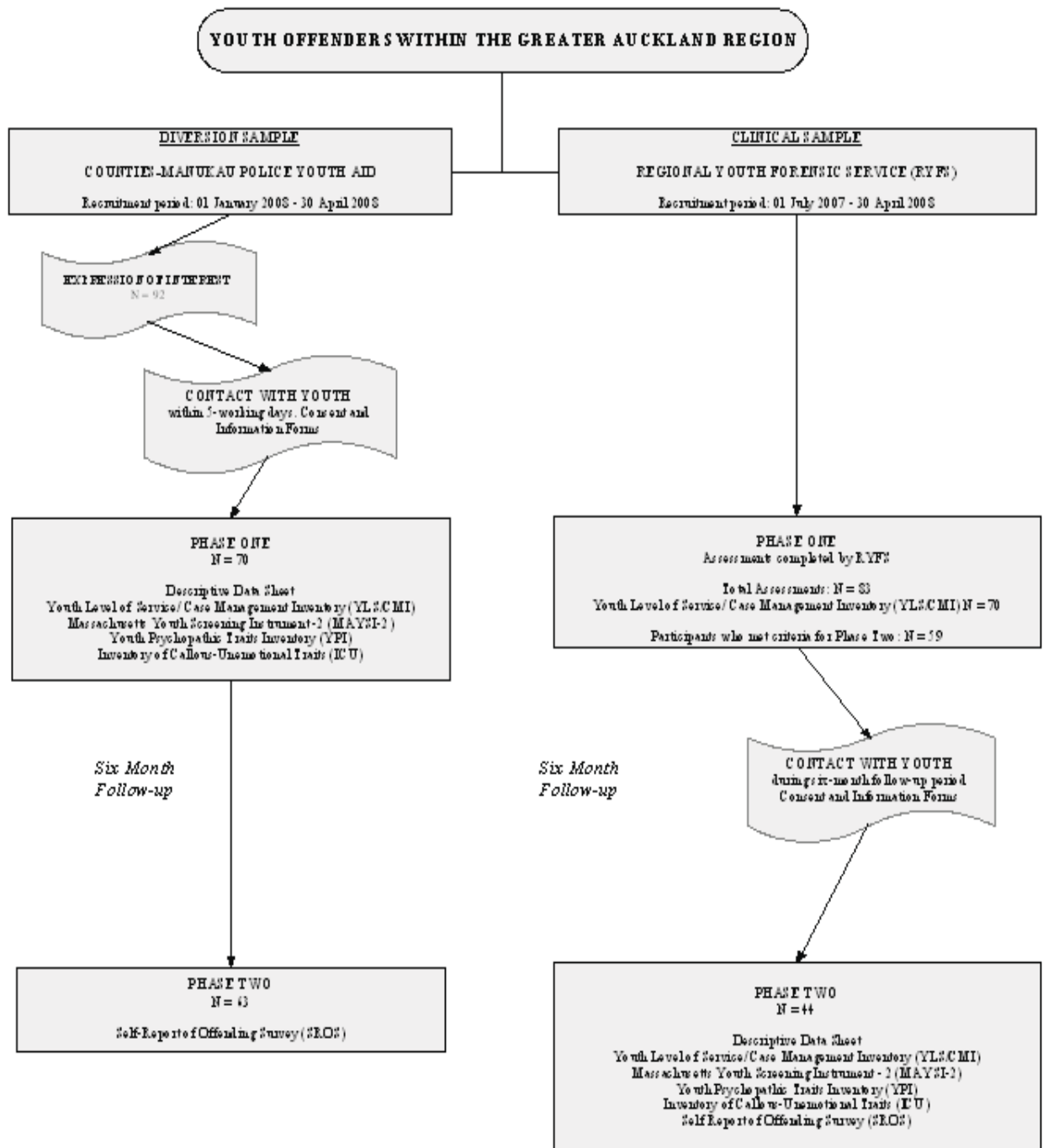


Figure 2. Flow diagram illustrating the procedure for participant recruitment and measure administration for the Diversion sample and the Clinical sample

### **Consent Process and Procedure for the Diversion Sample**

- Seven forms (on Massey University letterhead) were used in the recruitment of the Diversion sample (see Appendix C). Two versions (Youth version and Parent/ Guardian version) of a one-page Summary sheet of the studies Information sheet were provided to Youth Aid officers to inform families about the research and ask whether they would be interested in finding out more information on the study from the primary investigator. Youth Aid Officers were not expected to give detailed explanations of the study. Young people interested in the research were given an Expression of Interest Form by the Youth Aid officer. Page two of this form was then completed, signed, and forwarded via facsimile. I then made contact with the young person and his/ her caregivers by phone (or cold calling if the family had no telephone) within five working days of receiving it.
  
- An Information Sheet was provided to the young person and their parents/ caregivers at our first face-to-face contact. Two versions of the Information Sheet (Youth version and Parent/ Guardian version) were used throughout the study. The ethics committees agreed that young people aged 14-years or more were able to give their own consent. However, the cultural advisors consulted asserted that family/ whānau members should still have an option of being part of the consent process. Therefore a Consent form was to be completed by the participant, and on that form was an option for the young person to indicate whether he or she would like a family member to sign a Parent/ Guardian Agreement form. There were no instances where a family member disapproved of their young person's decision to participate in the study.

- Phase One* for the Diversion sample comprised of a single 90 minute assessment session and had to be undertaken within four weeks of the diversionary youth justice plan being finalised with the Police. This assessment was administered in a standardised fashion. The Descriptive Data Sheet was completed followed by the YLS/CMI using the instrument's interview guide. Administration of the YLS/CMI took approximately 50 minutes. Family members/ caregivers were permitted to be part of the YLS/CMI interview if the participant consented. Family members were not permitted to view the remainder of the assessment. A short break was taken after the completion of the YLS/CMI interview. Participants then completed the MAYSI-2 followed by the YPI and the ICU. The instructions for these three questionnaires were read to the participants, who were then given the option to complete the forms themselves, or (as was most preferred) answer verbally when I read each item to them. Administration of the three measures took approximately 30 minutes. Biscuits, potato chips, and cans of soft-drink were provided for participants during *Phase One*. All participants who began *Phase One* completed *Phase One*. Each participant was presented with a McDonalds voucher (to the value of \$10.00) to thank them for their participation.
- Phase Two* for the Diversion sample was a brief follow-up six months after *Phase One* where participants were administered the SROS. All participants agreed to be followed-up. Participants who could not be contacted after more than seven months were no longer pursued. The average follow-up period for the Diversion sample was approximately 23 weeks. Sixty three of the 70 participants (90%) were able to be located after six months and completed the SROS.

### **Consent Process and Procedure for the Clinical Sample**

- Six forms (on Auckland District Health Board letterhead) were utilised in the recruitment of the Clinical sample (see Appendix C).
  
- *Phase One* was an internal audit of all RYFS clients assessed between 01 July 2007 and 30 April 2008. Information collected from clients files included demographic information, mental health diagnoses, index offences, and YLS/CMI results. Participant consent was not required for this phase. This audit identified candidates to be followed up in *Phase Two*. Two versions (Youth Version and Parent/ Guardian Version) of a one-page Summary Sheet of the study's Information Sheet were optionally available for RYFS clinicians to inform any current clients who met the criteria for follow-up.
  
- A total of 83 young people were assessed by RYFS clinicians during the 10 month research timeframe. The YLS/CMI was used to estimate a young person's recidivism risk for 70 of those 83 young people (84%). The YLS/CMI was the only study measure utilised during *Phase 1* of the Clinical sample due to the aforementioned methodological and ethical difficulties.
  
- Young people eligible for *Phase Two* were contacted within six-months of the assessment by the RYFS clinicians. Information Sheets (Youth Version and Parent/ Guardian Version) were supplied to the young person and parents/ caregivers during our first face-to-face meeting. A Consent Form and a Parent/ Guardian Agreement Form were made available if the young person agreed to participate. Young people who met criteria for the *Phase Two* but who could not be contacted within 7 months of their RYFS assessment



were excluded from the study. The average follow-up phase for all Clinical sample participants was approximately 26 weeks.

- *Phase Two* for the Clinical sample consisted of standardised administration of all study measures during a single 100-minute assessment session. The Descriptive Data Sheet was administered followed by the YLS/CMI interview. Family members were permitted to be part of this interview if the participant permitted. The interview was usually completed within 50 minutes, after which a short break was taken. Participants then completed the MAYSI-II, the YPI, and then the ICU. Family members were excluded from observing. Participants were given the option whether they wanted to complete these measures themselves, or answer orally. Administration of all three measures took approximately 30-minutes. The study concluded for these participants with the administration of the SROS. Biscuits, potato chips, and cans of soft-drink were provided, and all participants were presented with a McDonalds voucher (to the value of \$10.00) to thank them for their participation. All participants who began *Phase Two* completed the 100 minute assessment.

### **Predictive versus Concurrent Validation**

Issues of predictive validity arise from this methodology. The YPI and the ICU are administered concurrently with the outcome SROS measure after six-months in the Clinical sample (but not in the Diversion sample). This is due to the aforementioned ethical difficulties in administering research measures during clinical assessment. Concurrent validity is a weaker measure of predictive power due to the lack of a predictive temporal gap. While this is acknowledged as a limitation of the design, this methodological approach was

deemed acceptable based on the evidence that psychopathic traits in children and adolescents are stable over short time periods (Frick et al., 2003).

### **Study Settings**

The settings in which the assessments took place were dependent on the participant and his or her family/ whānau. Most RYFS initial assessments were carried out at the RYFS clinic or within residential youth justice facilities. Where possible, the primary investigator assessed participants from both samples within their homes. However, if this was not viable then an alternative venue was identified in collaboration with the participant. A quiet and distraction-free environment was sought for all assessments.

### **Ethical and Cultural Considerations**

Clinical staff from RYFS, youth justice social workers, youth advocates, youth community workers, a Youth Court Judge, and numerous members of the New Zealand police in Counties-Manukau were consulted during the development of this study and their recommendations were taken into consideration. Māori and Pacific participants were likely to be over-represented due to the demographic features of the study and the overrepresentation of these ethnic groups within the youth justice system. Principles of the Treaty of Waitangi were acknowledged by way of a hui (meeting) separately held with senior Māori youth justice workers in Counties-Manukau, the Māori cultural advisor for a residential substance abuse programme in Auckland, and two Pacific community leaders in Counties-Manukau. This study was approved by the Health and Disability Commission (HDC) Northern X Regional Ethics Committee, the New Zealand Police Research and Evaluation Steering Committee (RESC), the Auckland District Health Board (ADHB) Research and Review Committee, and the ADHB Maori Research and Review Committee.

### **Primary Investigator Contact**

Participants could contact the primary researcher by calling a Massey University voicemail service set up specifically for the study. This voicemail service was checked at least once-per day throughout the duration of the study. Alternatively, participants could contact the researcher on a pre-paid mobile phone purchased and used for the sole purpose of the study.

### **Budget**

This study was funded by the allocated Massey University PhD/Doctoral fund, and through my personal funds. No government agencies or service providers contributed financially to this research project.

### **Alternative Titles for the Forms and Questionnaires**

The short name of the study was titled: “Getting it Sorted! A Study to Understand Youth Offending” This short title was used for all consent forms, information sheets, and assessment materials. Study titles were given to the YPI, the ICU, and the SROS in order to minimise any potential response biases (see Appendix C)

### **Data Analysis**

All data examined in this study were quantitative. Statistical analyses were conducted using SPSS 15.0 (SPSS Inc, 2008).

### **Concluding Comment: Presentation of the Participants**

Locating and assessing the participants presented unique challenges. The residences of many of these young people did not have home phone lines. Cold-calling their homes became the most successful method of meeting (and following-up) each young person once they had

consented to being contacted. Nevertheless, this method was time consuming and required persistence, patience, and a fair bit of petrol. Nearly all young people and their family/whānau members were welcoming and interested in hearing about the project, however the approach towards me by each family/whānau was variable. Many family/whānau members stated that they wanted their young person to participate as a way of “giving back” for their offending. Although the young people themselves were not as enthusiastic from this perspective, many cited the chance to help future young people who enter the youth justice system as a motivation for participating in the study. Some families, especially Māori and Pacific families, requested that I meet with both parents, as well as the young person prior to obtaining consent. However, other parents/caregivers were more dismissive and did not want to be involved in the young person’s decision. Only five of the 114 participants assessed wanted a parent or a caregiver to participate during the administration of the YLS/CMI interview.

Most of the assessment sessions were carried out at the homes of the young person. Due to the presence of other children and family members it was often difficult to find a quiet and distraction free environment. A number of assessments were therefore completed in the participant’s backyard area or in the garage. No sessions were completed in a closed environment (e.g., a bedroom) where access or observation by other people within the home was restricted. Homes varied widely depending on economic status and geography. Two young people were assessed in a youth justice residential facility. Bringing along cans of Coca Cola, chips, M&M’s and biscuits was useful in establishing rapport (both with the participant and other children in the home). Further, all young people appreciated receiving the McDonald’s voucher for their participation. In fact, many of the young people referred to

me as “the McDonald’s guy” when they were first approached about the study because friends of theirs had already become participants.

The presentation of each participant was also variable. This ranged widely from a 15 year old boy who was not attending school, lived in the garage of his parent’s state-owned housing complex with virtually no supervision, and who was under the influence of cannabis on each presentation. On the other end was a 16 year old girl with no history of any antisocial behaviour, was a form leader at a prestigious school in a high socio-economic area, and who had numerous prosocial peers, interests and goals. There were few young people similar to this latter example present within the Clinical sample. Nonetheless, a number of participants recruited through RYFS were *typical* young people whose emotional and interpersonal difficulties resulting from *atypical* circumstances (e.g., the death of a sibling, parental separation), which had led to contact with the police for the first time.

Overall, I felt that the participants related to me well as an outsider interested in their antisocial acts. My impression was that almost all of the young people participated to the best of their ability and relished the opportunity to confidentially discuss not only their crimes, but their friends, hobbies, and future ambitions. Most were surprised that it was not as “*hard*” or as “*boring*” as they had anticipated and were curious about how the results will be used. Virtually all participants were unhappy with their current predicament of being involved within the youth justice system. A number of young people asked me for advice or information on how they could improve their situations by enrolling in a course, obtaining an apprenticeship, or joining a club. Most participants requested to be contacted at the conclusion of the study with a brief description of the results.

## CHAPTER THREE

# RESULTS

This study intended to examine the validity of three risk assessment measures in predicting self-reported offending of youth offenders within New Zealand. Section One of this results chapter presents the descriptive univariate and bivariate statistics for both the Diversion sample, and the Clinical sample. Both samples are jointly discussed so that differences between the two samples can be observed. Section Two presents the descriptive findings for the four independent variable measures i.e., the Youth Level of Service/ Case Management Inventory (YLS/CMI), the Youth Psychopathic Traits Inventory (YPI), the Inventory of Callous/ Unemotional Traits (ICU) and the Massachusetts Assessment Youth Screening Inventory – 2 (MAYSI-2). The convergent validity of these three risk measures is explored in Section Three. The descriptive findings of the Self-Report Offending Survey (SROS), i.e., the outcome measure for the study, are discussed in Section Four. Sections Five and Six explore the predictive validity of YLS/CMI, the YPI, and the ICU. In Section Five the associations, between these risk assessment measures and the SROS outcome measure are examined. Section Six shows the results of Receiver Operator Characteristic (ROC) analyses for the three risk assessment measures. The incremental validity of the three measures is explored using a series of regression analyses to anticipate self-reported contact with authorities, as well as the overall seriousness of a participant's self-reported offending behaviour. Data from both samples were merged for these latter analyses. Finally, in Section Seven consideration is given to whether the participants of this study received interventions appropriate to their identified level of risk and need, and whether the application of different levels of service was associated with reoffending during the six month follow-up period.

## SECTION ONE

**THE PROFILE OF NEW ZEALAND YOUTH OFFENDERS IN THIS STUDY**

---

The Diversion sample consisted of 70 young people, of whom 63 (90%) were followed-up after six-months. The Clinical sample initially consisted of an audit of 83 young people. A total of 59 of these Clinical participants met the criteria for *Phase Two*, of whom 44 (75%) were successfully followed-up and re-assessed after six-months. Results for the two samples will be discussed separately throughout Section One to reflect the convergent validity of the risk-assessment measures.

**Sample Demographics**

Data on gender, age at offence, ethnicity, legal status, and education were collected for each participant at *Phase One*. This information is presented for both the Diversion and the Clinical samples in Table 2. Males are overrepresented in both samples. The 15% of female offenders in the Diversion sample is proportional to New Zealand youth offending statistics, while the proportion of female offenders is higher (25.3%) for the Clinical sample. Over 40% of both samples were 16 years of age at the time of the index offence. NZ Māori and Pacific youth were over-represented for both samples while NZ Europeans were less than 25% of the Diversion sample. Over 54% of the Diversion sample consisted of participants being made subject to a Diversion Family Group Conference (FGC). Approximately 40% of both samples were unemployed and/ or not enrolled with an education provider. Approximately 16% of the Clinical sample was still in mainstream education.

Table 2

**Initial Assessment Demographic Statistics for the Diversion and Clinical samples**

DEMOGRAPHIC	CATEGORY	DIVERSION <i>N</i> = 70		CLINICAL <i>N</i> = 83	
		<i>n</i>	%	<i>n</i>	%
Gender	Male	59	84.2	62	74.6
	Female	11	15.8	21	26.4
Age at initial assessment	14 years	24	34.2	20	24.2
	15 years	17	24.2	25	30.1
	16/17 years	29	41.6	38	45.7
Ethnicity	NZ European	17	24.3	36	43.4
	NZ Māori	27	38.5	31	37.3
	Pacific	24	34.3	12	14.5
	<i>Tongan</i>	<i>(10)</i>	<i>(14.3)</i>	<i>(0)</i>	<i>(0)</i>
	<i>Samoa</i>	<i>(7)</i>	<i>(10.0)</i>	<i>(3)</i>	<i>(3.6)</i>
	<i>Cook Island</i>	<i>(6)</i>	<i>(8.6)</i>	<i>(7)</i>	<i>(8.4)</i>
	<i>Pacific other</i>	<i>(2)</i>	<i>(2.8)</i>	<i>(2)</i>	<i>(2.4)</i>
Legal Status	Other ethnicity	1	1.4	4	4.8
	Alternative Action	32	45.7	---	---
	FGC Diversion	38	54.3	---	---
Education Status	Youth Court status	---	---	83	100
	Unemployed/ Un-enrolled	27	38.6	35	42.2
	High School (Mainstream)	24	34.3	13	15.7
	Employed (full-time)	10	14.3	7	8.4
	Alternative Education	9	12.9	19	22.9
	Unknown	0	0.0	9	10.8

**Index Offending**

Characteristics of the index offences that prompted referral to the study are presented in Table 3. Just over 50% of the Diversion sample committed only one offence ( $M = 1.86$ ,  $SD = 1.28$ ) while 9% of the sample was referred for committing four or more offences. This differed from the Clinical sample where 58% of the sample were before the Youth Court on four or more charges ( $M = 4.82$ ,  $SD = 3.58$ ). Similar discrepancies between the two samples were evident in the types of offending committed. Theft/ Dishonesty charges were the most prevalent index offence for both samples. However over half of the



Clinical sample had committed an offence against Good Order, and/ or a Violent offence. This is in contrast to the Diversion sample where Violence accounted for approximately 25% of the index offending. Further, youth offenders in the Clinical sample were more versatile with approximately 20% having offences from three of the eight offending categories. More than 77% of the Clinical sample self-reported having a history with the NZ Police prior to presenting at Court. The Diversion sample was similar, with 61% reporting some form of previous police involvement for offending behaviour.

Table 3  
Index Offending Characteristics for the Diversion and the Clinical Samples

INDEX OFFENDING	CATEGORY	DIVERSION N = 70		CLINICAL N = 83	
		<i>n</i>	%	<i>n</i>	%
<b>No. of Offences</b>	One matter only	38	54.3	8	9.6
	Two matters	16	22.9	14	16.9
	Three matters	10	14.3	13	15.7
	Four matters	3	4.3	15	18.1
	Five matters	2	2.9	6	7.2
	Six or more	1	1.4	27	32.5
<b>Categories of Offences</b>	Violence/ Threats	18	25.7	48	57.8
	Wilful Damage	11	15.7	17	20.5
	Arson	0	0.0	1	1.2
	Theft/ Dishonesty	36	51.4	53	63.9
	Good Order	7	10.0	45	54.2
	Traffic	13	18.6	4	4.8
	Sexual	0	0.0	2	2.4
	Drug related	5	7.1	8	9.6
<b>Offending Variability</b>	One category	52	74.3	28	33.7
	Two categories	14	20.0	28	33.7
	Three categories	3	4.3	17	20.5
	Four or more categories	1	1.4	10	12.0
<b>Previous Police Intervention</b>	Yes	43	61.4	64	77.1

### Participant Mental Health: Clinical Sample Only

Mental Health diagnoses were identified by RYFS for the Clinical sample only. These diagnostic impressions are listed in Table 4. Of the 83 young people assessed, 64% were diagnosed with an Axis-I psychiatric disorder as described in the DSM-IV-TR (APA, 2002). Conduct Disorder was the most prevalent with 47% receiving some form of this diagnosis (i.e. both early/ late onset, and either mild, moderate, or severe). Substance Abuse and Substance Dependence disorder were the next most prevalent diagnosis. Substance use of some form was identified as being a problem for nearly 70% of this sample and nearly 80% had co-occurring mental health condition and substance abuse/ dependence issues that warranted an additional DSM-IV-TR (APA, 2002) diagnosis. A full cognitive assessment was completed if it was directed by the court, or if the clinicians felt it was worth investigating. Eleven young people were identified as being intellectually impaired after undertaking a cognitive assessment. This ruled these participants out of *Phase Two*.

Table 4

#### Mental Health Descriptive Statistics Identified in the Clinical Sample

MENTAL HEALTH ISSUES	CATEGORY	CLINIC SAMPLE N = 83	
		n	%
Formal Axis-I Diagnosis?	Yes	53	63.9
Axis-I Diagnosis Type (cumulative results of all identified diagnoses)	Conduct Disorder (any type)	39	47.0
	Alcohol Abuse/ Dependence	13	15.7
	Cannabis Abuse/ Dependence	15	18.1
	Oppositional Defiant Disorder	7	8.4
	Attention Deficit Hyperactivity Disorder	2	2.4
	Mood Disorder	2	2.4
	Anxiety Disorder	2	2.4
	Other Substance Abuse/ Dependence	4	4.8
	Psychotic Disorder	2	2.4
	Other	2	2.4
Significant Substance Abuse Issues identified	Yes	25	30.1
Dual Diagnosis	Yes	19	22.9
Cognitive Difficulties	Yes	11	13.2

## SECTION TWO

**DESCRIPTIVE STATISTICS OF THE RISK ASSESSMENT MEASURES**

---

**Youth Level of Service/ Case Management Inventory (YLS/CMI)**

The YLS/CMI measure was administered on three occasions throughout this study. Table 5 presents the results comparing YLS/CMI scores for the Diversion and the Clinical sample during *Phase One*. Figures 3 and 4 display the distribution YLS/CMI total scores for the two respective samples. All 70 participants in the Diversion sample were administered the YLS/CMI during the initial assessment. The average score on this administration fell within the *Moderate* range of risk-of re-offending ( $M = 13.97$ ,  $SD = 7.89$ ). The range of results was variable with scores ranging from 1 through to 31. There were 20 Diversion participants (29%) who were scored as “Low” according to the YLS/CMI scoring manual, while 12 (17%) scored within the “High” range. Only one participant met the criteria for “Very High”.

For the Clinical sample, the YLS/CMI was completed as part of the clinical assessment for 70 of the 83 young people assessed by Regional Youth Forensic Services (RYFS) during the study period. The average overall score was at the higher end of the *Moderate* range ( $M = 19.69$ ,  $SD = 6.41$ ). Approximately 41% were scored as “High” risk of recidivism. There were no scores in the “Very High” range.

Alpha calculations were used to measure the internal consistency of the YLS/CMI. The initial scores for all participants ( $N = 140$ ) were merged. The overall internal consistency coefficient of the YLS/CMI total score was .79. Alpha values for the measures eight subscales were good and ranged from .58 (Education/ Employment) through to .77 (Attitudes/ Orientation).

## RESULTS

An independent samples  $t$  test compared YLS/CMI total and subscale scores for the Diversion sample and the Clinical sample (*Phase One*) in order to establish whether the two-samples are in fact different according to their risk profiles. There was no significant difference between the risk subscale “Leisure and Recreation” and “Peer Relationships”. However there were significant difference in scores between the two samples on the remaining six subscales as well as the YLS/CMI total score with the Clinical sample scoring consistently higher than the Diversion sample:  $t(138) = -4.73, p < .001$  (two-tailed).

Table 5  
**Descriptive Statistics and  $T$  Test Scores of the YLS/CMI for the Diversion and the Clinical Sample during *Phase One* of the Study**

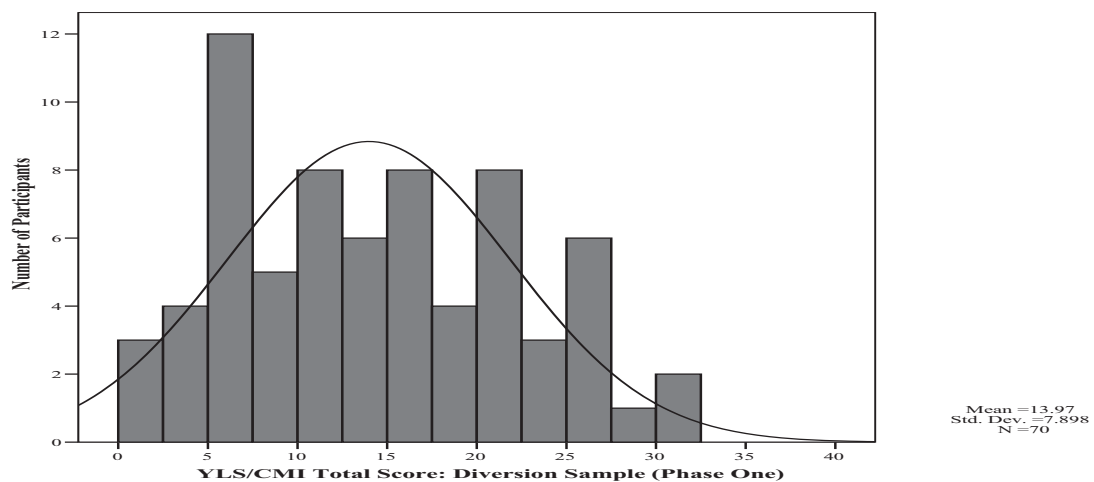
Youth Level of Service/ Case Management Inventory (YLS/CMI)	PHASE ONE DIVERSION $N = 70$			PHASE ONE CLINICAL $N = 70$			$t$	$\alpha$
	$M$	$SD$	Range	$M$	$SD$	Range		
1. Prior and Current Offences	0.33	0.86	0 – 4	0.99	1.18	0 – 5	-.3.75**	.67
2. Family Circumstances	2.34	1.71	0 – 6	3.71	1.63	0 – 6	-4.86**	.65
3. Education/ Employment	1.56	1.34	0 – 5	2.37	1.85	0 – 7	-2.98**	.58
4. Peer Relationships	2.53	1.34	0 – 4	2.74	1.11	0 – 4	-1.03	.62
5. Substance Abuse	1.94	1.45	0 – 5	2.44	1.56	0 – 5	-1.96*	.69
6. Leisure/ Recreation	1.69	1.29	0 – 3	1.93	0.98	0 – 3	-1.25	.73
7. Personality/ Behaviour	2.23	1.82	0 – 6	3.57	1.69	0 – 7	-4.52**	.65
8. Attitudes/ Orientation	1.36	1.43	0 – 4	2.01	1.53	0 – 5	-2.63**	.77
TOTAL YLS/CMI SCORE	13.97	7.89	1 - 31	19.69	6.30	4 - 30	-4.73**	.79

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

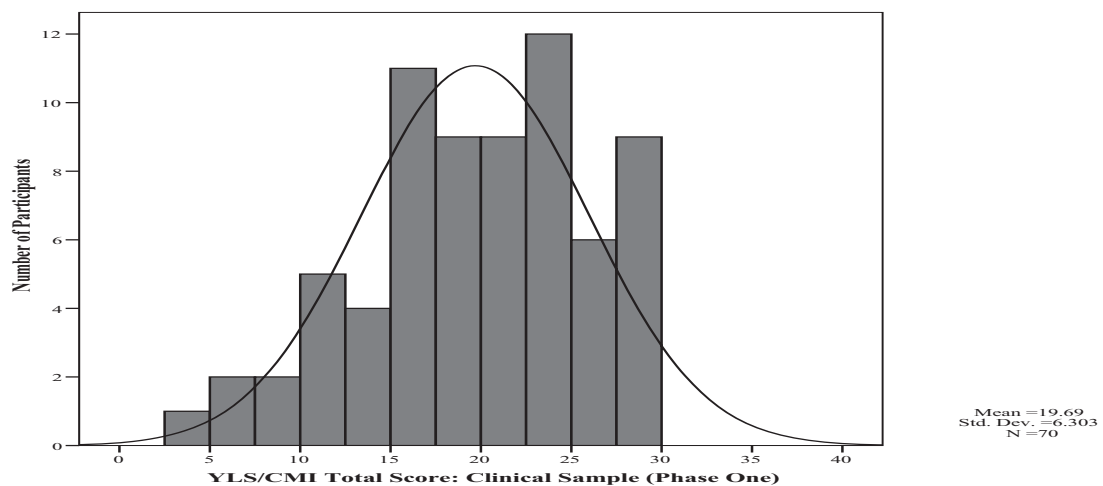
When the YLS/CMI was re-administered to the Clinical (follow-up) sample ( $N = 44$ ) the overall risk score was similar, remaining in the Moderate range of risk of re-offending ( $M = 18.25, SD = 6.48$ ). A total of 14 (32%) participants scored within the ‘High’ risk range at six-month follow-up. These results are illustrated in Table 6. The distribution of these scores are shown in Figure 5.

## RESULTS

The difference between pre and post scores on the YLS/CMI for the 44 Clinical participants was also examined. A paired samples *t* test found a statistically significant decrease in the mean scores for four of the eight risk domains (including “Family and Parenting Circumstances”, “Education and Employment”, “Substance Abuse”, and “Personality and Behaviour”) as well as the YLS/CMI total score,  $t(43) = 20.32$ ,  $p < .001$  (two-tailed).



**Figure 3.** Distribution of Phase One YLS/CMI total scores for the Diversion sample ( $N = 70$ )



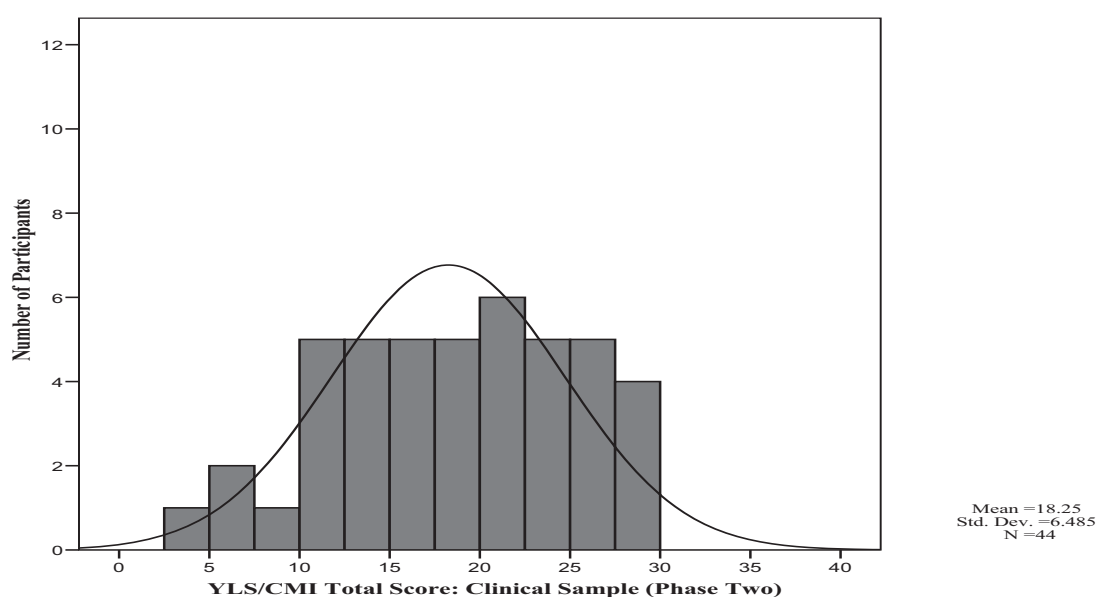
**Figure 4.** Distribution of Phase One YLS/CMI total scores for the Clinical Sample ( $N = 70$ )

Table 6

**Descriptive Statistics and Paired Sample *T* Test Results for the YLS/CMI Clinical Sample *Phase One* and *Phase Two*<sup>1</sup>**

Youth Level of Service/ Case Management Inventory (YLS/CMI)	<i>PHASE ONE</i> CLINICAL (Initial Assessment) <i>N</i> = 44			<i>PHASE TWO</i> CLINICAL (Follow-up) <i>N</i> = 44			Paired Samples <i>t</i>
	<i>M</i>	<i>SD</i>	Range	<i>M</i>	<i>SD</i>	Range	
1. Prior and Current Offences	1.05	1.14	0 - 5	2.00	1.14	0 - 5	-6.93**
2. Family Circumstances	3.89	1.53	0 - 6	3.23	1.54	0 - 6	3.76**
3. Education/ Employment	2.80	1.94	0 - 7	1.57	1.45	0 - 6	4.43**
4. Peer Relationships	2.80	1.22	0 - 4	2.55	1.21	0 - 4	1.43
5. Substance Abuse	2.61	1.56	0 - 5	1.93	1.26	0 - 5	2.94**
6. Leisure/ Recreation	1.89	0.91	0 - 3	1.77	0.96	0 - 3	1.59
7. Personality/ Behaviour	3.58	1.63	0 - 7	3.18	1.56	0 - 6	2.03*
8. Attitudes/ Orientation	2.31	1.55	0 - 5	1.98	1.48	0 - 5	1.20
TOTAL YLS/CMI SCORE	20.68	6.31	4 - 30	18.25	6.48	3 - 29	3.89**

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

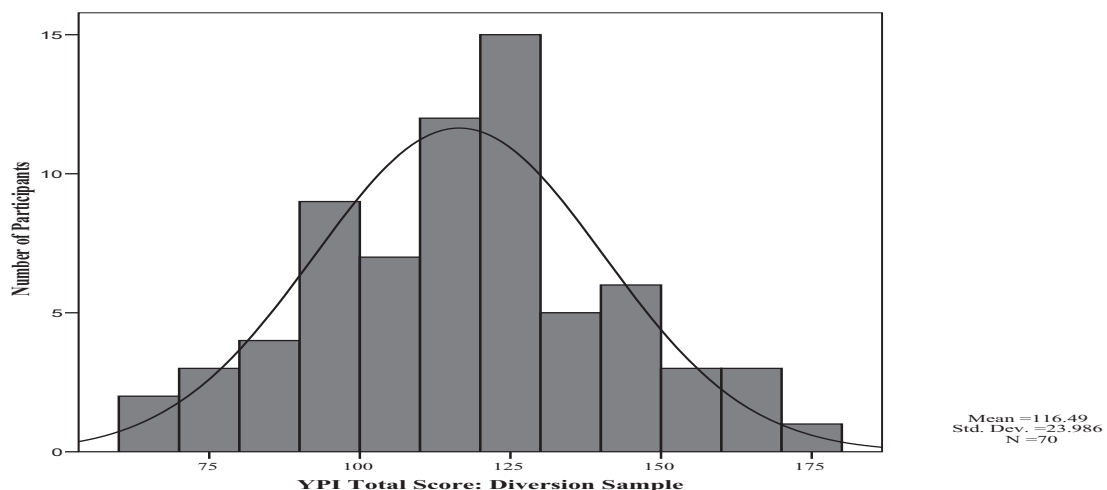


**Figure 5.** Distribution of Phase Two YLS/CMI Total Scores for the Clinical Sample ( $N = 44$ )

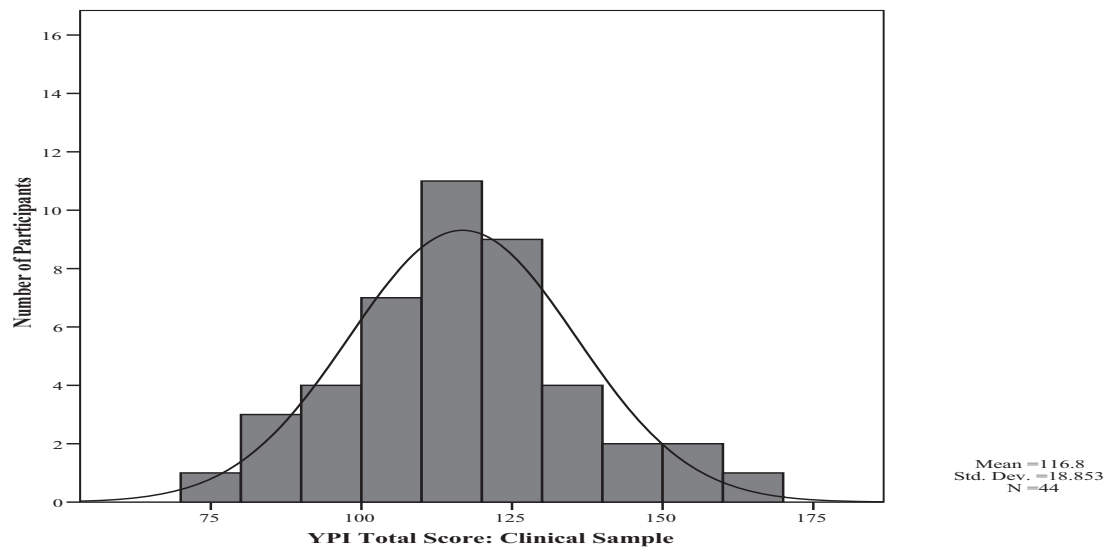
<sup>1</sup> Please recall that of the 83 original Clinical participants from *Phase One*, 70 were administered the YLS/CMI. Table 6 shows the descriptive results of the 44 Clinical participants where the YLS/CMI was administered in both *Phase One* and *Phase Two*.

### Youth Psychopathic Traits Inventory (YPI)

The YPI was administered to the Diversion sample ( $N = 70$ ) during *Phase One* and the Clinical follow-up sample ( $N = 44$ ) in *Phase Two*. The descriptive statistics for the YPI are presented in Table 7. The distributions of the mean scores across the 10 scoring domains and three factor scores were similar between the samples. The average scores for both samples was approximately 116 (Diversion:  $M = 116.5$ ,  $SD = 23.98$ ; Clinical:  $M = 116.8$ ,  $SD = 18.25$ ). Independent sample  $t$  tests were conducted to compare scoring between the two samples. No significant differences were obtained, including that of the total scores between the samples:  $t(138) = -0.07$ ,  $p > .05$ . The distribution of the YPI total scores for these two samples is illustrated in Figures 6 and 7. Internal consistency was examined by merging both samples together ( $N = 114$ ). The internal consistency for the YPI total scores was high ( $\alpha = .92$ ). Alpha values for the three factor scores was also high and ranged from  $\alpha = .62$  through to  $\alpha = .88$ . The ranges of alpha values for the ten index scores were more variable. Internal consistency for the Unemotional Index score was the weakest ( $\alpha = .47$ ). The Lying Index had the strongest internal consistency at  $\alpha = .79$ .



**Figure 6.** Distribution of YPI Total Scores for Diversion Sample



**Figure 7.** Distribution of YPI Total Scores for the Clinical Sample ( $N = 44$ )

Table 7

**Descriptive Statistics for the YPI for the Diversion ( $N = 70$ ) and Clinical Follow-Up ( $N = 44$ ) Samples**

Youth Psychopathic Traits Inventory (YPI)	DIVERSION $N = 70$			CLINIC (FOLLOW-UP) $N = 44$			$t$	Total $N = 114$ $\alpha$
	$M$	$SD$	Range	$M$	$SD$	Range		
1. Dishonest Charm	10.11	3.25	12	10.25	3.34	15	-0.22	.74
2. Grandiosity	10.36	3.24	15	10.25	2.86	12	0.18	.66
3. Lying	10.01	3.56	14	10.05	3.43	13	-0.05	.79
4. Manipulation	9.97	3.39	12	10.05	2.23	14	-0.12	.74
GRANDIOSE-MANIPULATIVE	40.46	11.52	52	40.59	11.08	49	-0.06	.88
5. Remorselessness	10.64	3.16	15	10.34	2.84	13	0.52	.62
6. Unemotionality	11.67	2.83	15	11.50	2.36	11	0.34	.47
7. Callousness	11.84	3.16	13	12.41	2.84	12	-0.96	.62
CALLOUS-UNEMOTIONAL	34.16	7.06	33	34.25	5.78	26	-0.07	.62
8. Thrill-Seeking	15.16	3.43	13	15.00	2.72	11	0.26	.72
9. Impulsivity	13.34	3.38	14	13.82	3.02	13	-0.76	.69
10. Irresponsibility	13.37	3.66	14	13.14	3.45	14	0.34	.67
IMPULSIVE-IRRESPONSIBILITY	41.87	8.85	34	41.95	7.71	33	-0.05	.79
YPI TOTAL SCORE	116.5	23.98	103	116.8	18.85	87	-0.07	.92



### Inventory of Callous-Unemotional Traits (ICU)

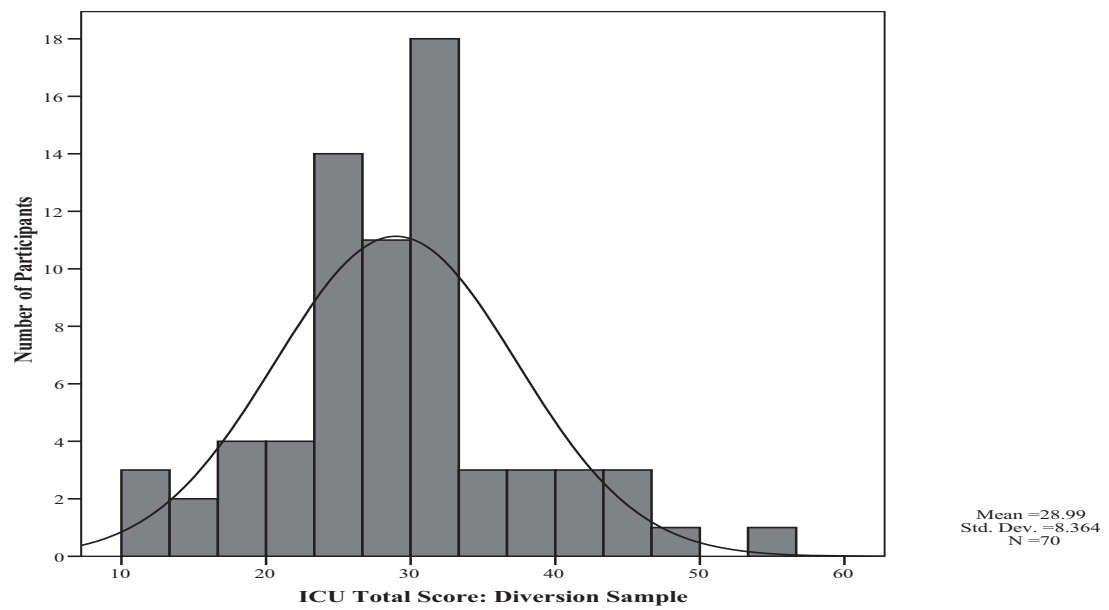
The ICU was administered to the Diversion sample ( $N = 70$ ) during *Phase One* and the Clinical follow-up sample ( $N = 44$ ) during *Phase Two*. The descriptive statistics for the ICU are presented in Table 8. The range of scoring for both samples was 43 points. Independent sample  $t$  tests were conducted to compare the two samples on the total score and the three factor scores of the ICU. No significant differences were identified, including the mean ICU total scores:  $t(138) = -0.63, p > .05$ . The distributions of the ICU total scores for the Diversion and Clinical samples are illustrated in Figures 8 and 9 respectively.

ICU scores for the Diversion and the Clinical sample were merged to assess internal consistency of the measure. Good internal consistency was identified for the total score of the ICU ( $\alpha = .77$ ). Alpha values for the three factor scores varied. The Unemotional factor score had the weakest internal consistency ( $\alpha = .48$ ) while the internal consistency of the Uncaring Factor was the strongest ( $\alpha = .75$ ).

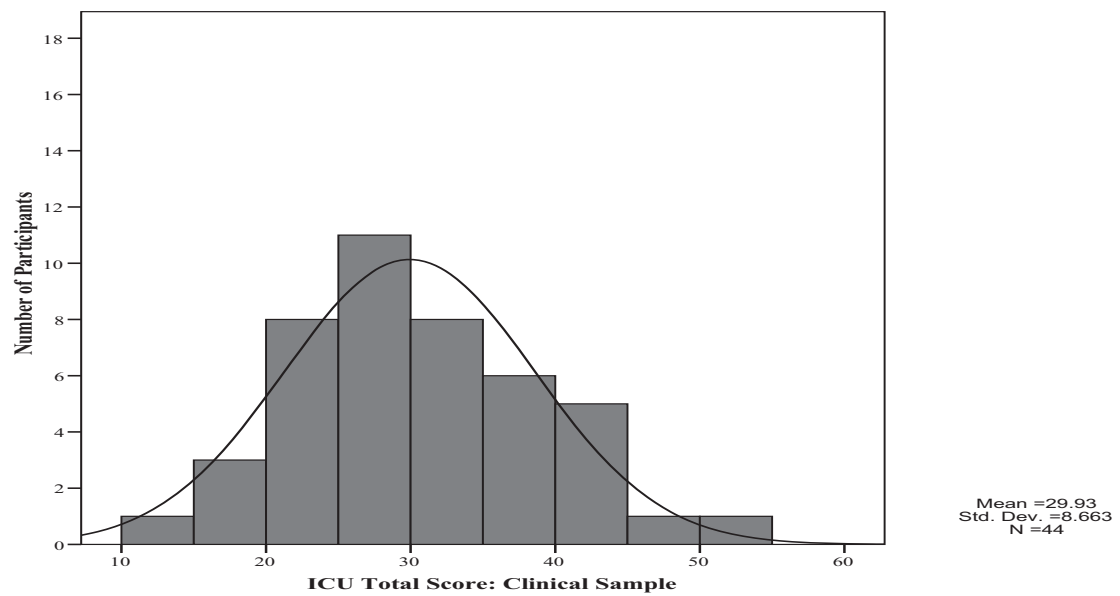
Table 8  
**Descriptive Statistics and  $T$  Test Result of the ICU for the Diversion ( $N = 70$ ) and Clinical Follow-Up ( $N = 44$ ) Samples**

Inventory of Callous-Unemotional Traits (ICU)	DIVERSION $N = 70$			CLINIC (FOLLOW-UP) $N = 44$			$t$	Total $N = 114$ $\alpha$
	$M$	$SD$	Range	$M$	$SD$	Range		
CALLOUSNESS FACTOR	9.83	4.79	30	10.43	4.98	25	-0.65	.69
UNCARING FACTOR	10.61	4.27	18	11.48	4.15	17	-1.06	.75
UNEMOTIONAL FACTOR	8.54	2.68	14	8.02	2.23	13	1.08	.48
ICU TOTAL SCORE	28.99	8.36	43	29.93	8.66	43	-0.63	.77

## RESULTS



**Figure 8.** Distribution of ICU Total Scores for the Diversion Sample.



**Figure 9.** Distribution of ICU Total Scores for the Clinical Sample.

**Massachusetts Assessment Youth Screening Inventory – Version Two (MAYSI-2)**

The mental health of both samples was further assessed by using the MAYSI-2. The descriptive statistics for both samples are provided in Table 9. At initial assessment most of the Diversion sample fell within the “Normal” range across the six scales of mental health assessed. Approximately half of all participants in both groups scored at the Caution range or above for “Alcohol/ Drug Use”. A high percentage reported problematic mood symptoms and difficulties with anger and irritability. Approximately 35% of the males in both groups scored at the Caution range or above on the screening questions for “Thought Disorder”.

Table 9

**Percentage Rates of Scoring Levels across the MAYSI-II Domains for the Diversion (Initial Assessment/ *Phase One*) and Clinical (Follow-Up/ *Phase Two*) Samples**

MAYSI-II SCORES	SCORING LEVEL	DIVERSION <i>N</i> = 70		CLINICAL <i>N</i> = 44	
		<i>n</i>	%	<i>n</i>	%
ALCOHOL/ DRUG USE	Normal	37	52.9	22	50.0
	Caution	26	37.1	18	40.9
	Warning	7	10.0	4	9.1
ANGRY - IRRITABLE	Normal	47	67.1	27	61.4
	Caution	16	22.9	15	34.1
	Warning	7	10.0	2	4.5
DEPRESSED - ANXIOUS	Normal	59	84.3	29	65.9
	Caution	10	14.3	12	27.3
	Warning	1	1.4	3	6.8
SOMATIC COMPLAINTS	Normal	50	71.4	33	75.0
	Caution	20	28.6	7	15.9
	Warning	0	0.0	4	9.1
SUICIDAL IDEATION	Normal	62	88.6	38	88.4
	Caution	2	2.9	2	4.7
	Warning	6	8.6	3	7.0
THOUGHT DISORDER (Males only)	Normal	39	66.1	21	61.7
	Caution	14	23.7	7	20.7
	Warning	6	10.2	6	17.6
	N/A Females	11	-----	10	-----

## RESULTS

Chi-square tests for independence were conducted in order to explore any relationships between demographic statistics obtained and the MAYSI-2 scale levels. Both samples were merged to maximise resistance to breaching the representation assumption of having more than 20% of cells with an expected frequency less than 5. This still resulted in a large number of breaches in this assumption. MAYSI-II scale scores of “Warning” and “Caution” were subsequently merged to adhere to the assumption. The findings revealed only three significant relationships. It was observed that a larger than expected number of young people who had previously been involved with the Police scored above the “Normal” range for the Alcohol/ Drug Use Domain:  $\chi^2 (2, 114) = 8.82, p < .005$ . Secondly, participants of non-Pākehā ethnicity were significantly more likely to score above the “Normal” range on the Depressed/ Anxious scale:  $\chi^2 (2, 114) = 3.71, p < .05$ . Finally, older participants aged 16 years or above were significantly more likely to score above the “Normal” range on the Thought Disorder scale:  $\chi^2 (2, 114) = 5.7, p < .005$ .

## SECTION THREE

**CONVERGENT VALIDITY OF THE RISK ASSESSMENT MEASURES****Correlation Analyses between the YLS/CMI, the YPI and the ICU**

The relationship between the total scores of the three risk assessment measures was examined using Pearson product-moment correlation coefficients. Preliminary analyses were performed, and there were no violations of the assumptions of normality, linearity, outliers, or homoscedasticity. Table 10 illustrates the results of the Diversion sample ( $N = 70$ ) where the YLS/CMI, the YPI and the ICU were administered during *Phase One*. Table 11 illustrates the results of the follow-up Clinical Sample ( $N = 44$ ) where the YLS/CMI was re-administered, along with the YPI and the ICU. For complete correlation matrices, including the factor scores and risk domain scores of the three measures, please see Tables A7 and A8 in Appendix G. For the Diversion sample, there was a strong positive correlation between the total scores of the YLS/CMI and the two psychopathic-traits screening measures. There was also a moderate positive correlation between the YPI and the ICU,  $r = .437$ ,  $n = 70$ ,  $p < .01$  (one-tailed). The co-efficient of determination between these two measures was 0.19. This means that scoring on the YPI accounted for approximately 19 per cent of the variance in participant scores on the ICU. The amount of variance in the YLS/CMI scores accounted for by these two measures was 38.5% (YPI) and 39.5% (ICU) respectively.

Table 10

**Pearson Product-Moment Correlations between the YLS/CMI, the YPI and the ICU for the Diversion Sample ( $N = 70$ ).**

Measure	YLS/CMI Total	YPI Total	ICU Total
1. YLS/CMI Total Score	----	.62**	.63**
2. YPI Total Score		----	.44**
3. ICU Total Score			----

\*\*  $p < 0.01$  (1-tailed)

Pearson product-moment correlation coefficients for follow-up participants in the Clinical sample ( $N = 44$ ) mirrored those described in the Diversion sample and shown in Table 11. Strong correlations between the YLS/CMI and the two-psychopathic-traits measures were revealed. There was also a moderate correlation between the YPI and ICU,  $r = .44$ ,  $N = 44$ ,  $p < .01$  (1-tailed). The amount of variance in the YLS/CMI scores explained by these two measures was 35.2% (YPI) and 39.3% (ICU).

Table 11

**Pearson Product-Moment Correlations between the YLS/CMI, the YPI and the ICU for the Clinical Sample ( $N = 44$ ).**

Measure	YLS/CMI Initial Score	YLS/CMI Follow-up	YPI Total	ICU Total
1. YLS/CMI Initial Score	----	.79**	.44**	.48**
2. YLS/CMI Follow-up		----	.59**	.63**
3. YPI Total Score			----	.44**
4. ICU Total Score				----

\*\*  $p < .01$  (one-tailed)

**Point-Biserial Correlations between Descriptive Data and the YLS/CMI, the YPI, and the ICU total scores**

Point-Biserial correlations were conducted to examine the relationship between the nominal descriptive data obtained and the three risk assessment measurements. Preliminary analyses were performed and there were no violations in the assumptions of normality, linearity, and homoscedasticity. The relationship between the three measures were explored for all demographic and index offending data. There were no significant associations identified between any of the three risk assessment measures and the index offence data collated for either the Diversion or the Clinical sample. Tables 12 and 13 present the point-biserial correlation results for the two samples.

Table 12

Point-Biserial Pearson Product-Moment Correlations between the Three Risk Assessment Measures and Selected Descriptive Statistics for the Diversion Sample

Measure	Gender	Age 14	Age 15	Age 16	Pakeha	NZ Māori	Pacific Is.	Prev. Police
1. YLS/CMI Total	-.12	.24*	-.00	-.23	-.08	.21	-.11	.48**
2. YPI Total	.05	.09	-.01	-.08	-.22	.24*	.02	.23
3. ICU Total	.07	.06	.26*	-.29*	-.22	.21	-.01	.41**

\*  $p < .05$  (two-tailed) \*\*  $p < .01$  (two-tailed)

Table 13

Point-Biserial Pearson Product-Moment Correlations between the Three Risk Assessment Measures and Selected Descriptive Statistics for the Clinical Sample

Measure	Gender	Age 14	Age 15	Age 16	Pakeha	NZ Māori	Pacific Island	Previous Police	Mental Health	Conduct Disorder	Substance Abuse	Dual Diagnosis
1. YLS/CMI (Initial)	-.14	.22	.04	-.23	-.24*	.29*	.04	.44**	.61**	.64**	.48**	.45**
2. YLS/CMI (Follow-up)	-.27	.18	-.03	-.13	-.37*	.41**	.08	.29	.43**	.42**	.35*	.33*
3. YPI Total	-.01	.00	.03	-.03	-.33*	.27	.19	.10	.07	.19	.18	.24
4. ICU Total	-.09	.18	-.07	-.09	-.17	.03	.20	.13	.32*	.18	.15	.25

\*  $p < .05$  (two-tailed) \*\*  $p < .01$  (two-tailed).

Previous police contact was moderately correlated to both the YLS/CMI total score ( $r = .48, p < .01$ ), and the ICU total score ( $r = .41, p < .01$ ). Participants 14 years of age were likely to score higher on the YLS/CMI ( $r = .24, p < .05$ ), while NZ Māori ethnicity significantly correlated with the YPI total score ( $r = .24, p < .05$ ). However, because of the small correlation coefficient, the amount of variance in YPI scores explained by Māori ethnicity was only 5.5 percent.

Table 13 shows the point-biserial correlation results for the follow-up Clinical sample ( $N = 44$ ). There was a strong positive association between the initial YLS/CMI total score and a mental health diagnosis ( $r = .61, p < .01$ ). This is likely a reflection of the strong correlation between being diagnosed with a conduct disorder and level of risk ( $r = 6.4, p < .01$ ). Māori ethnicity had a weak but positive correlation to scores on both the initial YLS/CMI assessment, and the follow-up YLS/CMI total score. Similarly, Pākehā ethnicity was negatively associated to both YLS/CMI total score and the YPI total score.

### **Ethnicity and the Measures of Risk**

The above findings prompted further exploration of the relationship between the three risk assessment measures and the ethnicity variables of the total sample. For the YLS/CMI, the average total score for New Zealand European/ Pākehā participants ( $N = 53$ ) was 16.3. Māori participants ( $N = 58$ ) scored, on average, 2.5 points higher (18.8). Similar trends were identified for the psychopathy measures. The average score for New Zealand European/ Pākehā on the YPI was 108.8, while for Māori it was more than 15 points higher at 123.5. For the ICU total score, New Zealand European/ Pākehā averaged 27.0, while Māori averaged 30.0.



## SECTION FOUR

**THE SELF-REPORTED OFFENDING SURVEY**

---

The Self-Reported Offending Survey (SROS) was administered to participants' in *Phase Two* of the study, six-months after the initial assessment. This included 63 participants from the Diversion sample and 44 participants from the Clinical sample. The descriptive statistics for Part 1 of the SROS are presented in Table 14, while the results of Part 2 are presented in Table 15.

**Police Contact, Court Contact, and Youth Justice Plan Adherence**

A sizeable percentage of both samples (Diversion = 38%; Clinical = 48%) had contact with the police for further criminal behaviour during the six-month follow-up period. For 14 (22%) participants in the Diversion sample and 14 (32%) participants in the Clinical sample, this contact with the Police resulted in the new offending proceedings being laid before a Court. Despite this, most participants from both samples were either able to adhere to, or complete their youth justice plan. It was further identified that young people who failed to complete their youth justice plans were significantly more likely to be caught by police for further offending,  $\chi^2(1, 107) = 30.36, p < .05, \phi = .53$ .

**The Level of Intervention Services Received**

Also investigated was the level of services each young person had access to during the six-month follow-up period. Only the highest level of service intervention was recorded and it was noted qualitatively that many participants receiving higher levels of intervention were concurrently receiving services from less intense and less evidence-based intervention services. As Table 14 shows, approximately 40% of the Diversion sample received no intervention. The most common intervention services for this sample were those targeting singular areas of risk or

need (such as drug and alcohol education, anger management, or drink-driving education), and non-clinical multi-targeted or “wraparound” programmes. These later programmes consisted of approximately three contacts per week with the young person and attempted to address multiple areas of risk or need (e.g., apprenticeship programmes, community wraparound programmes). Participants in the clinical sample were more likely to have access to intense clinical intervention (20%) as well as residential interventions using evidence-based practice.

Table 14

**Descriptive Statistics from Part One of the Self-Reported Offending Survey (SROS)**

<b>SIX-MONTH RECIDIVISM FOLLOW-UP</b>	<b>CATEGORY</b>	<b>DIVERSION N = 63</b>		<b>CLINICAL N = 44</b>	
		<i>n</i>	%	<i>n</i>	%
Police contact of any kind?	Yes	24	38	21	48
	No	39	62	23	52
Level of Police Intervention	Warning	8	13	6	14
	Alternative Action	2	3	0	0
	FGC Diversion	0	0	1	2
	Court (all Jurisdictions)	14	22	14	32
	Not Applicable	39	62	23	52
Youth Justice Plan Adherence/ Completion	Yes	53	86	33	75
	No	10	14	11	25
Level of Service Intervention experienced during follow-up period	0. No Service Intervention	25	40	7	16
	1. Minimal/ unorganised	7	11	1	2
	2. Singular target	11	18	10	23
	3. Multi-target/ wraparound	16	25	1	2
	4. CYF Residential home	1	2	5	11
	5. Intense Clinical Therapy	0	0	9	21
	6. Multi-Systemic Therapy	3	5	4	9
	7. Residential Therapy	0	0	7	16

**Self-Reported Offending**

Part 2 of the SROS asked participants to identify how many times (if any) they had committed any of the 31 listed offence items. Of interest was the total number of items that were carried out during the six-month follow-up period, as well as the amount of criminal variability (or

versatility) across the eight domains of offending. The percentage rates of each of the eight offending categories are presented in Table 15. Table A9 in Appendix G presents the percentage rates of all 31 self-report items. For the Diversion participants, the average number of crime items completed at least one time was approximately 7 ( $M = 6.94$ ,  $SD = 5.47$ ) however this ranged widely from 0 through to 23 out of a possible 31. The variability in offending categories scored ranged from zero to six ( $M = 3.40$ ,  $SD = 1.79$ ). The average number of offending items self-reported by the clinical sample during the follow-up period was slightly significantly higher ( $M = 10.98$ ,  $SD = 6.97$ ). Nearly half of the Clinical sample reported committing five or more categories of crime ( $M = 4.84$ ,  $SD = 1.446$ , Range 2 – 8).

Table 15

**Percentage Rates of Self-Reported Offending Survey Categories**

SELF-REPORTED OFFENDING OFFENDING CATEGORIES	DIVERSION <i>N</i> = 63		CLINICAL <i>N</i> = 44		<i>t</i>
	<i>n</i>	%	<i>n</i>	%	
VIOLENCE	32	51	37	84	-2.12*
WILFULL DAMAGE	26	37	34	77	-2.80*
ARSON	0	0.0	4	9	-1.81
THEFT/ DISHONESTY	33	52	38	86	-1.77
GOOD ORDER OFFENCE	49	78	39	89	-6.02**
TRAFFIC OFFENCE	43	68	37	84	-2.12*
SEXUAL OFFENCE	0	0	1	2	-1.19
DRUG RELATED OFFENCE	30	43	24	55	0.28

\* $p < .05$ ; \*\* $p < .01$ **The Seriousness of the Self-Reported Offending**

The seriousness of the self-reported offending behaviour was accounted for in Part 2 of the SROS by using a formulation which allowed participants to be ranked from the least serious to the most serious. Table 16 contains the descriptive statistics of the SROS scores for both samples and the total merged sample. The average score for the Diversion sample ( $M = 46.83$ ,

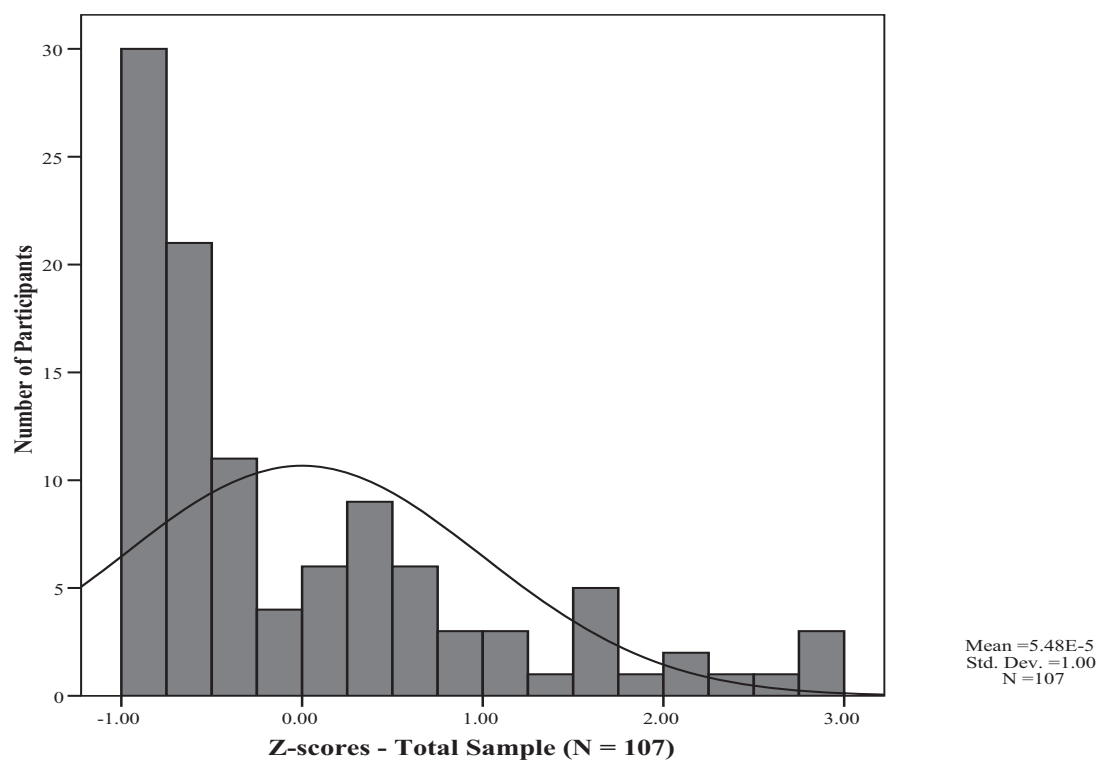
$SD = 57.02$ ) was significantly lower than mean score for the Clinical sample ( $M = 71.45$ ,  $SD = 61.00$ ):  $t(105) = -2.14$ ,  $p = .035$ . Total scores for both samples were combined and standardised z-scores were created based on the mean and standard deviation of this total sample ( $N = 107$ ,  $M = 56.95$ ,  $SD = 59.64$ ). The distribution of Seriousness z-scores is illustrated in Figure 10.

Table 16

**Descriptive Statistics for Self-Reported Seriousness of Offending Scores (SROS)**

	DIVERSION $N = 63$			CLINICAL $N = 44$			$t$	TOTAL SAMPLE $N = 107$		
	$M$	$SD$	Range	$M$	$SD$	Range		$M$	$SD$	Range
Z score	-0.169	0.956	3.74	0.243	1.02	3.81	-2.14*	0.00	1.00	3.91

\* $p < .05$



**Figure 10:** Distribution of Seriousness of Offending Scores (converted to Z-scores) for the total sample who completed *Phase Two* of the study ( $N = 107$ )

## SECTION FIVE

### ASSOCIATIONS BETWEEN THE RISK ASSESSMENT MEASURES AND THE SELF-REPORTED OFFENDING SURVEY

---

The following pages present univariate and bivariate statistics examining the associations between the SROS outcome variables and the YLS/CMI, the YPI, and the ICU. Scores from both participant samples were merged for these analyses ( $N = 107$ ).

#### Associations between Participant Descriptive Statistics and Further Contact with the Youth Justice System

Chi-square analyses were completed to test the independence of selected descriptive statistics with the two dichotomous dependent variables (police contact and Court contact). Only statistically significant results are outlined here. The Phi coefficient was used as a measure of effect size. Chi-square analyses revealed a significant association between Māori ethnicity and Police contact,  $\chi^2(1, 107) = 4.25, p < .05, \phi = .20$ . A total of 21 out of 38 Māori participants reported coming into police contact during the follow-up period. Previous police contact was also significantly associated with contact during the follow up period  $\chi^2(1, 107) = 7.02, p < .01, \phi = .26$ . Participants who committed an index offence of Wilful Damage were less likely to experience police contact during the six-month follow-up period  $\chi^2(1, 107) = 4.18, p < .05, \phi = -.20$ , while an index offence of Theft/ Dishonesty was associated with further Police contact,  $\chi^2(1, 107) = 7.24, p < .01, \phi = .26$ . With respect to Court contact, chi-square tests for independence revealed that a greater percentage of participants *not* aged 15 years at Index Offence had contact with court for new offences during the follow-up period,  $\chi^2(1, 107) = 4.16, p < .05, \phi = -.19$ . Māori ethnicity was also associated with greater rates of Court contact  $\chi^2(1, 107) = 10.91, p < .01, \phi = .32$ , as was past police contact,  $\chi^2(1, 107) = 4.39, p < .05, \phi = .20$ , and an index offence of Theft/ Dishonesty,  $\chi^2(1, 107) = 10.65, p < .01, \phi = .30$ .

### **Associations between the Risk Assessment Measures and the SROS Variables**

The relationship between the three risk assessment measures and the outcome variables was explored using Pearson Product-Moment correlations and Point-Biserial Pearson Product-Moment correlations. Table 17 presents the results of this analysis for the total sample of 107 participants. Results for the two separate samples are shown in Tables A10 and A11, Appendix G. The follow-up YLS/CMI scores for *Phase 2* of the Clinical sample are excluded from this analysis. YPI and ICU scores from the Clinical sample are included on the presumption that the traits were stable over a six-month follow-up period.

Medium to large positive relationships were found between the YLS/CMI total score and all four recidivism outcome variables. All eight YLS/CMI subscales significantly correlated with the continuous SROS seriousness score and the Police contact outcome variable. The Peer Relationship subscale had the strongest relationship with the SROS seriousness score ( $r = .45$ ), while the Leisure/ Recreation subscale had the strongest relationship with police contact ( $r = .41$ ), court contact ( $r = .46$ ), and failures to complete or adhere to youth justice plans ( $r = .36$ ). Medium sized correlations between all four outcome variables were obtained for Peer Relationships, Leisure/ Recreation, and Attitudes/ Orientation subscales of the YLS/CMI. The YPI total score also showed a medium sized positive correlation to all dependent variables. Both the Callous-Unemotional Factor and the Impulsiveness-Irresponsible Factor scores showed moderate correlations across all dependent variables. The Grandiose-Manipulative Factor was less strongly related to all dependent variables except for plan adherence where there was no significant relationship. The ICU had a medium correlation with the SROS seriousness score and police contact as well as a small correlation with the Court contact and plan adherence dependent variables. The Unemotional Factor of the ICU did not correlate with any of the SROS's dichotomous outcome variables.

Table 17

**Pearson Product-Moment Correlations between the Three Risk Assessment Measures and Self-Reported Outcome Variables for the Total Sample ( $N = 107$ )**

<b>Measure (<math>N = 107</math>)</b>	<b>SROS Total</b>	<b>Police Contact</b>	<b>Court Contact</b>	<b>Plan Adherence</b>
<b>YLS/CMI Total Score</b>	<b>.56**</b>	<b>.53**</b>	<b>.57**</b>	<b>.54**</b>
- Previous Offending	.28**	.21*	.24**	.13
- Family/ Parenting	.38**	.20**	.42**	.32**
- Education/ Employment	.38**	.22*	.14	.18**
- Peer Relationships	.45**	.33**	.38**	.29**
- Substance Abuse	.42**	.18*	.28**	.25**
- Leisure/ Recreation	.35**	.41**	.46**	.36**
- Personality/ Behaviour	.31**	.24**	.28**	.21*
- Attitudes/ Orientation	.47**	.44**	.38**	.29**
<b>YLS/CMI Categories</b>				
- Low Risk	<b>-.35**</b>	<b>-.23*</b>	<b>-.26**</b>	<b>-.24**</b>
- Moderate Risk	<b>-.12</b>	<b>-.22*</b>	<b>-.22*</b>	<b>-.08</b>
- High/ Very High Risk	<b>.44**</b>	<b>.46**</b>	<b>.47**</b>	<b>.31**</b>
<b>YPI Total Score</b>	<b>.34**</b>	<b>.35**</b>	<b>.33**</b>	<b>.30**</b>
- Grandiose-Manipulative	.22*	.19*	.19*	.15
- Callous-Unemotional	.32**	.35**	.32**	.30**
- Impulsiveness-Irresponsible	.36**	.38**	.35**	.33**
<b>ICU Total Score</b>	<b>.45**</b>	<b>.41**</b>	<b>.28**</b>	<b>.31**</b>
- Callousness Factor	.33**	.37**	.33**	.35**
- Uncaring Factor	.43**	.34**	.24*	.21*
- Unemotional Factor	.17*	.09	-.02	.01

\*  $p < .05$  (one-tailed) \*\*  $p < .01$  (one-tailed).

**Relationship between Participant Descriptive Statistics and SROS Seriousness Score**

Point-Biserial correlation analyses assessed the relationships between participant descriptive variables and SROS seriousness scores. A small but significant relationship was found between previous police intervention and SROS score,  $r = .29, p < .01$ . Non-Pakeha ethnicity also had a small but significant correlation to seriousness of recidivism,  $r = .26, p < .01$ , as was an index offence of Theft/ Dishonesty,  $r = .32, p < .01$ .

## SECTION SIX

**PREDICTING SELF-REPORTED OFFENDING**

---

The ability of the YLS/CMI, the YPI, and the ICU to predict self-reported youth offending was examined using Receiver Operating Characteristic (ROC) analyses, and both Binary Logistic Regression and Multiple Regression analyses. Scores from the Diversion sample and Clinical sample were merged for these analyses providing a total sample of  $N = 107$ . Results from ROC analyses are illustrated in Figures 11 and 12.

**Receiver Operating Characteristic (ROC)**

Receiver operating characteristic (ROC) analyses were conducted to further determine the predictive validity of the YLS/CMI, the YPI, and the ICU. The results for predicting both police contact and court contact are provided in Table 18. The YLS/CMI had the largest Area Under the Curve (AUC) for both police contact (.75) and Court contact (.81). This suggests that the probability of a randomly selected recidivist will score higher on the YLS/CMI than a randomly selected non-recidivist is 75% for police contact, and 81% for Court contact. The asymptotic significance is less than .05 for all three measures, which means that using any of the measures is superior to guessing. Almost all individual risk subscales and factor scores for the three measures significantly predicted both police and court contact. The notable exception was the YLS/CMI index scores of Previous History, and Substance Use. YLS/CMI index scores of Peer relationships, Leisure/ Recreation, and Attitude/ Orientation all had AUC scores greater than .70 for both outcome variables.

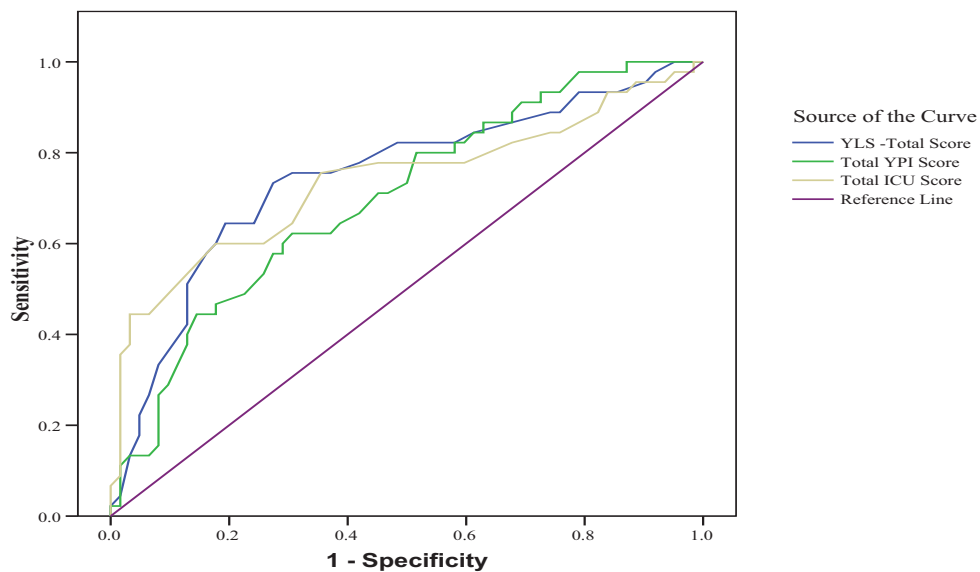


Table 18

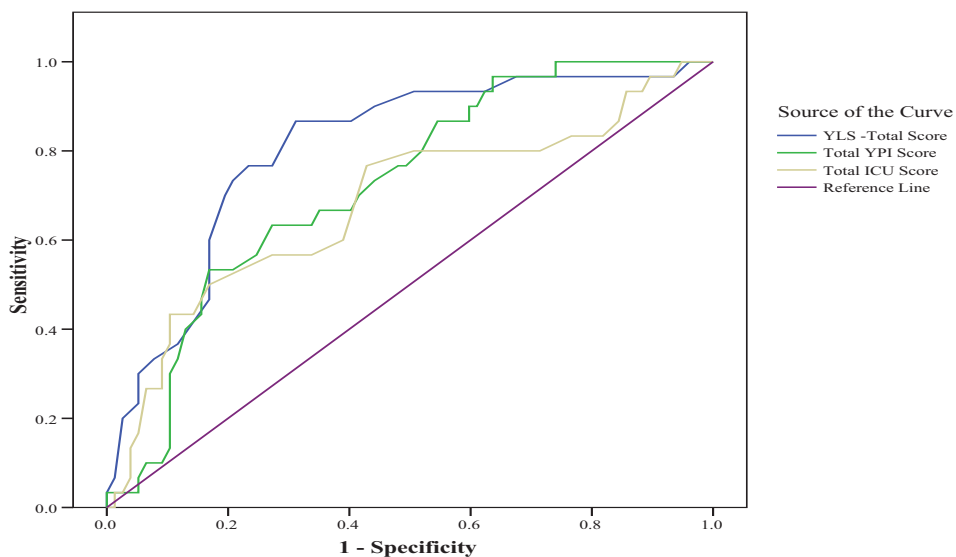
**Areas Under the Curves (AUCs) of the Receiver Operating Characteristic Analysis Comparing the YLS/CMI, YPI, and the ICU: Total sample – Police and Court Contact.**

Model ( <i>N</i> = 107)			TOTAL FOLLOW-UP SAMPLE			
	Police Contact			Court Contact		
	AUC	<i>SE</i>	95% CI	AUC	<i>SE</i>	95% CI
Prior Offences	.59	.05	.48 to .70	<b>.61</b>	.06	.49 to .73
Family/ Parenting	.66**	.05	.55 to .77	<b>.76**</b>	.05	.67 to .86
Education/ Employment	.62*	.05	.51 to .73	<b>.59</b>	.06	.48 to .71
Peer Relationships	.70**	.05	.59 to .80	<b>.75**</b>	.05	.65 to .85
Substance Abuse	.60	.05	.49 to .71	<b>.66*</b>	.06	.54 to .78
Leisure/ Recreation	.73**	.05	.63 to .82	<b>.79**</b>	.05	.70 to .87
Personality/ Behaviour	.65*	.05	.54 to .75	<b>.69**</b>	.05	.59 to .79
Attitudes/ Orientation	.75**	.05	.65 to .85	<b>.75**</b>	.05	.64 to .85
<b>YLS Total Score</b>	<b>.75**</b>	<b>.05</b>	<b>.65 to .85</b>	<b>.81**</b>	<b>.05</b>	<b>.72 to .89</b>
Grandiose-Manipulative	.62*	.05	.53 to .73	<b>.65*</b>	.05	.55 to .76
Callous-Unemotional	.70*	.05	.52 to .80	<b>.71**</b>	.05	.59 to .81
Impulsive-Irresponsible	.71**	.05	.59 to .81	<b>.71**</b>	.05	.60 to .82
<b>YPI Total Score</b>	<b>.70**</b>	<b>.05</b>	<b>.60 to .80</b>	<b>.73**</b>	<b>.05</b>	<b>.63 to .83</b>
Callousness	.71*	.05	.61 to .81	<b>.73**</b>	.05	.62 to .83
Uncaring	.70*	.05	.59 to .80	<b>.63*</b>	.06	.51 to .76
Unemotional	.54*	.05	.42 to .65	<b>.46</b>	.06	.34 to .59
<b>ICU Total Score</b>	<b>.74**</b>	<b>.05</b>	<b>.64 to .84</b>	<b>.68*</b>	<b>.06</b>	<b>.56 to .80</b>

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



**Figure 11:** Receiver Operating Characteristic Curve of the YLS/CMI, the YPI, and the ICU as a function of sensitivity and specificity at identifying Police contact ( $N = 107$ )



**Figure 12:** Receiver Operating Characteristic Curve of the YLS/CMI, the YPI, and the ICU as a function of sensitivity and specificity at identifying Court contact ( $N = 107$ )

While the AUC is a useful one-statistic summary of the accuracy of the measures, the co-ordinates of the curve produce cut-off scores which enable the choice of a specific criterion by which risk levels are classified and estimate the sensitivity and specificity of the measure. For this sample, a cut-off score of 21 or higher on the YLS/CMI would correctly identify 58% of participants who had contact with police, while there would be a 16% false positive rate. Approximately 70% of participants who had court contact during the six-month follow-up period would be equal to or higher than a YLS/CMI total score of 21, while there would be an approximate 16% false positive rate. The psychopathy screening measures also fared well in predicting both police contact and court contact. A score of 128 on the YPI would predict approximately 44% of Police contact and approximately 50% of recidivists who had contact with the Court (with a 15% false-positive rate). The ICU fared slightly better for predicting police contact but was poorer in predicting court contact. A score of 32 on the ICU predicted approximately 50% of police contact, with a 10% false-positive rate (and a 17% false-positive rate for court contact). Callousness factors for both the YPI and the ICU also scored above  $AUC = .70$ .

### **Binary Logistic Regression: Predicting Contact with Authorities**

Sequential forced entry logistic regression analyses examined whether the YLS/CMI, the YPI, and/ or the ICU significantly predicted if participants would come into contact with the Police and/ or the Court during the six-month follow-up period. Covariates which significantly related to the dependent variables were controlled for within each analysis (see Section five of this chapter). All logistic regressions consisted of 3 blocks. All covariates were categorical and dichotomous, allowing them to be “dummy” coded and entered into each respective model at block 1. The YLS/CMI total score was entered into the analyses as a single covariate in block 2. This decision was based upon on the literature supporting the YLS/CMI’s predictive validity

and the moderately sized point bi-serial correlations observed in the present analyses. The YPI and the ICU total scores were entered together as covariates in block 3. These measures have less empirical support for their predictive ability and the bi-serial correlations with Police and Court contact observed in the present study were not as strong as the YLS/CMI.

Forward stepwise logistic regression analyses were also completed for the Police contact and Court contact dependent variables. Stepwise regression is a method of regression in which the covariates are entered into the regression model based on their semi-partial correlation with the dependent variables. Once a new criterion is entered into the model, all remaining covariates are assessed to determine whether they correlate strongly enough to remain in the model (Field, 2005). These analyses were undertaken to explore exactly which subscale and factor scores of the three risk measures made the most unique contribution to the prediction of police and Court contact. These included the eight subscales of the YLS/CMI (Previous offending, Family/ Parenting, Education/ Employment, Peers, Substance Use, Leisure/ Recreation, Personality/ Behaviour, and Attitudes/ Beliefs), the three YPI factor scores (Grandiose/ Manipulative, Callousness/ Unemotional, and Impulsiveness/ Irresponsibility), and the three ICU factor scores (Callousness, Uncaring, and Unemotional). Total scores for the three risk assessment measures were excluded here to allow the unique contribution of the subscale and factors to be examined. Preliminary analyses revealed no violations in the assumptions of multicollinearity, normality, linearity, and homoscedasticity.

#### *Predicting Police Contact: Forced Entry Binary Logistic Regression*

The first sequential logistic regression analysis was performed to assess the impact of the three risk assessment measures (the YLS/CMI, the YPI, and the ICU) on the likelihood that participants would come into contact with the police. Māori ethnicity and previous police

involvement were both associated to this dependent variable. These two covariates were entered in block 1 of the analysis as control variants. The YLS/CMI total score was entered in block 2, while YPI and ICU scores were entered in block 3.

In block 0 only the constant was included in the equation. The  $-2 LL$  value of this baseline model was 145.62. The percentage of correct classifications was 57.9%. This percentage reflects a chance prediction, as calculated by SPSS. In block 1 the  $-2 LL$  value declined to 132.49. This block, containing only the two control covariates, made a significant contribution to the model,  $\chi^2 (2, 107) = 13.129, p < .01$ . The model as a whole accounted for 15.5% of the variance (Nagelkerke R squared) in Police contact, and correctly classified 66.4% of the cases (an increase of 8.5% over chance). The YLS/CMI was entered at block 2 resulting in the  $-2 LL$  value to decrease to 120.26. The model remained statistically significant,  $\chi^2 (3, 107) = 25.36, p < .001$ , and now explained 28.4% (Nagelkerke R squared) of the variance in police contact. Approximately 75% of the cases were correctly classified (an increase of 17% over chance). Further examination of the covariates in the equation revealed that Māori ethnicity ( $wald = 4.58, p = .032$ ) and the YLS/CMI total score ( $wald = 10.91, p = .001$ ) were significant predictors of police contact within this model.

In the third and final block, the YPI and the ICU were both entered into the logistic regression model. This model is displayed in Table 19. The overall model remained statistically significant,  $\chi^2 (5, 107) = 33.40, p < .001$  and explained 36.1% (Nagelkerke R squared) of the variance in police contact. The inclusion of these two psychopathy screens improved predictive ability of the model,  $-2 LL$  for this final model equalled 112.22,  $\chi^2 (5, 107) = 33.40, p < .001$ . However an issue with the goodness of fit of this model was flagged by the Hosmer and Lemeshow Test:  $\chi^2 (8) = 17.31, p < .05$ . A significant result on this test indicates that the

observed data in this model are significantly different from the expected data. Goodness of fit was not an issue during the previous steps of the model. This final model should be interpreted with caution. The lack of goodness of fit may also explain why only two of the five covariates in the final model made significant contributions to explaining the variance in police contact. The YLS/CMI significantly explains the variance in police contact ( $wald = 10.91, p = .001$ ) prior to the addition of the psychopathy scales in the last block. According to this final model, participants of Māori ethnicity were approximately 3 times more likely to come into contact with police (based on an odds ratio of 2.86). Further, as scores on the ICU increase by one point, the odds of coming into police contact within a six-month follow-up period increase by nearly 8% (odds ratio of 1.08).

Table 19

**Logistic Regression Analysis: YLS/CMI, YPI, and ICU Total Scores Predicting Police Contact after Controlling for Ethnicity and Previous Police contact ( $N = 107$ )**

Predictors	B	SE	Wald ( $W$ )	df	p-value	Odds Rat	95% C.I. for Odds Ratio	
							Lower	Upper
Māori	1.05	0.48	4.75	1	.03	2.86	1.11	7.34
Prev. Police	0.21	0.58	0.13	1	.72	1.23	0.39	3.83
YLS/CMI	0.60	0.04	2.44	1	.12	1.06	0.99	1.15
YPI	0.01	0.01	1.26	1	.26	1.01	0.99	1.04
ICU	0.08	0.03	5.11	1	.02	1.08	1.01	1.15
Constant	-5.82	1.59	13.29	1	.00	0.00		

Note:  $-2 LL = 112.22, \chi^2 (5) = 33.40, p < .001$ . Cox and Snell  $R^2 = .268$ , Nagelkerke  $R^2 = .361$ . Hosmer and Lemeshow Test:  $\chi^2 (8) = 17.305, p = .027$ .

*Predicting Police Contact: Forward Stepwise Binary Logistic Regression*

Forward stepwise logistic regression was completed to explore the predictive validity of the individual subscales and factors comprised within the three risk measures. Total scores for the three measures were excluded. The dichotomous covariates of Māori ethnicity and previous police contact were again controlled for due to their significant relationship with the police contact variable. All remaining predictor covariates were entered in a second block which produced two subsequent models. The second of these two models contained the two control covariates, the YLS/CMI Attitude/ Orientation subscale, and the YPI Impulsiveness/ Irresponsibility Factor score. This final model was significant:  $-2 LL = 113.23$ ,  $\chi^2 (4, 107) = 32.39$ ,  $p < .001$ . This model explained 35.1% (Nagelkerke R squared) of the variance in police contact. Approximately 75% of cases were correctly classified (an increase of 17% over chance). Table 20 shows the unique contributions of these four covariates. Only the previous police contact covariate did not significantly contribute to the model. Overall participants' Attitudes/ Orientations (as measured by the YLS/CMI) and their propensity to be impulsive and irresponsible (as measured by the YPI) were significant contributors to the prediction of police contact. An increase of one point on either of these two items increased the risk of further Police contact by approximately 58% and 8% respectively (odds ratios of 1.58 and 1.08).

Table 20

**Forward Stepwise Logistic Regression: Risk Measure Items Predicting Police Contact after Controlling for Ethnicity and Previous Police Contact (N = 107)**

Predictors	B	SE	Wald (W)	df	p-value	Odds Ratio	95% C.I. for Odds Ratio	
							Lower	Upper
Māori ethnicity	1.06	0.48	4.77	1	.03	2.87	1.11	7.42
Previous Police	0.14	0.57	0.06	1	.80	1.16	0.37	3.54
YLS Attitude	0.45	0.18	6.13	1	.01	1.58	1.10	2.26
YPI Impulsivity	0.08	.03	5.43	1	.02	1.08	1.01	1.15
Constant	-0.48	1.39	11.81	1	.00	.01		

Note:  $-2 LL = 113.23$ ,  $\chi^2 (4) = 32.39$   $p < .001$ . Cox and Snell  $R^2 = .261$ , Nagelkerke  $R^2 = .351$ , Hosmer and Lemeshow Test:  $\chi^2 (8) = 2.08$ ,  $p = .978$ .

*Predicting Court Contact: Forced Entry Binary Logistic Regression*

The second forced entry logistic regression analysis evaluated the incremental validity of the three risk assessment measures to predict the likelihood of Court contact. The dichotomous covariates of Māori ethnicity and previous police contact were controlled for due to significant relationships with the Court contact outcome dependent variable. The two control covariates in block 1 created a significant model that explained 16.6% (Nagelkerke R squared) of the variance in court contact. The YLS/CMI was entered at block 2 resulting in a decrease of the  $-2 LL$  value to 91.89. This model was statistically significant,  $\chi^2 (3, 107) = 35.01, p < .001$ . Approximately 81% of the cases were correctly classified. The YLS/CMI total score was the only statistically significant predictor of Court contact within this model ( $wald = 16.10, p < .001$ ). The model remained statistically significant,  $\chi^2 (5, 107) = 36.15, p = < .001$  with the inclusion of these YPI and ICU at block 3. However these did not improve the predictive ability of the model:  $-2 LL$  was 90.81,  $\chi^2 (2, 107) = 1.08, p > .05$ . Correct classification of the model was 79.4% and explained 41.3% (Nagelkerke R squared) of the variance in Court contact. Table 21 illustrates that the YLS/CMI was the only risk assessment measure to significantly contribute:  $W = 10.85, p < .001$ . The model indicates that a one point increase on the YLS/CMI increases the risk of appearing in Court by 18% (odds ratio of 1.18).

Table 21

**Forced Entry Logistic Regression Analysis. YLS/CMI, YPI, and ICU Total Scores Predicting Police Contact During a Six-Month Follow-Up Period ( $N = 107$ ).**

Predictors	B	SE	Wald ( <i>W</i> )	df	p-value	Odds Ratio	95% C.I. for Odds Ratio	
							Lower	Upper
Māori	1.37	0.53	6.62	1	.01	3.95	1.39	11.25
Prev. Police	-0.47	0.70	0.45	1	.50	0.62	0.16	2.47
YLS/CMI	0.16	0.05	10.86	1	.00	1.18	1.07	1.29
YPI	0.01	0.01	0.86	1	.35	1.01	0.98	1.04
ICU	0.01	0.04	0.04	1	.85	1.01	0.94	1.08
Constant	-6.01	1.78	11.32	1	.00	0.00		

Note:  $-2 LL = 90.81, \chi^2 (5, 107) = 36.15, p = .000$ . Cox and Snell  $R^2 = .287$ , Nagelkerke  $R^2 = .413$ . Hosmer and Lemeshow Test:  $\chi^2 (8) = 11.53, p = .173$ .



*Predicting Court Contact: Forward Stepwise Binary Logistic Regression*

Forward stepwise logistic regression on the individual items and factors of the risk assessment measures was used to further explore factors relating to Court contact. The dichotomous covariates of Māori ethnicity and previous police contact were controlled for due to their significant relationship with the Court contact by being entered in block 1. All remaining predictor covariates were entered in a second block using a forward stepwise approach. Three models were produced in this final block. The third model contained the two control covariates, the YLS/CMI Leisure/ Recreation item, the YLS/CMI Family/ Parenting item, and the YPI Impulsivity/ Irresponsibility Factor score:  $-2 LL = 81.17$ ,  $\chi^2 (5, 107) = 45.79$ ,  $p < .001$ . This model explained 50.1% (Nagelkerke R squared) of the variance in Court contact. Table 22 shows the unique contributions of these three covariates. Correct classification of the model was 85% (an increase of 13% over chance). The YLS/CMI Leisure/ Recreation category score was the most significant contributor to this model ( $W = 7.70$   $p < .05$ ). This finding suggests that the odds of a participant coming into contact with the court six-months after administration of the YLS/CMI are 3 times higher for every point scored on the three-point Leisure/Recreation scale (based on the odds ratio of 3.02)

Table 22

**Forward Stepwise Logistic Regression: Risk Measure Items Predicting Court Contact after Controlling for Ethnicity and Previous Police Contact ( $N = 107$ )**

Predictors	B	SE	Wald ( <i>W</i> )	df	p-value	Odds Ratio	95% C.I. for Odds Ratio	
							Lower	Upper
Māori ethnicity	1.58	0.58	7.49	1	.01	4.84	1.57	14.97
Previous Police	-1.12	0.81	1.92	1	.17	0.33	0.07	1.59
YLS Family	0.50	0.21	5.72	1	.02	1.65	1.09	2.49
YLS Leisure	1.10	0.39	7.70	1	.01	3.02	1.38	6.59
YPI Impulsivity	0.08	0.04	3.72	1	.05	1.08	0.99	1.17
Constant	-8.26	2.12	15.26	1	.00	0.00		

Note:  $-2 LL = 81.17$ ,  $\chi^2 (5, 107) = 45.79$   $p < .001$ . Cox and Snell  $R^2 = .348$ , Nagelkerke  $R^2 = .501$ , Hosmer and Lemeshow Test:  $\chi^2 (8) = 7.08$ ,  $p = .528$ .

### **Multiple Regression: Predicting the Seriousness of Self-Reported Offending**

Two multiple regression analyses looked at whether the YLS/CMI, the YPI, and/ or the ICU could significantly contribute to predicting the accumulated seriousness of self-reported offending behaviour committed by participants during the six-month follow-up period. The analyses were conducted to further examine the incremental validity of the three measures. The methodology of these two analyses mirrored the binary logistic regression analyses described above. Preliminary analyses were conducted which confirmed no violations of the assumptions of normality, linearity, multicollinearity, and homoscedasticity. Pearson Product-Moment correlations analyses revealed that three participant descriptive covariates (see Section Five), Non-Pākehā ethnicity, an index offence of Theft (“Theft”), and previous police involvement were significantly correlated to the Self-Reported Offending Survey (SROS) seriousness score for the total sample ( $N = 107$ ). These three covariates were controlled for by “dummy” coding and entering each at block 1 for the analyses. A hierarchical multiple regression analysis was used to examine the total scores of the three risk assessment measures in predicting SROS seriousness scores. A forward stepwise multiple regression analysis was then completed to examine which categories or factor scores of the three risk measures contributed most to the prediction of SROS seriousness. Total scores for the three risk assessment measures were excluded from this stepwise analysis.

#### *Predicting Seriousness of Offending: Hierarchical Multiple Regression*

Hierarchical multiple regression was used to assess the ability of the YLS/CMI, YPI, and ICU total scores to predict SROS seriousness scores. The three control covariates were entered into block 1 and explained approximately 18% of the variance in seriousness scores. The YLS/CMI total score was entered at block 2 due to its strong empirical base for predicting youth recidivism. Within this second model the YLS/CMI explained a statistically significant 22% of

the variance in seriousness scores for the total sample:  $R$  squared change = .04,  $F$  change (1, 102) = 37.02,  $p < .001$ . After entry of the YPI and the ICU in block 3 the total variance explained by the model as a whole increased from 40.0% to 42.8%. This additional 2.8% of variance explained was not a significant contribution;  $R$  square change = .030,  $F$  change (2, 100) = 2.59,  $p = .080$ .

The final model containing all three blocks of covariates significantly predicted SROS seriousness scores,  $F(6, 100) = 12.50$ ,  $p < .001$ . Table 23 illustrates the contributions of the individual covariates in the final model. Three variables significantly contributed to the predictive ability of the final model. These included the Theft control covariate (beta = 0.44,  $p < .01$ ), the YLS/CMI total score (beta = 0.06,  $p < .001$ ) and the ICU total score (beta = 0.03,  $p < .05$ ).

Table 23

**Summary of Hierarchical Regression Analysis for Risk Assessment Measure Total Scores Predicting Self-Reported Offending Behaviour in the Total Sample ( $N = 107$ ).**

Variable	$B$	$SE\ B$	$\beta$
Step 1			
Constant	-0.80	0.20	
Non Pakeha	0.36	0.20	.17
Previous Police	0.49	0.20	.23*
Theft (Index)	0.44	0.19	.22*
Step 2			
Constant	-1.47	0.20	
Non Pakeha	0.36	0.17	.17*
Previous Police	-0.10	0.19	-.05
Theft (Index)	0.40	0.16	.20*
YLS/CMI total	0.07	0.01	.55**
Step 3			
Constant	-1.67	0.43	
Non Pakeha	0.32	0.18	.15
Previous Police	-0.16	0.19	-.07
Theft (Index)	0.44	0.16	.22**
YLS/CMI total	0.06	0.01	.48**
YPI total	-0.00	0.00	-.07
ICU total	0.03	0.01	.21*

Note  $R^2 = .43$  for Step 1;  $\Delta R^2 = .22$  for Step 2 ( $ps < .01$ );  $\Delta R^2 = .03$  for Step 3 ( $ps > .05$ ). Durbin-Watson = 1.76. \* $p < .05$ , \*\* $p < .01$ .

*Predicting Seriousness of Offending: Forward Stepwise Multiple Regression*

A forward stepwise multiple regression analysis was undertaken to further explore the predictive validity of the individual items and factors comprised within the three risk measures. Previous police contact, Non-Pākehā ethnicity, and Theft (as an index offence) were again controlled for by being entered at step one. All remaining predictor covariates were entered in a second block which produced four predictor models. The first model consisted solely of the three control covariates. The YLS/CMI Substance Use category was entered in the second model. This significantly explained an additional 12.5% of the variance in self-reported delinquent behaviour:  $R^2$  change = .125,  $F$  change (1, 102) = 18.38,  $p$  = .001. The YLS/CMI Education/ Employment item was added to a third regression model and significantly explained approximately 11% of the variance. The final model saw the inclusion of the ICU Uncaring Factor score. The addition of this factor significantly contributed an additional 2.3% towards the variance in self-reported delinquent behaviour. Overall this model explained 44% of the variance in SROS seriousness scores.

The final model was identified to be a significant predictor of seriousness of delinquent behaviour,  $F(6, 10) = 13.03$ ,  $p < .001$ . Table 24 reports the contributions of the individual items throughout the four models produced in this analysis. The YLS/CMI Substance Use item was the strongest covariate ( $p < .001$ ) followed by the YLS/CMI Education Employment item ( $p = .002$ ), and the Theft (as an index offence) control covariate ( $p = .008$ ). The YLS/CMI Attitudes and Orientation item was the strongest predictor variable excluded from the current model ( $p = .07$ ).

Table 24

**Summary of Forward Stepwise Multiple Regression Analysis for Risk Assessment Measure Total Scores and Individual Indices Predicting Self-Reported Offending Behaviour in the Total Sample ( $N = 107$ ).**

Variable	<i>B</i>	<i>SE B</i>	$\beta$
Step 1			
Constant	-.80	0.20	
Previous Police	.49	0.20	.23*
Non Pakeha	.36	0.20	.17
Theft (Index)	.44	0.19	.22*
Step 2			
Constant	-7.17	0.20	
Previous Police	0.23	0.19	.10
Non Pakeha	0.39	0.19	.18*
Theft (Index)	0.43	0.17	.22*
YLS Substance	0.25	0.06	.37**
Step 3			
Constant	-1.49	0.20	
Previous Police	0.13	0.18	.06
Non Pakeha	0.38	0.17	.18*
Theft (Index)	0.46	0.16	.23**
YLS Substance	0.24	0.05	.36**
YLS Edu/Emp	0.19	0.05	.34**
Step 4			
Constant	-1.76	0.24	
Previous Police	0.06	0.18	.03
Non Pakeha	0.39	0.17	.18*
Theft (Index)	0.43	0.16	.22**
YLS Substance	0.21	0.05	.32**
YLS Edu/Emp	0.15	0.05	.27**
ICU Uncaring	0.04	0.02	.18*

Note  $R^2 = .18$  for Step 1;  $\Delta R^2 = .13$  for Step 2 ( $ps < .01$ );  $\Delta R^2 = .11$  for Step 3 ( $ps < .01$ );  $\Delta R^2 = .02$  for Step 4 ( $ps < .05$ ); Durbin-Watson = 1.79 \* $p < .05$ , \*\* $p < .01$ .

## SECTION SEVEN

**MATCHING RISK LEVEL WITH INTERVENTION SERVICES**

The preceding sections of this chapter have identified that the YLS/CMI, the YPI and the ICU are sufficiently valid and reliable measures for predicting self-reported recidivism. One final question was whether appropriately intensive intervention services were being made available to youth offenders when they enter the youth justice system. This would examine the adherence to the risk principle whereby young people most at risk of recidivism receive a greater level of services. To answer this question the data for the eight levels of services received by participants in both groups were merged and categorised (see Table 14, Section 4 for original results). Category 1 consisted of *No/Low* level of intervention; Category 2 consisted of services offering a *Moderate* level of service, while Category 3 consisted of *High* levels of clinical services which targeted multiple areas of identified risk and need. These revised categories are shown in Table 25.

Table 25

**Categorised Levels of Service Intervention Received by Participants (N = 107)**

LEVEL OF SERVICE INTERVENTION RECIEVED DURING FOLLOW-UP	CATEGORY	TOTAL SAMPLE N = 107	
		n	%
0. No Service Intervention	LOW	40	37
1. Minimal/ unorganised			
2. Singular target	MODERATE	44	41
3. Multi-target/ wraparound			
4. CYF Residential home			
5. Intense Clinical Intervention	HIGH	23	22
6. Multi-Systemic Therapy			
7. Residential Therapy			

**Level of Intervention Services and YLS/CMI Categories of Risk/ Need**

Of the three risk assessment measures, only the YLS/CMI has established risk categories. It was originally envisaged that the risk categories posited by the YLS/CMI would be used to compare risk levels with services received. However, only three (5%) participants in the

Diversion sample were classified as High risk or above. Two categories were developed from the four YLS/CMI categories with the intention of identifying greater representation of the total sample within each category. The two YLS/CMI risk categories were separated by the median score (YLS/CMI = 17). All participants who scored 17 or higher on the YLS/CMI were allocated to a Moderate to High risk group, while all participants who scored below 17 were allocated to a Low to Moderate risk group. The relationship between level of risk and level of service received is reported in Table 26. No violations in test assumptions were identified. The chi-square analysis revealed that significantly more youth offenders (approximately 78%) identified as Moderate to High risk of recidivism were receiving intense clinical services that addressed multiple areas of risk and need,  $\chi^2 (2, 107) = 10.20, p < .01, \phi = .31$ .

Table 26

**Relationship Between the YLS/CMI Risk Categories and Level of Service During Follow-Up**

YLS/CMI RISK CATEGORY	LEVEL OF SERVICE			TOTAL N = 107
	LOW	MODERATE	HIGH	
LOW -MODERATE	25 (63%)	24 (55%)	5 (22%)	54 (50%)
MODERATE -HIGH	15 (37%)	20 (45%)	18 (78%)	53 (50%)

### **Level of Service Intervention and Psychopathy Instruments**

The relationship between total scores of the two psychopathy screening measures and the level of services received during the six-month follow-up period was also explored. Total samples scores for the YPI and the ICU were split into two groups (Low and High) at the median score. Chi-square analyses revealed no relationship between the two levels of the YPI total score and the level of services received,  $\chi^2 (2, 107) = 0.47, p > .05$ . A similar result was found for the levels of the ICU total score,  $\chi^2 (2, 107) = 0.24, p > .05$ . Point-biserial correlations also revealed no significant relationships between the ICU,  $r = 0.13, p > .05$ , and YPI,  $r = -0.03, p > .05$ , total scores and the level of services received.

### **Level of Intervention Services Received and Recidivism**

Chi-square analyses were completed to explore whether the level of services received by the total sample of participants was related to recidivism. The initial analyses revealed no association between the three category levels of services received and either police contact,  $\chi^2 (2, 107) = 4.55, p > .05$ , or Court contact,  $\chi^2 (2, 107) = 4.00, p > .05$ .

Low risk youth who received moderate to high levels of service were significantly more likely to come into contact with both the police,  $\chi^2 (1, 107) = 7.59, p < .01$ , or the Court,  $\chi^2 (1, 107) = 11.10, p < .01, r = .72$ .

Moderate to high risk youth who received a moderate level of services were more likely to come into contact with Police for new offending matters than lower risk youth,  $\chi^2 (1, 107) = 7.13, p < .01$ , as well having further contact with the Courts,  $\chi^2 (1, 107) = 9.55, p < .01, r = .74$ .

There was no associations between young people whose risk level was met by high levels of service and future police contact;  $\chi^2 (1, 107) = 4.48, p > .05$ , or court contact;  $\chi^2 (1, 107) = 1.81, p > .05$ , however the assumptions of this were breached due to the small sample sizes. The groups were also not significantly associated with the seriousness of self-reported offending  $r = .34$ .



## CHAPTER FOUR

# DISCUSSION

Given the consistent findings that a small group of high risk persistent offenders commit most of the crime dealt with by youth justice systems around the world, it is critical that these chronic offenders are able to be identified as early as possible. It is argued that while the role of New Zealand's youth justice system is to reduce re-offending, it also has a restorative mandate to intervene and reintegrate youth offenders back into their communities. Therefore in addition to identification, it is important to understand the specific factors and pathways that contribute to the offending of chronic and persistent youth in order to provide effective interventions. For this reason, the present study considered the predictive utility of three measures that are theoretically grounded in the youth offending etiological literature. These measures were the Youth Level of Service/ Case Management Inventory (YLS/CMI), the Youth Psychopathic Traits Inventory (YPI) and the Inventory of Callous/ Unemotional Traits (ICU). This final chapter discusses the outcomes of the study by summarising the results within the context of the reviewed literature. The findings also have a number of implications not only for the field of risk assessment, but also for the practices and policies employed by youth justice professionals in New Zealand. These findings are discussed with consideration of the identified limitations and future directions of risk assessment research and practice within New Zealand and around the world.

## SECTION ONE

**PRIMARY FINDINGS OF THE RESEARCH**

---

**Characteristics of the Participating Youth Offenders**

Investigating the validity of the risk assessment measures afforded the opportunity to take a look at the characteristics of the participating youth offenders. Youth risk assessment research is very limited within New Zealand and the following results have been highlighted due to their possible implications for understanding and intervening with these young people.

*Gender and Ethnicity*

This study did not attempt to analyse the differences between males and females due to the expected low number of females recruited, and because youth justice professionals have to work with all youth regardless of gender. Males were overrepresented in both samples. This is consistent with both New Zealand (Auckland Health Research Group [AHRG], 2009; Ministry of Justice, 2010), and international research (e.g., Williams et al., 2008). Māori youth were also overrepresented in both samples. However, the Diversion sample reflected the particular demographics of the Counties-Manukau district with a higher proportion of Pacific participants than would be expected from the national norms (Police Development Group, 2007). The broad range of ethnic backgrounds recruited in this study is therefore reflective of New Zealand's increasing multi-cultural identity. This point is important when consideration is given to the generalisability of any risk assessment measures that could be adopted for widespread practice.

*Education/ Employment*

A lack of education or employment is one of the Big Eight risk factors identified by Andrews and Bonta (2003). Very few young people in either the Diversion sample (34.3%) or the

Clinical sample (15.7%) were still in mainstream high school education during the time they were involved with the youth justice system. Approximately 40% of both samples were effectively unemployed and had no constructive activity to participate in during the day. Alternative education was not being widely utilised by either sample.

#### *Mental Health and Substance Use*

The prevalence of mental health concerns were investigated by auditing diagnoses from the Clinical sample, and by administering the MAYSI-2 to all participants. The rates of specific DSM-IV-TR (APA, 2000) mental health concerns amongst the Clinical participants were consistent with the reviewed literature (Veysey, 2008). As expected, externalising disorders such as Conduct Disorder and Oppositional Defiant Disorder were the most prevalent. The larger proportion of female offenders within the Clinical sample (26.4%) is aligned with previous reports that female youth offenders are more at-risk of mental health concerns than males (Randell et al., 1999). High rates of alcohol and drug disorders were identified however this was lower than the 60% to 70% reported elsewhere (Cauffman et al., 2007; Richards, 1996; Teplin et al., 2005). Over 30% were assessed to have a significant substance use concern, with nearly one quarter of all referred youth receiving a dual diagnosis. This level of substance misuse within a referred population is concerning as most of these participants were living within the community at the time of assessment. It is likely that the incarcerated participants utilised in previous studies experience greater levels of substance use problems than non-incarcerated samples. Similar research with incarcerated New Zealand youth offenders may reveal results more consistent with this literature.

The results of the MAYSI-2 for both samples produced some interesting results. Surprisingly, there was very little difference in scores between the Clinical sample and the Diversion sample. Approximately half of all participants in both samples scored above the normal range for alcohol and drug use. This result is consistent with the Clinical sample findings and contends that substance misuse is a problem for youth offenders within our communities. The identified association between substance use and previous police contact verifies its importance as a preventable criminogenic need factor. Over one-third of all youth identified problems with anger and irritability. As expected, rates of depression and anxiety were higher for the Clinical sample, however nearly 9% of the Diversion sample scored within the highest range for suicidal ideation. Unlike the clinical sample, youth in the Diversion range did not have trained clinicians assessing their risk of suicide. It is likely that many other young people who are diverted away from the youth court by police may experience similar thoughts of self-harm. Given New Zealand's high rate of youth suicide (Ministry of Health, 2001), these findings propose that youth offending may be an important risk factor for deliberate self-harm. These results imply that many of New Zealand's youth offenders experience a heightened degree of emotional and psychological distress.

#### *Index Offending and Self-Reported Re-offending*

The expected differences in the rates of index offending were found between the two samples. Clinical participants reflected their youth court status by presenting with more offences and offending categories than the Diversion sample. Their offending was also more serious. Nearly 60% of the Clinical participants were facing charges of a violent nature, compared to about 25% of the Diversion sample. Matters of Theft/ Dishonesty were the most prevalent for both samples. Although the Clinical sample had higher rates of previous police contact (77.1%), this statistic for the Diversion sample was also high (61.4%). Previous offending is

one of the strongest risk factors for future offending (Andrews & Bonta, 2003). This finding highlights a potential for services to intervene early with appropriately matched services when young people first come to the attention of police (Sickmund & Snyder, 2006).

Results from the Self-Reported Offending Survey (SROS) six-months after the participant's initial assessment revealed a level of re-offending above the base-rate identified by official apprehension statistics (Ministry of Justice, 2010), as well as other studies using adjudicated samples (e.g., Catchpole & Gretton, 2001). This can be attributed to the self-report methodology. Similarly to the AHRG (2009) findings, it was expected that many of these participants would confess to committing more antisocial behaviour than the police were aware of. Nearly half of the Clinical sample and over a third of the Diversion sample self-reported being in contact with the police for further offending behaviour. This is consistent with earlier literature on the propensity of young people to re-offend more regularly than adults, and to do so within a short period of time (Spier, 2002). The distribution of the cumulative seriousness scores shows a negative skew with the majority of participants reporting no to minimal antisocial behaviour, while a small proportion (approximately 15%) scored more than one standard deviation above the mean (36 participants [34%] scored above the z-score adjusted mean of zero on the measure). This trend mirrors the findings of other studies whereby smaller proportions of delinquent youth have been responsible for a disproportionate amount of youth crime (Snyder & Sickmund, 2006; Thornberry & Krohn, 2000). This may represent the life-course persistent youth offenders identified by Moffitt's (1993) taxonomy, however this was not directly explored in the current study.

Over 77% of the Clinical sample reported having committed violence, wilful damage, theft/dishonesty, traffic offences, and offences against good order (e.g., unlawful gathering, carrying weapons, etc.) during the follow-up period. The high offending rate observed by this group is likely a reflection of their court status and identified high risk (see below). The Diversion sample produced a pattern of results more consistent with the AHRG (2009) self-report study whereby traffic offending, violence, theft, and offences against good order were common (50% of participants or more). Clearly, these rates were higher than those found in the high-school student sample of the AHRG (2009).

Overall findings from the SROS identified a high rate of re-offending from both samples. This was despite most participants either adhering to, or completing their youth justice plans. Findings like these will be frustrating, although perhaps unsurprising to many youth justice professionals because it shows that many of the young people they work with continue to be a problem in their communities despite recent involvement with the police and efforts to promote desistance from crime.

### **The Reliability of the Risk Assessment Measures**

The distributions of total scores for the YLS/CMI, the YPI, and the ICU were mostly normal. The YLS/CMI results for the Diversion sample had a small negative skew, reflecting their lower mean risk scores. An examination of the internal consistency indicators revealed fair reliability for the total scores of all three risk measures (i.e., above  $\alpha > .70$ ). This is above the recommended standard required for research. Results for the YLS/CMI (total score  $\alpha = .79$ ) showed all eight subscales to have moderate to fair internal consistency (Education/Employment  $\alpha = .58$  to Attitudes/ Orientation  $\alpha = .77$ ). Overall, the internal consistency findings for the YLS/CMI were consistent with previous reports.

Only the YPI total score ( $\alpha = .92$ ) achieved reliability above the  $\alpha = .90$  level recommended for clinical practice. This was the same  $\alpha$  score reported in a comparably sized study of adjudicated youth in the US (Poythress et al., 2006). All 10 index scores of the measure were moderate to fair, with the exception of the Unemotionality index ( $\alpha = .47$ ). This is likely to have contributed to a lower  $\alpha$  score on the Callous-Unemotional Factor ( $\alpha = .62$ ). Findings from the current study support the previous authors' suggestions that the items of the Callous-Unemotional Factor be re-visited to improve the reliability of the measure (Andershed et al., 2007; Poythress et al., 2006).

Internal consistency of the ICU total score ( $\alpha = .77$ ) is likely to have been negatively affected by lower  $\alpha$  scores on the Callousness Factor ( $\alpha = .69$ ), and in particular, the poor reliability of the Unemotional Factor ( $\alpha = .48$ ). These findings are consistent with validation studies of the measure (Kimonis et al., 2008). The ICU may therefore benefit from a review of the items pertaining to these two factors in-order to improve reliability. Similarly to the YPI Callous-Unemotional factor, this would be especially critical for both the research and practical utility of the ICU, given the theoretical importance of both callous and unemotional traits to the concept of psychopathy.

### **The Convergent Validity of the Three Risk Assessment Measures**

The YPI and the ICU were designed as research tools for assessing psychopathic traits in community samples of children and young people. However, due to their theoretical underpinnings, the present study tested their ability to predict youth offending behaviour. Convergent validity for the YPI and ICU as risk assessment measures is supported by their near identical significantly strong associations (average  $r \approx .60$ ) with the established YLS/CMI risk assessment measure across both the Clinical and Diversion samples. The YPI was not

significantly associated with previous police contact in either of the two samples. The ICU was moderately correlated ( $r = .41$ ) to previous police contact in the Diversion sample, but not in the Clinical sample.

It was expected that the YPI and ICU would be associated due to their similar theoretical grounding. However, this relationship was not as strong as the association between either of the psychopathy measures and the YLS/CMI. Recent research has confirmed the convergent validity of the YPI with the PCL:YV (Andreshed et al., 2007). This is the first study to examine the convergent validity of the ICU as a measure of psychopathic traits. Given psychopathy's notoriety as a significant risk factor for offending, further research comparing the total and factor scores of these measures, along with other established measures of youth psychopathy (particularly the PCL:YV) would be beneficial in establishing the convergent validity of both the YPI and the ICU.

### **The Predictive Ability of the Three Risk Assessment Measures**

The YLS/CMI, the YPI, and the ICU were all examined on their predictive and incremental validity using statistical analyses that required an increasing degree of interpretation. Overall, the study provided some degree of support for the effectiveness of all three risk assessment measures in predicting self-reported re-offending.

#### *Youth Level of Service/ Case Management Inventory*

Of the three measures, the YLS/CMI provided the best evidence for its ability to predict re-offending across the total New Zealand sample of youth offenders. This finding was not unexpected as the YLS/CMI was the only actual measure of risk. It had also been made subject to intensive empirical validation supporting its use with youth offenders. Retrospective



analyses identified the YLS/CMI to be moderately associated with past previous police contact for both the Diversion ( $r = .48$ ) and Clinical samples ( $r = .44$ ), as well as diagnoses of mental health concerns ( $r = .61$ ) and substance abuse ( $r = .48$ ).

The YLS/CMI was also efficient in predicting future offending on all levels of analyses. The total score was moderately correlated with both police contact and Court contact outcome variables, as it was for cumulative seriousness of self-reported antisocial behaviour committed over a six-month period. Strong results from ROC analyses verified these associations by identifying the YLS/CMI total score to be 25% better than chance at identifying a group of young persons who are likely to come into contact with police, and 31% better than chance at identifying future court contact. Previous studies examining the predictive validity of this measure has generally reported AUC scores ranging from .50 to .75 (Olver et al., 2009). One likely reason for why the AUC scores in the current study are slightly higher than existing reports is due to the self-reported nature of the offending. Most previous literature has relied on official records to record recidivism.

Further evidence of the measures' predictive validity was confirmed using binary logistic and multiple regression analyses. The YLS/CMI total score significantly contributed to both logistic regression models explaining police and Court contact. Although significant, the variance explained in police contact was small (approximately 15%) reflecting the multi-determined nature of offending. This was still superior to the two experimental psychopathy measures and is consistent with previous research (Welsh et al., 2008). This finding was regardless of which step the YLS/CMI was entered into the logistic regression model. Hierarchical regression analyses presented the ability of the YLS/CMI total scores to explain 22% of the variance in the cumulative SROS seriousness score.

It was also of some interest to note which subscales of the YLS/CMI were most related to recidivism. Police contact was moderately associated with peer relationships, leisure/recreation, and attitude/orientation subscales. The same subscales were also moderately associated with court contact. However, the family and parenting circumstances subscale jumped from being weakly associated to police contact, to being moderately associated ( $r = .42$ ) to court contact. All YLS/CMI subscales, with the exception of the previous offending subscale, were moderately associated to the cumulative SROS total score with correlations ranging from the personality/behaviour subscale ( $r = .31$ ) to the peer relationships subscale ( $r = .45$ ). These findings are consistent with the ROC analyses which found all subscales except the prior offences subscale to be significantly associated with court contact, and all but prior offences and substance misuse to be associated with police contact. Stepwise forward logistical and hierarchical regression analyses identified the YLS/CMI subscale of attitude/orientation as the strongest contributor from any of the three measures in explaining the likelihood of coming into police contact. Parenting and family circumstances, and the leisure/recreation subscales were the only significant contributors from the YLS/CMI in explaining court contact, while substance misuse and the education/employment subscale were the only significant contributors from the measure to explain cumulative SROS seriousness scores.

Importantly, the prior offending subscale was weakly associated and did not significantly predict any of the three offending outcome measures. This chapter has already noted that retrospective analysis of previous offending histories were associated with both YLS/CMI total score risk and SROS scores. This finding does not refute the importance of this static factor as an important risk factor for youth offending. Instead, this result is likely due to a “mismatch” between the YLS/CMI scoring criteria for this subscale and the New Zealand youth justice system. This issue is discussed below.

Central to the effectiveness of the YLS/CMI is its ability to discriminate between high-risk youth and low-risk youth. In addition to the cumulative total score, YLS/CMI levels of risk classifications were significantly correlated with the outcome measure. Specifically, the youths who were categorised as high risk were commonly shown to have contact with police and courts. Similar to previous research, the YLS/CMI is capable of distinguishing youthful offenders into risk categories and then identifying which ones are more likely to engage in further offending.

*The Youth Psychopathic Traits Inventory and the Inventory of Callous/Unemotional Traits*

Predictive findings of the two self-report screening measures of psychopathy were generally supportive. These findings build upon other research using self-report methods that have shown relationships with antisocial behaviour using both the YPI (Skeem & Cauffman, 2003), and the ICU (Dandreaux & Frick, 2009). However this was the first study to examine the predictive validity of the latter measure. When considering the following results it is important to recall that the YPI and the ICU were administered at different times for the Diversion and the Clinical sample due to previously discussed methodological issues.

Retrospectively, the ICU total scores for the Diversion sample was moderately associated with previous police offending ( $r = .41$ ). The YPI total score was not significantly correlated. Neither the YPI nor the ICU was associated with previous police contact, substance use, or mental health concerns within the Clinical sample. Both samples were merged to examine the prospective predictive validity of the two measures. Both the YPI and ICU total scores exhibited low to moderate associations with the police contact and Court contact outcome variables, as well as the cumulative SROS seriousness score. These findings were consistent with the results of the ROC analyses. The YPI was a moderate to strong predictor of police

contact (20% over chance) and of Court contact (23% over chance). Similar results were found for the ICU (24% and 18% respectively).

Regression analysis of the two measures confirmed that the YPI did not make a significant contribution to explaining any of the reoffending models over and above explained variance by the YLS/CMI. The ICU was also unable to make a significant contribution to the prediction model of court contact. Nevertheless, the ICU was able to make a significant contribution to the prediction of police contact and explained approximately 15% of the variance in this outcome. The ICU total also significantly contributed to the prediction of the SROS seriousness scores.

All factor scores from the YPI and the ICU, with the exception of the ICU Unemotional factor, had low to moderate associations with police contact, court contact, and SROS total score. These associations were verified using ROC analyses. The incremental contribution of these factor scores identified the YPI Impulsivity factor as a small but significant contributor to explaining the variance of both police and court outcome. The ICU Uncaring factor was the strongest contributor of all measures in predicting the cumulative SROS seriousness score. Given the importance placed on callous and unemotional traits within the developmental life course theories of youth offending, it is worth noting that none of the factors measuring these traits significantly influenced the prediction models. Then again, both the YPI and the ICU have been designed for experimental use only and are not established risk prediction measures.

**Matching Interventions to Level of Risk**

Findings from the SROS revealed that most participants in the Diversion sample (40%) received no intervention following their alternative action or FGC diversion plan. However, 25% were involved in a multi-targeted programme at some stage during the follow-up period. The proportions of service levels received by the participants were more evenly spread across the Clinical sample. This was expected as the feedback from mental health clinicians would have included intervention recommendations for a Family Group Conference (FGC) to consider.

The study then briefly explored whether young people involved in the youth justice system were receiving a level of service intervention that corresponded to their level of risk. The key findings were that, while participants who were assessed to be moderate to high risk of reoffending by the YLS/CMI received a higher level of service intervention (34%), a similar number of moderate to high risk participants (28%) received a low level of service.

Unfortunately the levels of intervention received did not appear to influence reoffending. Low to moderate risk participants who received moderate to high levels of intervention were significantly more likely to report further contact with the police subsequently, while moderate to high risk participants who received a matched level of intervention services were also significantly more likely to come into contact with the court after six-months. The present study had no means of controlling what types of services were applied, the level of participation exhibited, or when the interventions were initiated during the six-month follow-up. Many of these services may only have been received following further contact with authorities for offending during the six-month follow-up period. Given these limitations, and considering that this investigation was exploratory, results should be interpreted with caution.

## SECTION TWO

**IMPLICATIONS OF THE RESEARCH FINDINGS**

---

New Zealand's youth justice system is responsible for holding young people accountable for their offending while taking steps to prevent reoffending. Overall the findings of this study have a number of practical and theoretical implications which can guide and assist professionals working in this field to make decisions aligned with these responsibilities.

**The Assessment of Risk and the Matching of Need**

All the measures used throughout this study were easy to administer and well received by the participants. The strongest of the three risk assessment measures administered was the YLS/CMI, the only measure specifically designed to assess risk and dynamic need factors. Young people at higher risk on this measure were more likely to come into contact with authorities, as well as carry out higher levels of serious and persistent antisocial behaviour in their communities. The results of an individual's YLS/CMI were structured and transparent. This would make it easy for both professionals and non-professionals alike to understand the assessment outcomes. The YLS/CMI also demonstrated an ability to conceptualise the factors required to manage risk and identify potential protective factors, meaning that application of the rehabilitation principles of risk, need and responsivity could be achieved with confidence. For example, this study identified poor family and parenting circumstances to be a significantly strong contributor to contact with the court after six-months. Additionally, a lack of meaningful and structured leisure activities was significantly responsible for high levels of self-reported antisocial behaviour. These are examples of how the YLS/CMI can reduce the likelihood of recidivism by tailoring treatment interventions to match the identified criminogenic needs to service responses (Taxman et al., 2006; Vieira et al., 2009). The present study therefore supports these matching efforts.

Further findings showed that there were a substantial proportion of high-risk young people who received less intensive services. An example of the risk principle in action using the YLS/CMI could be the youth justice professionals' recommendations' to an FGC that a plan be longer and the services made available be more intense and targeted at the dynamic risk factors that are maintaining antisocial behaviour. Similar decisions could be considered at a youth court level when imposing supervision orders. Moreover, the ability of the YLS/CMI to identify low-risk youth is important. Not only does subjecting low-risk youth to more intensive levels of services increase their likelihood of reoffending (Andrews & Dowden, 2006), but it is also a waste of the limited available resources and a strain on already large caseloads.

However, there is a potential issue with applying the risk principle through assessment measure in New Zealand. The restorative justice principles inherent to the FGC rely on the mutual agreement for all the FGC attendees. It cannot be assumed that the results of a risk assessment and the recommended treatment targets will be agreed upon with an FGC. Some criminogenic need factors may require changes the young person and the family may not want to undertake. It is not an objective of the Act, nor a principle of restorative justice, to enforce the recommendations of youth justice professionals onto youth offenders. Although, in my professional experience, many young people and their families are open to new ideas and receiving information from authoritative sources. Explaining that the risk assessment measure used to identify these needs is both valid and reliable within a New Zealand sample could overcome any potential opposition. The guiding premise should be that quality information leads to quality decision making.

A further point derived from this study concerns the application of the Good Lives Model when matching services to needs (Ward, 2002). Although the principles of risk, need, and responsivity are focussed on risk reduction, they do not exclude the emotional distress of youth offenders (Andrews & Bonta, 2003). This study encourages the use of Ward's (2002) Good Lives Model to complement actuarial risk assessment. Many of the young people who participated in this study were experiencing heightened levels of mental health concerns, social deprivation, and a lack of meaningful activity. It is critical that the youth justice system does not lose sight of these issues when attempting to reduce recidivism and promote desistance.

### **Generalising the Risk Assessment Measures to New Zealand**

A number of issues were raised by the study regarding the generalisability of the three risk assessment measures to New Zealand youth offenders. Firstly, all three measures were associated with multiple reoffending variables. Additionally, both the YLS/CMI and the ICU made significant contributions to explaining reoffending within the regression analyses. However, these analyses reported a large degree of variation in the recidivism rate between offenders. For example, approximately 64% of the variance in police contact was not explained by the final model (which included the control variables and all three risk assessment measures). Comparable findings have been reported in similarly conducted predictive studies of youth risk assessment (Onifade, Davidson, Campbell et al., 2008). Unexplained variance in statistical models is caused by both the complexity of human behaviour itself and as a consequence of applying group based data to individuals.

Currently, our theories and attempts to measure offending outcomes using actuarial measures are not yet sufficient to account for complex processes inherent within individual behavioural



repertoires. Variance in risk assessment can be improved by using multiple assessment measures that target varying risk domains (Bonta, 2002), as was the case in the present study. Other ways in which unexplained variance can be improved is by exploring what worked, and what did not work. An obvious systematic issue identified in the present study was the poor fit between the YLS/CMI's prior offending subscale and restorative justice practices. Most youth who enter the New Zealand youth justice system do not receive a conviction (Ministry of Justice, 2010). Offending matters are normally diverted, while charges laid in the youth court are normally discharged on completion of the youth justice plan. Items of the YLS/CMI such as "prior custody" "prior probation" and "three or more current convictions" were difficult to score within this context. This is likely to have led to lowering of the discrepancy in offending being unexplained by the YLS/CMI.

Other ecological factors that may contribute to unexplained variance, and thus issues of generalisability, include the role of ethnicity. Māori youth scored higher on all three risk assessments when compared to non-Māori. This trend is similar to risk assessment research with other minority groups (Onifade et al., 2009). For example, Australian Aboriginal youth score three points higher, on average, than non-Aboriginal youth on the Australian Adapted version of the YLS/CMI (Thompson, 2006). These findings may suggest test bias; however it may also acknowledge that Māori youth experience more causal risk factors within their environment than non-Māori. Further research is warranted that explores the different factors relevant to different ethnic groups. Any risk assessment measure used widely within New Zealand must prove that, under ideal circumstances, different races and genders should mediate the risk of recidivism in the same way. For example, a low-risk Māori young person should convey the same meaning as a low-risk Asian young person.

This study contends that the three instruments, particularly the YLS/CMI is capable of predicting reoffending with New Zealand, despite the differing ethnic groups and systematic differences. However, I personally would like to see either an adaptation of the YLS/CMI for New Zealand youth, akin to the Australian adapted version of the measure (Thompson & Pope, 2005), or a newly developed comprehensive actuarial risk assessment measure which is grounded in the RNR model. Validation studies of this new approach would need to incorporate the social, cultural, and ethnic individual and systematic differences that moderate risk assessment within the New Zealand's youth justice landscape (Miller, & Lin, 2007). This would include consideration of the disproportionate distribution of risk factors across different ethnicities, which is the likely explanation for why Māori youth scored higher on all three risk measures.

### **The Role of Psychopathy in Youth Justice**

Consistent with the adult psychopathy literature, this thesis adds to the growing evidence of the moderate associations identified between various measures of youth psychopathy and antisocial behaviour (Boxer & Frick, 2008; Frick & Marsee, 2006). The implications of these findings, however, are contentious and varied. Despite the predictive validity of the YPI and the ICU, neither measure was as strong as the YLS/CMI in explaining the variance of reoffending. Given the stigma and labelling issues identified with a diagnosis of psychopathy (Seagrave & Grisso, 2002), the practical use of these screening measures is questionable. Additionally, the reviewed literature identified callous and unemotional personality traits as important predictors of antisocial behaviour in children and young people (Frick & Viding, 2009). ROC analyses revealed significant AUC scores for these factors from both the YPI and the ICU. However, none of the factor scores pertaining to assess callous or unemotional traits

from either measure significantly contributed to the reoffending models of the regression analyses.

Despite being screening measures designed for research purposes only, both the YPI and the ICU may prove useful for short-term prediction of offending, especially the identification of young people who exhibit violent and persistent levels of offending. Such screening measures could further prompt further assessment using the widely used and efficacious PCL:YV (Edens, Campbell & Weir, 2006; Wilson & Rolleston, 2004). However, much more research into the development of these screening measures, including further examination of the factor structures, individual items, and the introduction of cut-off scores is needed before clinicians should use them for practical purposes. Further research on these measures may also help clinicians decide if intensive services could be implemented for the young person, and what role psychopathic traits play as responsivity factors for intervention management. The future of research that this field is currently experiencing will undoubtedly address these issues in the near future.

## SECTION THREE

**LIMITATIONS OF THE RESEARCH**

---

**Sampling of the Participants**

The most critical limitations in the research concerned the sampling of the participants. The recruitment of youth offenders for both the Diversion sample and the Clinical sample was not random but rather dictated by the availability of participants. Moreover, as the sole investigator of this study, I was not blind to the participant responses. Attempts to reduce investigator bias were undertaken by keeping two separate databases so that results from *Phase One* assessments were not immediately available when *Phase Two* was undertaken. Inter-observer reliability was not calculated in this study. Additionally, it was observed that young people and families *with* a history of previous offending were more willing to participate in the research. The most common reason for *non*-participation was the young person's belief that this offending was an isolated event and that he or she was not the type of person who should be participating in a study on youth offending. This was paradoxical to expectations and is likely to have positively biased results towards a more at-risk group. Many young people also chose to participate because they had "*nothing better to do*" as they were not working or attending school.

The sample size was moderate in this study. Merging the two samples for multivariate analyses attempted to compensate for this size limitation. Given that the research objectives posed had not been previously attempted in New Zealand, and that these three risk assessment measures had never been collectively compared in a single study, this modest sample size seemed basically adequate. Obviously a larger sample would have been preferable. Despite all steps being taken to identify the potential effects or influences on the power of the statistical analyses, caution is still urged when interpreting these findings.

There were also issues with sample generalisability. It was hoped that the Diversion sample would represent the approximately 80% of New Zealand youth offenders who did not go to court (Ministry of Justice, 2010). However, this sample was drawn from a district with a high level of crime and social disruption. Further, many of the participants had previously been involved with the police and were recruited following a diversionary FGC plan. Young people who only received warnings for their offending are not represented in this sample. These limitations are likely to have positively biased the level of risk for the Diversion sample. It may also explain why there were few differences between the Diversion sample and the Clinical sample on measures of mental health, risk, and psychopathic traits. It is considered that the small Clinical sample accurately represented the type of youth who are referred to clinical services by the youth court each week throughout New Zealand. However, neither of these samples represented the small group of youth offenders who appear before the youth court and are made subject to legal orders without contributions from clinical professionals. Despite these concerns, the merging of these samples for the more advanced statistical analyses demonstrated a more representative sample of the typical youth offenders dealt with by youth justice professionals within the community on a day-to-day basis. This goes some way to overcoming concerns by some researchers that referred youth differ markedly from non-referred youth (Vieira et al., 2009). Additional limitations include the small number of females in the study (although this was proportional to official statistics).

### **Procedural Limitations**

The reliance on self-report was both a limitation and a strength of the research. The self-reported risk factors, psychopathic-traits, and offending behaviour may have been exaggerated, minimised, or subject to memory loss. However, obtaining accurate clinical information and official records would have identified less antisocial behaviour, and the

participants may not have been processed through the legal system by the time they were followed-up. It is likely that self-reported offending was a more valid approach to obtaining offending information within the current methodology. An additional strength of the study was the use of multiple outcome measures on the SROS to identify re-offending.

One further limitation was the short follow-up period of six-months. A longer termed follow-up period of at least 2 years may have allowed chronic and persistent offenders to be more firmly differentiated from adolescent limited offenders. Moreover, according to the YLS/CMI manual and scoring guide, the measure is to be re-administered to young people at six-month intervals, especially if they are participating in an intervention programme. The measure was designed this way to assess change in risk over time, not as a single snap-shot of risk. Including scores over multiple six-month intervals would help to determine whether intervention services are reducing level of risk. Interventions implemented at various stages after the initial assessment may have affected the predictive validity of the three risk measures. However, the short-term follow-up period may also be a positive aspect of the study. Self-reported offending becomes less reliable and over longer-periods of time (Thornberry & Krohn, 2000). Young people are also likely to re-offend quickly, and it is speculated that the SROS captured most, if not all, young people who were likely to have re-offended regardless of a longer-time period.

A final limitation of note was the issue of administering the psychopathy measures to the Clinical sample during the follow up phase. The reasoning behind this decision was explained in the methodology. However, it is important to remember that this approach weakened the predictive assumptions of the YPI and ICU results because they were administered concurrently to the measuring the outcome variables.

## SECTION FOUR

**CONCLUSIONS AND FUTURE DIRECTIONS**

---

The complexity of criminal behaviour will always be beyond what assessment measures and intervention plans can completely match. Regardless of this, actuarial risk assessment approaches have become widely accepted as preferable to unstructured clinical assessments of risk for offenders because of their superior ability to reliably identify the causal factors necessary to predict and manage future antisocial behaviour. The widespread use of this practice is currently lacking in New Zealand, yet this study has demonstrated the predictive validity of three such measures, in particular the YLS/CMI.

Earlier in this thesis I highlighted the need for an actuarial risk assessment measure designed specifically for New Zealand youth offenders. Any such measure would require continued research and refinement so that it can continue to identify moderating variables and the unexplained variance of youth offending. However, should such a measure come to fruition, it is critical that all aspects of the youth justice system support its use. Without the support of the system, youth justice professionals are likely to view risk assessment as a time burden, extra paper work, and potentially an insult to their professional experience (Schwalbe, 2008). Restorative justice programmes and actuarial risk assessment measures are both empirically linked to the reduction of further offending. Implementing risk assessment within FGC processes maybe a step forward to maximising the effectiveness of New Zealand's youth justice system, but only if it is applied consistently and correctly.

It is not just initiatives in risk assessment that require wider implementation and support. Pilot studies of evidence-based intervention and prevention programmes that have been proven effective should be given the opportunities to expand and fill the current void of available

services. Additionally, it is important that the limited resources available to intervene and prevent youth offending are not wasted in the pursuit of “what works”. To ensure this, future longitudinal research is needed that investigates the service needs and service utilisation patterns of youth offenders, in addition to the effectiveness of the services that are currently available. This research can then guide the design or improvement of existing service responses for young people by matching their criminogenic need and responsivity factors. Given the current lack of resources available, it is imperative that prevention and intervention efforts maximise their potential to help young people by using evidence-based practice (Maschi et al., 2008).

The rehabilitation principles of risk, need, and responsivity are promising approaches to understanding youth offending without letting our personal judgements bias our perceptions of the problem. Future research should continue to study these causal/ maintenance factors to youth offending. The specific role of responsivity factors inherent to psychopathy is of special note here. Developmental life course theoretical pathways, particularly the development of youth psychopathy, represent one potentially useful conceptualisation for improved assessment and management of serious and persistent youth offenders. Although there is no evidence to exclude young people with psychopathic traits from interventions (Spain et al., 2004), the literature supporting the effective treatment of these youth is very limited and requires greater empirical attention. This is particularly important given the potential amelioration of these traits through such a variable developmental period (Salekin et al., 2009; Vaughn & Howard, 2005).

So, who is going to carry out this research, develop these evidence-based measures, and put into practice these evidence-based interventions? A critically important aspect of realising the



future directions described above depends on the education and training received by workers within the field. Youth workers, social workers, counsellors, youth aid officers, youth advocates, judges, and psychologists would all benefit from a greater understanding of the causal correlates of youth offending, and, in particular, the rehabilitation principles of risk, need, and responsivity factors which includes psychopathic traits and mental health issues. Importantly though, clinical psychologist's need to be encouraged to have a greater role within both the research and development of risk assessment and intervention approaches within Youth Justice. As a professional group clinical psychologists have the basic training to complete these tasks. Assessment and formulation skills are unique to this profession, and they have much to add that would encourage the wider use of these measures, while aiding para-professional colleagues to be kept up-to-date with the latest research. Much in the same way that psychometric measures are used routinely within clinical assessments in other areas of mental health, clinical psychologists have the opportunity to promote and use actuarial risk assessment measures such as the YLS/CMI within the youth justice field. This thesis has demonstrated that such measures are easily administered and well received by the young people. FGC's and alternative action plan meetings offer an ideal forum for providing these results back to the young people. It is easily conceivable that, with a little encouragement and leadership from clinical psychologists working within youth justice, actuarial risk assessments can be used with all youth and eventually developed into standard best practice.

A final point to make is that the field of youth offending in New Zealand currently has two great strengths on which the findings of this study can build. The first strength is the existence of a widely respected national youth justice system. This system has successfully applied the principles of restorative justice to youth offenders since 1989. Not only has this limited institutionalisation, it has dramatically reduced the proportion of young people committing

crime and appearing before the court. It is critical that youth justice professionals recognise their potential to embrace therapeutic jurisprudence by continuing to use this legal process and to respond to the psychological needs of youth offenders. The second great strength of this field in New Zealand is the youth justice professionals themselves. Practitioners across this system are faced with protecting the community, rehabilitating young people and their families, and ensuring offender accountability. This work is often conducted with few resources, in difficult situations, and with very high caseloads. This work comes with high expectations from the government, the media, the community, and each other. If using structured risk assessment measures can improve how New Zealand's youth justice system manages offenders, then this is something that youth justice professionals should be encouraged to embrace.

# POSTSCRIPT

Undoubtedly, the most enjoyable aspect of completing this doctoral thesis was spending time with the participants of the study and overcoming the unique challenges that this entailed. However, as I was concluding this thesis I questioned what contributions to the youth forensic field in New Zealand this research has made, as well as how the efforts of both myself, and my participants, had been worthwhile. In other words, I was wondering “*now what?*”

On reflection, I personally would have found the YLS/CMI to be a valuable tool during my day to day practice at Child Youth and Family Services (CYFS). The measure was easy to administer and well received by the participants. Moreover, it may also have alleviated some of the confusion and frustration I experienced while trying to understand why a young person was still offending despite doing everything that I thought would *work*. Throughout this thesis I have argued that youth justice professionals would benefit from the wider use of structured risk assessment measures. The literature tells us that they are beneficial, and now we have some New Zealand data that supports this assessment approach here.

A second benefit I garnered from conducting this research was a vastly better insight into why people commit crime. Greater knowledge of risk factors, developmental life course explanations, psychopathy, and even the role of the media in portraying youth offending would have helped me during my work at CYFS. While completing this thesis, I often thought of young people whose cases I would have approached differently had I had known what I know now. Here I again emphasise the importance of having adequately educated youth

justice professionals in order for their practical competence to be maximised.

I am hesitant to again discuss specific findings in this postscript, however, I would like to comment on my own surprise at the number of participants who had little or no positive meaningful day to day activities. Whether this be attendance at school, employment, or just having something to do on the weekends, I believe that structured meaningful activity serves as the foundation for preventing emotional and behavioural problems, as well as assisting young people to build and maintain a healthy sense of personal identity. What I found was that many, if not all, of these young people *want* to have this meaningful and challenging structure in their lives. They understand the benefits of it. What they appear to lack is the guidance and the opportunities to realise this. This is something that both policy makers and practicing professionals need to consider.

Finally, I believe that an important contribution of this thesis was the research itself. This study demonstrated that empirical investigations are possible with youth offenders in the community on a shoe string budget. If youth justice professionals in New Zealand take anything from this work, I hope it is that research within the youth justice system can and should be undertaken more than it presently is. More research means more evidence-based practices to enact, which hopefully equates to fewer youth offenders and stronger arguments for the funding resources that this area needs. Completing this thesis has been a challenging yet rewarding experience for me. I feel fortunate to have been able to complete a piece of work in an academic area that I am interested in and that utilised my past working experiences and relationships. It would be great if other scientist-practitioners working with youth offenders were to experience this as well. Who knows, they may also discover that they are not as “uncool” as they thought they were!

# REFERENCES

- Adolescent Health Research Group. (2009). *Youth '07: The health and wellbeing of secondary school students in New Zealand. Young people and violence*. Auckland: University of Auckland.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders – text revision* (4<sup>th</sup> edition.). Washington DC: American Psychiatric Association.
- Andershed, H., Hodgins, S., & Tengström (2007). Convergent validity of the Youth Psychopathic Traits Inventory (YPI). *Assessment*, 14, 144-154.
- Andershed, H., Kerr, M., & Stattin, H. (2002). Understanding the abnormal by studying the normal. *Acta Psychiatrica Scandinavica*, 106 (Suppl. 412), 75-80.
- Andershed, H., Kerr, M., Stattin, H., Levander, S. (2002). Psychopathic traits in non-referred youths: A new assessment tool. In E. Blaauw & L. Sheridan (Eds.). *Psychopaths: current international perspectives* (pp. 131-158). The Hague: Elsevier.
- Andershed, H., Köhler, D., Louden, J., & Hinrichs, G. (2009). Does the three-factor model of psychopathy identify a problematic subgroup of young offenders? *International Journal of Law and Psychiatry*, 31, 189-198.
- Andrews, D. A., & Bonta, J. (2003). *The psychology of criminal conduct* (3<sup>rd</sup> edition). Cincinnati: Anderson Publishing Co.
- Andrews, D. A., & Bonta, J. (1995). *Level of Service Inventory – Revised*. New York: Multi Health Systems.

- Andrews, D. A., Bonta, J., & Hoge, R. D. (1990). Classification for effective rehabilitation: Rediscovering psychology. *Criminal Justice and Behavior*, 17, 19-52.
- Andrews, D. A., Bonta, J., & Womith, S. J. (2004). *The Level of Service/Case Management Inventory (LS/CMI)*. Toronto: Multi-Health Systems.
- Andrews, D. A., & Dowden, C. (2006). Risk principle of case classification in correctional treatment.: A meta-analytic investigation. *International Journal of Offender Therapy and Comparative Criminology*, 50, 88-100.
- Baglivio, M. T. (2009). The assessment of risk to recidivate among a juvenile offending population. *Journal of Criminal Justice*, 37, 596-607.
- Bakker, L., Riley, D., & O'Malley, J. (1999). *RoC Risk of Reconviction: Statistical models predicting four types of re-offending*. Christchurch, NZ: Department of Corrections, Psychological Service.
- Becroft, A. J. (2009). Are there lessons to be learned from the youth justice system? In G. Maxwell (Ed.), *Addressing the causes of offending: What is the evidence?* (pp. 25-36). Wellington: Milne.
- Becroft, A. J., & Thompson, R. (2007). Restorative justice in the Youth Court: A square peg in a round hole? In G. Maxwell & J. H. Liu (Eds.), *Restorative justice and practices in New Zealand: Towards a restorative society* (pp. 69-94). Wellington: Milne.
- Bender, K., Kim, J. S., & Springer, D. W. (2007). Treatment effectiveness with dually diagnosed adolescents: Implications for juvenile offenders. In D. W. Springer & A. R. Roberts (Eds.), *Handbook of forensic mental health with victims and offenders*. (pp. 173-205) New York: Springer.
- Betchel, K., Lowenkamp, C. T., & Latessa, E. (2007). Assessing the risk of re-offending for juvenile offenders using the Youth Level of Service/Case Management Inventory. *Journal of Offender Rehabilitation*, 45 (3/4), 85-108.

## REFERENCES

- Birgden, A. (2002). Therapeutic jurisprudence and “Good Lives”: A rehabilitation framework for corrections. *Australian Psychologist*, 37, 180-186.
- Birgden, A (2004). Therapeutic jurisprudence and responsivity: Finding the will and the way in offender rehabilitation. *Psychology, Crime, and Law*, 10, 283-295.
- Blair, J., Mitchell, D., & Blair, K. (2005). *The psychopath: emotion and the brain*. Oxford: Blackwell.
- Bonta, J. (2002). Offender risk assessment: Guidelines for selection and use. *Criminal Justice and Behavior*, 29, 355-379.
- Bonta, J., & Andrews, D. A. (2007). *Risk-Need-Responsivity Model for Offender Assessment and Rehabilitation*. Canada: Public Safety Canada.
- Bonta, J., Jesseman, R., Rugge, T., & Cormier, R. (2006). Restorative justice and recidivism: Promises made, promises kept? In D. Sullivan & L. Tift (Eds.), *Handbook of Restorative Justice* (pp. 108-120). New York: Routledge.
- Bonta, J., Law, M., & Hanson, K. (1998). The prediction of criminal and violent recidivism among mentally disordered offenders: a meta-analysis. *Psychological Bulletin*, 123, 123-142.
- Borum, R., & Verhaagen, D. (2006). *Assessing and managing violence risk in juveniles*. New York: Guilford Press.
- Boxer, P., & Frick, P. J. (2008) Treating conduct problems, aggression, and antisocial behaviour in children and adolescents: An integrated view. In R. G. Steele, T. D. Elkin & M. C. Roberts (Eds.), *Evidence-based therapies for children and adolescents: Bridging science and practice* (pp. 241-259) New York: Springer.
- Braithwaite, J. (2002). *Restorative Justice and Responsive Regulation*. Oxford: Oxford University Press.

- Brandt, J. R., Kennedy, W. A., Patrick, C. J., & Curtin, J. J. (1997). Assessment of psychopathy in a population of incarcerated adolescent offenders. *Psychological Assessment, 9*, 429-435.
- Bruns, E. J., Moore, E., Stephan, S. H., Pruitt, D., & Weist, M. D. (2005). The impact of school mental health services on out-of-school suspension rates. *Journal of Youth and Adolescence, 34*, 23-30.
- Caldwell, M., Skeem, J., Salekin, R., & Van Rybroek, G. (2006). Treatment response of adolescent offenders with psychopathic features: A 2-year follow-up. *Criminal Justice and Behavior, 33*, 571-596.
- Campbell, M. A., Doucette, N. L., & French, S. (2009). Validity and stability of the Youth Psychopathic Traits Inventory in a non-forensic sample of young adults. *Journal of Personality Assessment, 91*, 584-592.
- Catchpole, R. E. & Gretton, H. M. (2003). The predictive validity of risk assessment with violent young offenders. *Criminal Justice and Behavior, 30*, 688-708.
- Cauffman, E., Kimonis, E. R., Dmitrieva, J., & Monahan, K. C. (2009). A multimethod assessment of juvenile psychopathy: Comparing the predictive utility of the PCL:YV, YPI, and NEO PRI. *Psychological Assessment, 21*, 528-542.
- Cauffman, E., Lexcen, F. J., Goldweber, A., Shulman, E., & Grisso (2007). Gender differences in mental health symptoms among delinquent and community youth. *Youth Violence and Juvenile Justice, 5* (3), 287-307.
- Christian, R., Frick, P. J., Hill, N., Tyler, L. A., & Frazer, D. (1997). Psychopathy and conduct problems in children: II. Subtyping children with conduct problems based on their interpersonal and affective style. *Journal of the American Academy of Child and Adolescent Psychiatry, 36*, 233-241.



- Cocozza, J., & Skowrya, K. (2000). Youth and mental health disorders: Issues and emerging responses. *Office of Juvenile Justice and Delinquency Prevention Journal*, 7, 3-13.
- Cooke, D. J., & Michie, C. (2001). Refining the construct of psychopathy: towards a hierarchical model. *Psychological Assessment*, 9, 3-14.
- Compain, G. (2008). *Street wise parenting*. Auckland: Harper Collins Publishers.
- Cottle, C. C., Lee, R. J., & Heilbrun, K. (2001). The prediction of criminal recidivism in juveniles: A meta-analysis. *Criminal Justice and Behavior*, 28, 367-394.
- Cullen, F. T., Smith, P., Lowenkamp, C. T., & Latessa, E. J. (2009). Nothing works revisited: Deconstructing Farabee's rethinking rehabilitation. *Victims and Offenders*, 4, 101-123.
- Curtis, N. M., Ronan, K. R., Heiblum, N., & Crellin, K. (2009). Dissemination and effectiveness of multisystemic treatment in New Zealand: a benchmark study. *Journal of Family Psychology*, 23, 119-129.
- Curtis, N. M., Ronan, K. R., Heiblum, N., Reid, M., & Harris, J. (2002). Antisocial behaviours in New Zealand youth: Prevalence, interventions and promising new directions. *New Zealand Journal of Psychology*, 31, 53-58.
- Dadds, M. R., Fraser, J., Frost, A., & Hawes, D. (2005). Disentangling the underlying dimensions of psychopathy and conduct problems in childhood: a community study. *Journal of Consulting and Clinical Psychology*, 73, 400-410.
- Dandreaux, D., & Frick, P. J. (2009). Developmental pathways to conduct problems: A further test of the childhood and adolescent-onset distinction. *Journal of Abnormal Child Psychology*, 37, 375-385.
- Declercq, F., Markey, S., Vandist, K., & Verhaeghe, P. (2009). The Youth Psychopathic Trait Inventory: factor structure and antisocial behaviour in non-referred 12-17 year-olds. *The Journal of Forensic Psychiatry and Psychology*, 20, 577-594.

- Decoene, S., & Bijttebier, P. (2008). On risking risk assessment of delinquent juveniles: Some questions concerning the role of psychopathy. *International Journal of Law and Psychiatry*, 31, 29-235.
- Dicataldo, F., Zaitchik, M. C., & Provencher, K. (2009). Youth violence: Prevalence, etiology, and treatment. In J. T. Andrade (Ed.), *Violence risk assessment and treatment: New approaches for mental health professionals* (pp. 349-376). New York: Springer.
- Dolan, M. C., & Rennie, C. R. (2006). Psychopathy Checklist: Youth Version and Youth Psychopathic Trait Inventory: A comparison study. *Personality and Individual Differences*, 41, 779-789.
- Dolan M. C., & Rennie, C. R. (2007). The relationship between psychopathic-traits measured by the Youth Psychopathic Traits Inventory and psychopathology in a UK sample of conduct disordered boys. *Journal of Adolescence*, 52, 601-611.
- Douglas, K. S., Cox, D. N., & Webster, C. (1999). Violence risk assessment: Science and practice. *Legal and Criminological Psychology*, 4, 149-84.
- Douglas, K. S., Epstein, M. E., & Poythress, N. G. (2008). Criminal recidivism among juvenile offenders: Testing the incremental and predictive validity of three measures of psychopathic features. *Law and Human Behavior*, 32, 423-438.
- Eccleston, L., & Ward, T. (2006). Criminal justice and good lives. In A. J. W. Taylor (Ed.), *Justice as a basic human need* (pp. 49-60). New York: Nova Science.
- Edens, J. F., Campbell, J. S., & Weir, J. M. (2007). Youth psychopathy and criminal recidivism: A meta-analysis of the Psychopathy Checklist measures. *Law and Human Behavior*, 13, 53-75.
- Edens, J. F., Guy, L. S., & Fernandez, K. (2003). Psychopathic traits predict attitudes towards a juvenile capital murderer. *Behavioral Sciences and the Law*, 21, 807-828.

## REFERENCES

- Edens, J. F., Skeem, J. L., Cruise, K. R., & Cauffman, E. (2001). Assessment of “juvenile psychopathy” and its association with violence: A critical review. *Behavioral Science and the Law*, 19, 53-80.
- Elliot, D. S., & Ageton, S. S. (1980). Reconciling race and class differences in self-reported and official estimates of delinquency. *American Sociological Review*, 45, 95-110.
- Essau, C. A., Sasagawa, S., & Frick, P. J. (2006). Callous-unemotional traits in a community sample of adolescents. *Assessment*, 23, 454-469.
- Farrington, D. P. (2006). Childhood risk factors and risk-focussed prevention. In M. Maguire, R. Morgan & R. Reiner (Eds.). *The Oxford Handbook of Criminology 4<sup>th</sup> Edition* (pp. 602-640). Oxford: Oxford University Press.
- Farrington, D. P. (2005). The importance of child and adolescent psychopathy. *Journal of Abnormal Child Psychology*, 4, 489-497.
- Farrington, D. P. (2002). Understanding and preventing youth crime. In J. Muncie, G. Hughes & E. McLoughton (Eds.). *Youth justice: critical readings* (pp. 425-431). London: Sage.
- Farrington, D. P., Ttofi, M. M., & Coid, J. W. (2009). Development of adolescence-limited, late-onset, and persistent offenders from age 8 to age 48. *Aggressive Behavior*, 35, 150-163.
- Fergusson, D. M., Horwood, J. L., & Nagin, D. S. (2000). Offending trajectories in a New Zealand cohort. *Criminology*, 38 (2), 525-551.
- Field, A. (2005). *Discovering statistics using SPSS: (and sex, drugs and rock ‘n’ roll)*. Second edition. London: Sage.
- Frick, P. J. (2006). Developmental pathways to conduct disorder. *Child and Adolescent Psychiatric Clinics of North America*, 15, 311-331.

## REFERENCES

- Frick, P. J. (2002). Juvenile psychopathy from a developmental perspective: Implications for construct development and use in forensic assessments. *Law and Human Behavior, 26*, 247-252.
- Frick, P. J. (2004). *The Inventory of Callous-Unemotional Traits*. New Orleans, LA: University of New Orleans.
- Frick, P. J. (2007). Using the construct of psychopathy to understand antisocial and violent youth. In H. Hervé & J. C. Yuille (Eds.), *The psychopathy: theory, research, and practice* (pp. 343-367). New Jersey: Lawrence Erlbaum Associates.
- Frick, P. J., Bodin, S. D., & Barry, C. T. (2000). Psychopathic traits and conduct problems in community and clinic-referred samples of children: Further development of the Psychopathy Screening Device. *Psychological Assessment, 12*, 382-393.
- Frick, P. J. & Ellis, M. (1999). Callous-unemotional traits and subtypes of conduct disorder. *Clinical Child and Family Psychology Review, 2*, 246-268.
- Frick, P. J. & Hare, R. D. (2001). *The Antisocial Process Screening Device*. Toronto: Multi-Health Systems.
- Frick, P. J., Kimonis, M. S., Dandreaux, D. M., & Farell, J. M. (2003). The 4-year stability of psychopathic traits in non-referred youth. *Behavioral Sciences and the Law, 21*, 713-736.
- Frick, P. J., & Marsee, M. A. (2006). Psychopathy and developmental pathways to antisocial behaviour in youth. In C. J. Patrick (Ed.), *Handbook of psychopathy* (pp. 353-388). New York: Guilford.
- Frick, P. J., O'Brien, B. S., Wootton, J. M., McBurnett, K. (1994) Psychopathy and conduct problems in children. *Journal of Abnormal Psychology, 103*, 700-707.

## REFERENCES

- Frick, P. J., Stickle, T. R., Dandreaux, D. M., Farrell, J. M., & Kimonis, E. R. (2005). Callous- unemotional traits in predicting the severity and stability of conduct problems and delinquency. *Journal of Abnormal Child Psychology*, 33, 471-487.
- Frick, P.J., & Viding, E. (2009). Antisocial behavior from a developmental psychopathology perspective. *Development and Psychopathology*, 21, 1111-1131.
- Forth, A. E., Kosson, D. S., & Hare, R. D. (2003). *The Psychopathy checklist: Youth version*. Toronto: Multi-Health Systems.
- Grisso, T., & Barnum, R. (2003). *Massachusetts Youth Screening Instrument – second Version: User’s manual and technical report*. Sarasota, FL: Professional Resource Press.
- Grisso, T., Barnum, R., Fletcher, K., Cauffman, E., & Peuschold, D. (2001). Massachusetts youth screening instrument for mental health needs of juvenile justice youths. *Journal of the American Academy of Child & Adolescent Psychiatry*, 40, 541-548.
- Grisso, T., & Quinlan, J. (2005). Massachusetts Youth Screening Instrument – Version 2. In T. Grisso, G. Vincent & D. Seagrave (Eds.), *Mental health screening and assessment juvenile justice* (pp. 99-111). New York: Guilford.
- Grove, W. M., & Meehl, P. E. (1996). Comparative efficiency of informal (subjective, impressionistic) and formal (mechanical algorithmic) prediction procedures: The clinical-statistical controversy. *Psychology, Public Policy, & Law*, 2, 293-323.
- Guerra, N. G., Williams, K. R., Tolan, P. H., & Modecki, K., L. (2008). Theoretical and research advances in understanding the causes of juvenile offending. In R. D. Hoge, G. Guerra & P. Boxer (Eds.), *Treating the juvenile offender* (pp. 33-53). New York: Guilford.
- Hanson, R. K. (2009). The psychological assessment of risk for crime and violence. *Canadian Psychology*, 50, 172-182.

- Hare, R. D. (1999). *Without conscience: The disturbing world of the psychopaths amongst us*. New York: Guilford.
- Hare, R. D. (2003). *Hare Psychopathy Checklist – Revised (PCL-R): Second edition, technical manual*. Toronto, Canada: Multi-Health Systems.
- Hare, R. D. (2006). Psychopathy: A clinical construct whose time has come. In C. Bartol & A. Bartol (Eds.). *Current Perspectives in Forensic Psychology and Criminal Justice*. London: Sage.
- Hare, R. D., & Neumann, C. S. (2008). Psychopathy as a clinical and empirical construct. *Annual Review of Clinical Psychology*, 4, 217-246.
- Harris, G., T., & Rice, M. E. (2006). Treatment of psychopathy: A review of empirical findings. In C. Patrick (Ed.), *The handbook of psychopathy* (pp. 555-572). New York: Guildford.
- Hart, S. D. & Hare, R. D. (1996). Psychopathy and antisocial personality disorder. *Current Opinions in Psychiatry*, 9, 129-132.
- Hart, S. D., Kropp, P. R., & Hare, R. D. (1998). Performance of male psychopaths following conditional release from prison. *Journal of Consulting and Clinical Psychology*, 56, 227-232.
- Hart, J. L., O'Toole, S. K., Price-Sharps, J. L., & Shaffer, T. W. (2007). The risk and protective of violent juvenile offending: An examination of gender differences. *Youth Violence and Juvenile Justice*, 5, 367-384.
- Hart, S. D., Watt, K. A., & Vincent, G. M. (2002). Commentary on Seagrave and Grisso: Impressions of the state of the art. *Law and Human Behavior*, 26, 241-244
- Hayes, H. (2007). Reoffending and restorative justice. In G. Johnstone & D. Van Ness (Eds.). *Handbook of restorative justice* (pp. 426-442). Devon: Willan.

- Hillege, S., Das, J., de Ruiter, C. (2010). The Youth Psychopathic Traits Inventory: Psychometric properties and its relation to substance use and interpersonal style in a Dutch sample of non-referred adolescents. *Journal of Adolescence*, 33, 83-91.
- Hoge, R. D. (1999). An expanded role for psychological assessments in juvenile justice systems. *Criminal Justice and Behavior*, 26, 251-266.
- Hoge, R. D. (2008). Assessment in juvenile justice systems. In R. D. Hoge, N. G. Guerra & P. Boxer (Eds.), *Treating the Juvenile Offender* (pp. 54-78). New York: Guilford.
- Hoge, R. D. (2002). Standardised instruments for assessing risk and need in youthful offenders. *Criminal Justice and Behavior*, 29, 380-396.
- Hoge, R. D. (2005). Youth Level of Service/ Case Management Inventory. In T. Grisso, T. Vincent & D. Seagrave (Eds.), *Mental health screening and assessment in juvenile justice* (pp. 283-294). New York: The Guilford Press.
- Hoge, R. D., & Andrews, D. A. (1996). *Assessing the youthful offender: Issues and techniques*. Plenum: New York.
- Hoge, R. D. & Andrews, D. A. (2001). *The Youth Level of Service/Case Management Inventory (YLS/CMI) Screening Version*. Ottawa: Carleton University.
- Hoge, R. D. & Andrews, D. A. (2002). *Youth Level of Service/ Case Management Inventory user's manual*. New York: Multi-Health Systems.
- Johnstone, G., & Van Ness, D. (2007). The meaning of restorative justice. In G. Johnstone & D. Van Ness (Eds.), *Handbook of Restorative Justice*. Devon: Willan.
- Johnstone, L., Cooke, D. J. (2004). Psychopathic-like traits in childhood: Conceptual and measurement concerns. *Behavioural Sciences and the Law*, 22, 103-125.

## REFERENCES

- Jolliffe, D., Farrington, D. P., Hawkins, D., Catalano, R., Hill, K. G., & Kosterman, R. (2003). Prediction, concurrent, prospective, & retrospective validity of self-reported delinquency. *Criminal Behavior and Mental Health*, 13, 179-192.
- Jones, S. & Cauffman, E. (2008). Juvenile psychopathy and judicial decision making: an empirical analysis of an ethical dilemma. *Behavioral Sciences and the Law*, 26, 151-165.
- Jung, S. & Rawana, E. P. (1999). Risk and need assessment of juvenile offenders. *Criminal Justice and Behavior*, 26, 69-89.
- Kimonis, E. R., Frick, P. J., Skeem, J. L., Marsee, M. A., Cruise, K., Munoz, L. C., Aucion, K. J., & Morris, A. S. (2008). Assessing callous-unemotional traits in adolescent offenders: Validation of the Inventory of Callous-Unemotional Traits. *International Journal of Law and Psychiatry, Special Issue: Psychopathy and Risk Assessment in Children and Adolescents*, 31, 241-252.
- Kimonis, E. R. M Frick, P. J., Munoz, L., & Aucoin, K. J. (2007). Can a laboratory measure of emotional processing enhance the statistical prediction of aggression and delinquency in detained adolescents with callous-unemotional traits? *Journal of Abnormal Child Psychology*, 35, 773-785.
- Kochanska, G. (1993). Towards a synthesis of parental socialisation and child temperament in early development of conscience. *Child Development*, 64, 325-347.
- Kotler, J. S., & McMahon, R. J. (2005). Child Psychopathy: Theories, measurement, and relations with the development and persistence of conduct problems. *Clinical Child and Family Psychology Review*, 8, 291-324.
- Kramer, R. (2000). Poverty, inequality, and youth violence. *Annals of the American Academy of Political and Social Science*, 567, 123-139.



- Krohn, M. D. & Thornberry, T. P. (2003). Common themes, future directions. In. T. P. Thornberry, & M. D. Krohn (Eds.), *Taking stock of delinquency: An overview of findings from contemporary longitudinal studies* (pp. 313-326). New York: Kluwer Academic/ Plenum.
- Kutash, K., & Duchnowski, A. J. (2004). The mental health needs of youth with emotional and behavioral disabilities placed in special education programs in urban schools. *Journal of Child and Family Studies*, 13, 235-248.
- Larsson, H., Andershed, H., & Lichtenstein, P. (2006). A genetic factor explains most of the variation in the psychopathic personality. *Journal of Abnormal Psychology*, 115, 221-230.
- Lashlie, C. (2005). *He'll be ok: Growing gorgeous boys into good men*. New Zealand: Harper Collins.
- Latimer, J., Dowden, C., & Muise, D. (2005). The effectiveness of restorative justice practices: A meta-analysis. *The Prison Journal*, 85, 127-144.
- Latta, N. (2007). *Into the Darklands and Beyond: Unveiling the predators amongst us*. Auckland: Harper Collins.
- Levine, M., Eagle, A., Tuiavi'I, S., Roseveare, C. (1998). *Creative youth justice practice*. Wellington: Social Policy Agency.
- Lilienfeld, S. O., & Fowler, K. (2006). The self-report assessment of psychopathy: problems, pitfalls, and promises. In C. J. Patrick (Ed.), *Handbook of psychopathy* (pp. 107-132). New York: Guilford.
- Lipsey, M., Wilson, D. B., & Cothorn, L. (2000). *Effective interventions for serious juvenile offenders*. Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

- Livingston, M., Stewart, A., Allard, T., & Ogilvie, J. (2008). Understanding juvenile offending trajectories. *The Australian and New Zealand Journal of Criminology*, 41, 345-363.
- Loeber, R., & Farrington, D. P. (2000). Young children who commit crime: Epidemiology, developmental origins, risk factors, early interventions, and policy implications. *Developmental and Psychopathology*, 12, 737-762.
- Lösel, F. (2003). The development of delinquent behaviour. In D. Carson & R. Bull (Eds.), *Handbook of psychology in legal contexts* (2<sup>nd</sup> edition) (pp. 245-268). West Sussex: John Wiley & Sons Ltd.
- Lowenkamp, C. T., Latessa, E. J. & Holsinger, A. M. (2006). The risk principle in action: what have we learned from 13,676 offenders and 97 correctional programs? *Crime and Delinquency*, 52, 77-93.
- Lynam, D. R. (2002). Fledgling Psychopathy: A view from personality theory. *Law and Human Behavior*, 26, 255-259.
- Lynam, D. R. (1997). Pursuing the psychopath: Capturing the fledgling psychopath in a nomological net. *Journal of Abnormal Psychology*, 106, 425-438.
- Lynam, D. R. (1996). The early identification of chronic offenders: Who is the fledgling psychopath? *Psychological Bulletin*, 120, 209-234.
- Marsh, I. & Melville, G. (2009). *Crime, justice and the media*. New York: Routledge.
- Marshall, J., Egan, V., English, M., & Jones, R. M. (2006). The relative validity of psychopathy versus risk/needs-based assessments in the prediction of adolescent offending behaviour. *Legal and Criminological Psychology*, 11, 197-210.
- Maschi, T., Hatcher, S., Schwalbe, C. S., & Rosato, N. S. (2008). Mapping the social pathways of youth to and through the juvenile justice system: A comprehensive review. *Children and Youth Services Review*, 30, 1376-1385.

## REFERENCES

- Maxwell, G. (2007). The youth justice system in New Zealand: Restorative justice delivered through the Family Group Conference. In G. Maxwell & J. H. Liu (Eds.), *Restorative justice and practices in New Zealand: Towards a restorative society* (pp. 45-68). Wellington: Milne.
- Maxwell, G. (2009). Understanding and responding to criminal offending. In G. Maxwell (Ed.), *Addressing the causes of offending: What is the evidence?* (pp. 173-184). Wellington: Milne.
- Maxwell, G. M., Kingi, V., Robertson, J., Morris, A., & Cunningham, C. (2004). *Achieving effective outcomes in youth justice: final report*. Wellington: Ministry of Social Development.
- Maxwell, G. M., & Morris, A. (1993). *Family and culture: Youth justice in New Zealand*. Wellington: Social Policy Agency.
- Maxwell, G. M., & Morris, A. (2006). Meeting human needs: the potential of restorative justice. In A. J. W. Taylor (Ed.), *Justice as a basic human need* (pp. 71-84). New York: Nova Science.
- Maxwell, G., Morris, A., & Hayes, H. (2006). Conferencing and restorative justice. In D. Sullivan & L. Tift (Eds.), *Handbook of restorative justice: A global perspective* (pp. 91-106). New York: Routledge.
- Maxwell, G., Robertson, J., & Anderson, T. (2002). *Police youth diversion: final report*. Wellington: The Crime and Justice Research Centre, Victoria University of Wellington.
- McCold, P. (2006). The history of restorative justice: Mediation, circles, and conferencing. In D. Sullivan & L. Tift (Eds.), *The handbook of restorative justice* (pp. 23-51). New York: Routledge.

## REFERENCES

- McCord, J., Widon, C., & Crowell, N. A. (Eds.). (2001). *Juvenile crime juvenile justice: Panel on Juvenile Crime: Prevention, treatment, and control*. Washington DC: National Academy Press.
- McLaren, K. L. (2000). *Tough is not enough: Getting smart about youth crime*. Wellington: Ministry of Youth Affairs.
- Menkel-Meadow, C. (2007). Restorative justice: What is it and does it work? *Annual Review of Law and Social Science*, 3, 161-187.
- Meyers, J. R., & Schmidt, F. (2008). Predictive validity of the Structured Assessment for Violence Risk in Youth (SAVRY) with juvenile offenders. *Criminal Justice and Behavior*, 35, 344-355.
- Miller, J., & Lin, J. (2007). Applying a generic juvenile risk assessment instrument to a local context: Some practical and theoretical lesions. *Crime and Delinquency*, 53, 552-580.
- Ministry of Health (2001). *Suicide trends in New Zealand 1978-1998*. Wellington: New Zealand Health Information Service.
- Ministry of Justice (2010). *Child and youth offending statistics in New Zealand: 1992 to 2008*. Wellington: Ministry of Justice.
- Moffitt, T. E. (1993). Adolescence-limited and life course persistent antisocial behavior: A developmental taxonomy. *Psychological Review*, 100, 674-701.
- Moffitt, T. E. Caspi, A., Harrington, H., & Milne, B. J. (2002). Males on the life-course persistent and adolescent limited pathways: Follow-up at age 26 years. *Developmental and Psychopathology*, 1, 105-118.
- Morris, A. (2004). Youth justice in New Zealand. In M. Tonry & A. N. Doob (Eds.), *Youth crime and youth justice: Comparative and cross-national perspectives* (pp. 243-291). London: The University of Chicago Press.

## REFERENCES

- Morris, A. & Maxwell, G. M. (2003). Demystifying family group conferences. *New Zealand Law Journal*, 3, 94-95.
- Morris, A., Maxwell, G. M., & Shepherd, P. (1997). *Being a youth advocate: an analysis of their role and responsibilities*. Wellington: Institute of Criminology, Victoria University of Wellington.
- Muncie, J. (2004). *Youth and Crime* (2<sup>nd</sup> edition). London: Sage Publications.
- Murrie, D. C., & Cornell, D. G. (2002). Psychopathy screening of incarcerated juveniles: A comparison of measures. *Psychological Assessment*, 14, 390-396.
- New Zealand Police (2010). *New Zealand crime statistics 2010: A summary of recorded resolved offence statistics*. Wellington: Police National Headquarters.
- Office of Juvenile Justice and delinquency Prevention. (2008). *Juvenile offenders and victims: National report 2008*. Washington DC: Office of Juvenile Justice and Delinquency Prevention.
- Ogloff, J. P. & Davis, M. R. (2004). Advances in offender assessment and rehabilitation: contributions of the risk-needs-responsivity approach. *Psychology, Crime, & Law*, 10, 229-242.
- O'Leary, P. & Halton, C. (2009). Young person's probation in the Republic of Ireland: An evaluation of risk assessment. *Irish Probation Journal*, 6, 97-112.
- Olver, M. E., Stockdale, K. C., & Wormith, J. S. (2009). Risk assessment with youth offenders: A meta-analysis of three assessment measures. *Criminal Justice and Behavior*, 36, 329-353.
- Onifade, E., Davidson, W., & Campbell, C. (2009). Risk assessment: The predictive validity of the Youth Level of Service Case Management Inventory with African Americans and girls. *Journal of Ethnicity in Criminal Justice*, 7, 221-221.

## REFERENCES

- Onifade, E., Davidson, W., Campbell, C., Turke, G., Malinowski, G., & Turner, K. (2008). Predicting recidivism in probationers with the Youth Level of Service/Case Management Inventory (YLS/CMI). *Criminal Justice and Behavior*, 35, 474-483
- Onifade, E., Davidson, W., Livsey, S., Turke, G., Horton, C., Malinowski, J., Atkins, D., & Wimberly, D. (2008). Risk Assessment: Identifying patterns of risk in young offenders with the Youth Level of Service/Case Management Inventory. *Journal of Criminal Justice*, 36, 165–173.
- O’Neil, M. L., Lidz, V., & Heilbrun, K. (2003). Adolescents with psychopathic characteristics in a substance abusing cohort: Treatment process and outcomes. *Law and Human Behavior*, 27, 299-313.
- Patrick, C. J., Fowles, D. C., & Krueger, R. F. (2009). Triarchic conceptualisation of psychopathy: Developmental origins of disinhibition, boldness, and meanness. *Development and Psychopathology*, 21, 913–938.
- Phares, V. (2008). *Understanding abnormal child psychology* (2<sup>nd</sup> edition). New York: John Wiley & Sons, Inc.
- Police Development Group (2007). *Counties Manukau police district environment scan 2007*. Counties Manukau: New Zealand Police.
- Porter, S. & Porter, S. (2007). Psychopathy and Violent Crime. In H. Huervé & J. C. Yuille (Eds.), *The Psychopath: Theory, research, and practice* (pp. 287-300). New York: Lawrence Erlbaum Associates.
- Poythress, N. G., Dembo, R., Wareham, J., & Greenbaum, P. E. (2006). Construct validity of the Youth Psychopathic Traits Inventory (YPI) and the Antisocial Process Screening Device (APSD) with justice involved adolescents. *Criminal Justice and Behavior*, 33, 26-55.

## REFERENCES

- Randall, J., Henggeler, S. W., Pickrel, S. G., Brondino, M. J. (1999). Psychiatric co-morbidity and the 16-month trajectory of substance-abusing and substance-dependent juvenile offenders. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38, 1118-1124.
- Richards, I. (1996). Psychiatric disorders among adolescents in custody. *Australian and New Zealand Journal of Psychiatry*, 30, 788-793.
- Rennie, C., & Dolan, M. (2010). Predicting validity of the youth level of service/case management inventory in a custody sample in England. *The Journal of Forensic Psychiatry and Psychology*, 31, 407-425.
- Reynolds, E. K., Magidson, J. F., Mayes, L. C., & Lejuez, C. W. (2010). Risk taking behaviors across the transition from adolescence to young adulthood. In J. E. Grant & M. N. Potenza (Eds.), *Young adult mental health* (pp. 40-63). Oxford: Oxford University Press.
- Rice, M. E., & Harris, G. T. (1995). Violent recidivism: Assessing predictive validity. *Journal of Consulting and Clinical Psychology*, 63, 737-748.
- Roose, A., Bijttebier, P., Decoene, S., Claes, L., & Frick, P. J. (2009). Assessing the affective features of psychopathy in adolescence: A further validation of the Inventory of Callous and Unemotional Traits. *Assessment*, 17, 44-57.
- Rowe, R. (2002). *Predictors of criminal offending: Evaluating measures of risk/ needs, psychopathy, & disruptive behaviour disorders*. Unpublished doctoral thesis, Carlton University, Ottawa, Canada.
- Rugge, T., & Scott, T. (2009). *Restorative justice's impact on participants' psychological and physical health*. Ottawa: Public Safety Canada.
- Salekin, R. T. (2002). Psychopathy and therapeutic pessimism: Clinical lore or clinical reality? *Clinical Psychology Review*, 22, 79-112.

- Salekin, R. T., & Lochman, J. E. (2008). Child and adolescent psychopathy: The search for protective factors. *Criminal Justice and Behavior*, 35, 159-172.
- Salekin, R. T., Rogers, R. G., & Machin, D. (2002). Psychopathy in youth, pursuing diagnostic clarity. *Journal of Youth and Adolescence*, 30, 173-185.
- Salekin R. T., Rosenbaum, J., Lee, Z. & Lester, W. (2009). Child and adolescent psychopathy: like a painting by Monet. *Youth Violence and Juvenile Justice*, 7, 239-255.
- Schmidt, F., Hoge, R. D. & Gomez, L. (2005). Reliability and validity analysis of the Youth Level of Service/Case Management Inventory. *Criminal Justice and Behavior*, 32, 329-344.
- Schwalbe, C. (2004). Re-visioning risk assessment for human service decision making. *Children and Youth Services Review*, 26, 561-576.
- Schwalbe, C. S. (2007). Risk assessment for juvenile justice: A meta-analysis. *Law and Human Behavior*, 31, 449-462.
- Schwalbe, C. (2008). Strengthening the integration of actuarial risk assessment with clinical judgement in evidence based practice framework. *Children and Youth Services Review*, 30, 1458-1464.
- Schwalbe, C. S., Fraser, M. W., Day, S. H., & Cooley, V. (2006). Classifying juvenile offenders according to risk of recidivism: predicting validity, race/ethnicity, and gender. *Criminal Justice and Behavior*, 33, 305-324.
- Seagrave, D., & Grisso, T. (2002). Adolescent development and the measurement of juvenile psychopathy. *Law and Human Behavior*, 26, 219-293.
- Sharp, C., & Kine, S. (2008). The assessment of juvenile psychopathy: strengths and weaknesses of currently used questionnaire measures. *Child and Adolescent Mental Health*, 13, 85-95



- Skeem, J. L., & Cauffman, E. (2003). Views of the downward extension: comparing the Youth Version of the Psychopathic Traits Inventory. *Behavioral Sciences and the Law*, 21, 737-770.
- Smith, P., Goggin, C., & Gendreau, P. (2002). *The effects of prison sentences and intermediate sanctions on recidivism: General effects and individual differences*. Ottawa: Solicitor General Canada.
- Snyder, H. N., & Sickmund, M. (2006). *Juvenile Offenders and Victims: 2006 national report*. Washington, DC: National Centre for the Juvenile Justice, Office of Juvenile Justice and delinquency Prevention, Office of Justice Programs, U.S. Department of Justice.
- Spain, S. E., Douglas, K. S., Poythress, N. G. & Epstein, M. E. (2004). The relationship between psychopathic features, violence and treatment outcomes: The comparison of three youth measures of psychopathic features. *Behavioural Science and the Law*, 22, 85-102.
- Spier, P. (2002). *Convictions and sentencing of offenders in New Zealand 1992 – 2001*. Wellington: Ministry of Justice.
- Steinberg, L. (2009). Adolescent development and juvenile justice. *Annual Review of Clinical Psychology*, 5, 459-485.
- Steinberg, L. & Schwartz, R. G. (2000). Developmental psychology goes to court. In T. Grisso & R. Schwartz (Eds.), *Youth of trial: A developmental perspective on juvenile justice* (pp. 9-32). Chicago: The University of Chicago Press.
- Sullivan, C. J., Veysey, B. M., Hamilton, Z. K., & Grillo, M. (2007). Reducing out-of-community placement and recidivism: Diversion of delinquent youth with mental health and substance use problems from the justice system. *International Journal of Offender Therapy and Comparative Criminology*, 51, 555-577.

- Sunday News (2010, April 08). Twenty teenage killers behind bars. *Sunday News*. Retrieved: <http://www.stuff.co.nz/sunday-news/news/3545881/20-teenage-killers-behind-bars>
- Taylor, J., & Lang, A. R. (2006). Psychopathy and substance use disorders. In C. Patrick (Ed.), *Handbook of psychopathy* (pp. 495-511): New York: Guilford.
- Taxman, F. S., Thanner, M., & Weisburd, D. (2006). Risk, need, and responsivity (RNR): It all depends. *Crime and Delinquency*, 52, 28-51.
- Teplin, L. A., Abram, K. M., McClelland, G. M., Dulcan, M. K., & Mericle, A. A. (2002). Psychiatric disorders in youth in juvenile detention. *Archives of General Psychiatry*, 59, 1133-1143.
- Teplin, L. A., Abram, K. M., McClelland, G. M., Washburn, J. J. & Pikus, A. K. (2005). Detecting mental disorders in juvenile detainees: who receives services? *American Journal of Public Health*, 95, 1773-1780.
- Thompson, A. P. (2006). Do we need to worry about subgroup differences in juvenile offender risk-need assessment? In M. Katsikitis (Ed.), *Psychology bridging the Tasman: science, culture, and practice. Proceedings of the 2006 joint conference of the APS and NZPsS*. Melbourne: The Australian Psychological Society Ltd.
- Thompson, A. (2001). Juvenile offending: An overview in support of assessing risk factors, needs, and strengths. *The Australian Education and Developmental Psychologist*, 18, 39-56.
- Thompson, A. & Pope, Z. (2005). Assessing juvenile offenders: Preliminary data for the adaptation of the Youth Level of Service/ Case Management Inventory (YLS/CMI). *Australian Psychologist*, 40, 207-214.
- Thompson, A. P., & Putnis, A. (2003). Risk-need assessment inventories for juvenile offenders in Australia. *Psychiatry, Psychology, and Law*, 10, 324-333.

- Thornberry, T. P., & Krohn, M. D. (2005). Applying interactional theory to the explanation of continuity and change in antisocial behaviour. In D. P. Farrington (Ed.), *Integrated Developmental and Life-Course Theories of Offending* (pp. 183-209). New Jersey: Transaction.
- Thornberry, T. P., & Krohn, M. D. (2000). The self-report method for measuring delinquency and crime. *Criminal Justice*, 4, 33-83.
- Umbriet, M. S., Coates, R. B., & Vos, B. (2002) *The impact of restorative justice conferencing: A review of 63 empirical studies in 5 countries*. Centre for Restorative Justice and Peacemaking, University of Minnesota: [www.rjp.umn.edu](http://www.rjp.umn.edu).
- Vaughn, M. G., & Howard, M. O. (2005). The construct of psychopathy and its potential contribution to the study of serious, violent, and chronic youth offending. *Youth Violence and Juvenile Justice*, 3, 235-252.
- Vein, A., & Beech, A. R. (2006). Psychopathy: Theory, measurement, and treatment. *Trauma, Violence, and Abuse*, 7, 155-174.
- Veysey, B. M. (2008). Mental Health, Substance Abuse, and Trauma. In R. D. Hoge, G. Guerra & P. Boxer (Eds.), *Treating the Juvenile Offender* (pp. 210-238). New York: Guilford.
- 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 Behaviour*, 36, 385-401.
- Viljoen, J. L., Elkovitch, N., Scalora, M., J., Ullman, D. (2009). Assessment of reoffense risk in adolescents who have committed sexual offences: Predictive validity of the ERASOR, PCL:YV, YLS/CMI, and the Static-99. *Criminal Justice and Behavior*, 36, 981-1000.

- Villa-Vicencio, C. (2006). Transitional justice, restoration, and prosecution. In D. Sullivan & L. Tifft (Eds.), *Handbook of restorative justice* (pp.387-400). New York: Routledge.
- Vincent, G. M., Terry, A. M., & Maney, S. M. (2009). Risk/need tools for antisocial behavior and violence among youthful populations. In J. T. Andrade (Ed.), *Violence risk assessment and treatment: New approaches for mental health professionals* (pp. 377-424). New York: Springer.
- Vitacco, M. J., & Vincent, G. M. (2006). Understanding the downward extension of psychopathy to youth: Implications for risk assessment and juvenile justice. *International Journal of Forensic Mental Health*, 5, 29-38.
- Ward, T. (2002). The management of risk and the design of good lives. *Australian Psychologist*, 37, 172-179.
- Ward, T., Brown, M. (2004). The good lives model and conceptual issues in offender rehabilitation. *Psychology, Crime, & Law*, 10, 243-257.
- Ward, T., Mann, R., & Gannon, T. A. (2007). The good lives model of offender rehabilitation: clinical implications. *Aggression and Violent Behavior*, 12, 87-107.
- Ward, T., Melser, J., & Yates, P. (2007). Reconstructing the risk-need-responsivity model: A theoretical elaboration and evaluation. *Aggression and Violent Behavior*, 12, 208-228
- Ward, T. & Stewart, C. A. (2003). The treatment of sex offenders: risk management and good lives. *Professional Psychology: Research and Practice*, 34, 353-360.
- Wasserman, G. A., Ko, S. J., & McReynolds, L. S. (2004). *Assessing the mental health status of youth in juvenile justice settings*. Washington DC: Office of Juvenile Justice and Delinquency Prevention.
- Welsh, J. L., Schmidt, F., McKinnon, L., Chattha, H. K., & Meyers, J. R. (2008). A comparative study of adolescent risk assessment instruments. *Assessment*, 15, 104-115.

## REFERENCES

- Wexler, D. B. (2006). Therapeutic jurisprudence. In A. Taylor (Ed.), *Justice as a basic human need* (pp. 61-71). New York: Nova Science.
- White, S. F., Cruise, K. R., & Frick, P. J. (2009). Differential correlates to self-report and parent-report of callous-unemotional traits in a sample of juvenile sexual offenders. *Behavioral Sciences and the Law*, 27, 910-928.
- Wilmhurst, L. (2009). *Abnormal child psychology: A developmental perspective*. New York: Routledge.
- Wilson, N., & Rolleston, R. (2004) *A risk-need profile using four measures for youth offenders incarcerated in young offender units*. New Zealand: Department of Corrections Psychological Service.
- Williams, K. R., Tuthill, L., & Lio, S. (2008). A portraits of juvenile offending in the United States. In R. D. Hoge, G. Guerra & P. Boxer (Eds.), *Treating the juvenile offender* (pp. 15-32). New York: Guilford.
- Winick, B. (2003). Therapeutic jurisprudence and problem-solving courts. *Fordham Urban Law Journal*, 30, 112-134.
- Wootton, J. M., Frick, P. J., Shelton, K. K., & Silverthorn, P. (1997). Ineffective parenting and childhood conduct problems: The moderating role of callous-unemotional traits. *Journal of Consulting and Clinical Psychology*, 65, 301-308.
- Zara, G., & Farrington, D. P. (2009). Childhood and adolescent predictors of late onset criminal careers. *Journal of Youth and Adolescence*, 38, 287-300.

# APPENDICES

## APPENDIX

<b>A.</b>	<b>CASE STUDY</b>	
	A Pilot Evaluation of the Intensive Monitoring Group: A Problem-Solving Court for Youth Offenders.....	185
<b>B.</b>	<b>GEOGRAPHIC DISTRIBUTION OF PARTICIPANT REFERRALS</b>	
	The Counties-Manukau District.....	212
	The Greater Auckland Region.....	213
<b>C.</b>	<b>MEASURES USED IN THE STUDY</b>	
	Descriptive Data Sheet.....	215
	Youth Level of Service/ Case Management Inventory (YLS/CMI).....	218
	Youth Psychopathic Traits Inventory (YPI).....	220
	Inventory of Callous-Unemotional Traits (ICU).....	226
	Massachusetts Youth Screening Instrument – Version 2 (MAYSI-2).....	228
<b>D.</b>	<b>DEVELOPMENT OF THE SELF-REPORTED OFFENDING SURVEY (SROS)</b>	
	The Development of the SROS.....	229
	Purpose of the SROS	
	Basic Description of the SROS	
	Development and Psychometrics of the SROS	
	The Self-Reported Offending Survey.....	237
<b>E.</b>	<b>CONSENT FORMS AND INFORMATION SHEETS:</b>	
	<b>DIVERSION SAMPLE.....</b>	239
	Expression of Interest Forms.....	240
	Summary Sheet - Youth Version.....	242
	Summary Sheet – Parent Version.....	243
	Information Sheet for the Young Person.....	245

Information Sheet for Parents and Guardians.....	248
Consent Form for the Young Person.....	252
Agreement Form for Family/ Whanau, Caregivers and Guardians.....	253

**F. CONSENT FORMS AND INFORMATION SHEETS:**

<b>CLINICAL SAMPLE.....</b>	<b>254</b>
Summary Sheet - Youth Version.....	255
Summary Sheet - Parent Version.....	256
Information Sheet for the Young Person.....	257
Information Sheet for Parents and Guardians.....	261
Consent Form for the Young Person.....	265
Agreement Form for Family/ Whanau, Caregivers and Guardians.....	266

**G. ADDITIONAL RESULTS**

Convergent Validity of the Risk Assessment Measures.....	267
Self-Reported Offending.....	270

# APPENDICES

## LIST OF TABLES

Table A1.	Initial Assessment Demographic Data for the Total Clinical Sample and Pilot Sub-Sample.....	193
Table A2.	Level of Service Intervention for All Participants during the Six-Month Follow-Up Period.....	199
Table A3.	SROS Categorised Indicated for All Participants during the Six-Month Follow-Up Period.....	200
Table A4.	Percentage of completed initial assessments for the Diversion Sample as viewed by referring Counties-Manukau Police Youth Aid Site.....	212
Table A5.	Percentage of Referrals by Youth Courts within Auckland to the RYFS during the designated participant recruitment period.....	213
Table A7.	Pearson Product-Moment Correlations between the YLS/CMI, the YPI, and the ICU (including Subscales and Factor scores) for the Diversion Sample ( $N = 70$ ).....	268
Table A8.	Pearson Product-Moment Correlations between the YLS/CMI, the YPI, and the ICU (including Subscales and Factor scores) for the Clinical Sample ( $N = 44$ ).....	269
Table A9.	Percentage Rates of Self-Reported Offending Items for the Diversion Sample and the Clinical Sample.....	271
Table A10.	Pearson Product-Moment Correlations between the Three Risk Assessment Measures and Self-Reported Outcome Variables for the Diversion Sample ( $N = 63$ ).....	272
Table A11.	Pearson Product-Moment Correlations between the Three Risk Assessment Measures and Self-Reported Outcome Variables for the Clinical Sample ( $N = 44$ ).....	273



# APPENDICES

## LIST OF FIGURES

Figure A1. Map of the Counties-Manukau District.....	212
Figure A2. Map of the Greater Auckland Region.....	213

## APPENDIX A

### **A Pilot Evaluation of the Intensive Monitoring Group A Problem-Solving Court for Youth Offenders**

#### **ABSTRACT**

The augmentation of “problem solving courts” throughout the United States has been identified as an effective and efficient approach to addressing offenders’ difficulties with drugs, alcohol, mental health, and family systems. The current study sought to provide a preliminary evaluation of the Intensive Monitoring Group (IMG) using a quasi-experimental design. The IMG is a problem solving court for moderate to high risk youth offenders in Auckland with significant substance use and/ or mental health concerns. Findings showed no differences in self-reported recidivism after a 6-month follow-up period. However IMG participants were significantly more likely to access clinical services to address their identified needs. The risk of recidivism was also significantly reduced compared to the control group. Future research into the long-term effectiveness of the IMG is warranted. The role of mental health workers in this research is discussed.

#### **INTRODUCTION**

##### *What are Problem-Solving Courts?*

Problem-solving courts are specialist courts that are designed to address specific difficulties faced by offending populations. This is achieved by using the authority of the court to reduce crime by assisting offenders through collaboration with outside services specialised in addressing the specific issue of the court. The premise of problem-solving courts arose from the development of drug courts in the United States, which remain the most common and widely adopted form of problem-solving court (Belenko, DeMatteo, & Patapis, 2007). Drug courts began in earnest approximately three decades ago as a result of the United States “war on drugs”. As a result of this political initiative many offenders convicted of substance related offences were incarcerated while a lack of appropriate community interventions was

identified (MacKenzie, 2006). Drug courts offered a solution to this problem by directing drug involved offenders to supervision and treatment programmes within the community.

The concept of speciality problem-solving courts originates from the theory of therapeutic jurisprudence. Therapeutic jurisprudence is an interdisciplinary approach to legal and law reform that views the law (and agents of the law) as able to act as a therapeutic entity by contributing to the mental health and emotional wellbeing of those affected (Winick, 2003). It is interdisciplinary in that it brings insight from psychology and the social sciences to bear on legal questions, and it is empirical in that it calls for testing of hypotheses concerning how the law functions and can be improved. Therapeutic jurisprudence suggests that law should value psychological health, strive to avoid imposing anti-therapeutic consequences whenever possible, and should attempt to bring about healing and wellness within the values of the legal system (Wexler & Winick, 1991, cited in Winick, 2003). Therapeutic jurisprudence allows for the contribution of multiple perspectives and is often viewed as an extension of the wider principles of restorative justice practices, e.g., the Family Group Conference (FGC).

A number of key components are present with the integration of therapeutic jurisprudence into problem solving court. For participants the process begins with an assessment and screening of problem behaviours. Courtroom procedures are more informal and communication between the participants and the judge, prosecutor, and other members of the court are not adversarial. Often the participant will sit alongside the judge in the witness box. The role of the judge inspires therapeutic intervention into a more powerful and accountable form of rehabilitation than standard court practices (MacKenzie, 2006). The central component of problem-solving courts is attendance at regular scheduled hearings where the judge monitors the progress of participants. Treatment providers, social workers, probation

officers, advocates and prosecutors are present. Information provided at these hearings allows the judge to reward progress or sanction non-compliance. Case management of the offenders' needs is an important component of drug courts. Successful programme completion results in either a case dismissal or a reduced sentence for the participant.

Since the implementation of problem-solving court over 150,000 U.S. offenders of different age-groups have participated (McCarthy & Waters, 2004). Empirical evidence has largely involved adult drug courts (Belenko, 2001; Belenko et al, 2007; McCarthy & Waters, 2004). Belenko (2001) reviewed research findings from 37 evaluations of different drug courts. The findings showed drug courts provide closely long-term (one year or more) supervision to offenders with substantial histories of drug use and criminal justice contacts, previous treatment failures, and high rates of health and social problems. The review concluded that while participating in a drug court, substance use prevalence and criminal recidivism is low. Studies comparing drug court participants to a suitable control samples identified 10% to 20% reductions in drug use and criminal recidivism. Randomised control studies have identified a 15% reduction in re-arrest rates after 3 years compared to probationers (Gottfredson, Najaka, & Kearley, 2003). Similar findings were identified in a more recent review of 117 adult drug court evaluations by the US Government Accountability Office (cited in Belenko et al, 2007). Drug courts are also a cost-effective approach to addressing substance related criminal behaviour (Belenko et al, 2007; McCarthy & Waters, 2004).

#### *Problem-Solving Courts for Youth Offenders*

Drug courts for youth offenders have also become increasingly popular within the United States. Belenko and Dembo (2003) note that as of 2002 there were over 200 drug courts for youth within the United States. More than 12,500 participants had enrolled in these

programmes and 4000 had graduated (American University, 2001; cited in Belenko & Dembo, 2003). Few evaluations have been published on youth drug courts. Results thus far have been inconsistent and not as favourable as adult drug courts (MacMaster, Ellis, & Holmes, 2009; Balenko & Dembo, 2003; Henggeler, 2007). An evaluation of Los Angeles County participants found 26% were re-arrested during the follow-up period (after an average follow up of 181 days; Deschenes, Moreno, Emani, Thompson, & Manatt, 2001). Henggeler's (2007) review identified youth drug courts as superior in reducing recidivism rates while on the programme; however these results did not lead to reduced rates of re-arrest or incarceration during a 12-month follow-up period.

The New South Wales (NSW; Taplin, 2002) youth drug court opened in 2001 and is Australia's only Youth Drug Court. Seventy-five young people attended the programme during the first two-years of operation. Of these, 29 (39%) went on to complete the programme. Approximately 60% of participants appeared in court on new charges while on the programme. Approximately 65% re-offended once they either left or completed the programme. This evaluation did not use a comparison group; however it concludes that participants who completed the programme were less likely to re-offend compared to those who dropped out. New Zealand's one drug court was established in the Christchurch Youth Court in 2002. Thirty young people were followed-up one-year after they left the programme (Searle & Spier, 2006). Most (80%) accumulated further offences while attending the court, while 70% had re-offended at one-year follow-up. This was lower than a comparison group; however this result was not statistically significant.

Problem-solving courts for youth offenders encounter a number of social, developmental, and systematic difficulties that adult problem solving courts may not encounter. Firstly, most

young people involved in the youth justice system still live with family members (who may have their own difficulties to consider), will be of school age, have important attachments to peers, and may be exhibiting rebellious behaviour consistent with normative development, i.e. impulsivity and irresponsibility. Youth offenders are also more likely to re-offend (and re-offend faster) than their adult counterparts (Spier, 2008). All of these issues are exacerbated by substance abuse (Belenko & Dembo, 2003), and all would need to be addressed by the problem solving court within the context of an appropriate assessment and case management plan. One remaining issues pertinent to the current case study is that of mental health. The prevalence of mental health disorder within the youth justice system is markedly high. Research has shown that approximately 70% of incarcerated youth offenders are likely to be experiencing a serious mental health disorder (Teplin, Abram, McClelland, Dulcan, & Mericle, 2002; Cocozza & Skowrya, 2000). Disruptive behavioural disorders (such as Conduct Disorder, Oppositional Defiant Disorder, and Attention Deficit Disorder) are the most prevalent, followed by mood and anxiety disorders. Female offenders were more likely to receive more than one diagnosis with virtually all females (99%) meeting the criteria for a substance misuse and mental health co-morbidity, compared to 69% of males (Randall, Henggeler, Pickrel, & Brondino, 1999). Specific problem solving “mental health courts” for both adults and youth have reported reduced recidivism and increased access to effective treatment (Steadman, Davidson, & Brown, 2001), although criteria is often variable and participants whose primary problems are behavioural are often excluded.

The exact components of a youth problem-solving court which contribute to a successful outcome have been yet to be examined extensively. Balenko et al (2007) noted that it was unclear what specific components of drug courts were effective (e.g. the behaviour of the judge, the amount of treatment received, level of supervision provided etc.). However, the

current review identified a number of components worth considering in the development of a youth drug court. An important finding by Henggeler et al (2006) was that the integration of evidence-based cognitive behavioural and multi-systemic substance-abuse treatments into youth drug courts enhanced participant substance-related outcomes and rates of youth drug court completion. This finding highlights the importance of employing evidence-based therapies. Length of stay with treatment providers are known to decrease the risk of substance use relapse and recidivism (Yeager, 2003; McCarthy & Waters, 2004). Adult drug courts enable participants to stay with providers for longer periods of time. This may not be viable given specific youth court jurisdictions. Finally, Balenko et al (2007) points out the importance of using standardised assessment measures in problem-solving courts to effectively assess the participants, *risk*, *need* and *responsivity* factors. *Risk* relates to the criminogenic factors of the individual that cannot be changed. *Need* relates to factors that are dynamic and, if changed, will result in changes to the likelihood of recidivism. *Responsivity* factors include the person's attitude and motivation to change. These factors are important in predicting recidivism (Hoge, 2008; Simourd, 2004).

*The Auckland Youth Court Intensive Monitoring Group (IMG)*

The IMG began in July 2007 as a problem solving court for youth offenders within the central Auckland region. The process was spearheaded by Judge Tony Fitzgerald. Youth offenders eligible for the IMG required a diagnosis of a moderate to severe mental health disorder as defined by the DSM-IV-TR (APA, 2000), including disruptive behavioural disorders (e.g. Conduct Disorder), and/ or a “clinically severe substance dependency”. All participants are required to be assessed as moderate to high risk or re-offending. They are first identified by NZ Police Youth Aid officers, Youth Advocates, or Child, Youth and Family Services (CYFS) Social Workers. If the young person is not denying the charge then

the Youth Court can request a psychological assessment to ascertain whether the young person meets criteria for the IMG. Young people who meet IMG criteria need to agree to the programme at an FGC whereby the intervention plan would be finalised. A meeting of the professionals involved with IMG participants is held for one-hour prior to the court beginning. These professionals include the judge, as well as members of the Police, CYFS, Youth Advocates, and therapeutic service providers. This meeting discusses participant progress so that the judge can give the appropriate feedback to the participant. Participants are initially required to attend the IMG every second week until progress on the treatment plan is made. As the young person's charges have been separated out from regular youth court process there is no definite timeframe for plan completion.

The IMG attempts to address the underlying cause of the young person's offending behaviour by reducing their risk of re-offending and finding solutions that are strength-based, child-centred, family-focussed, and culturally appropriate. In order to do this the IMG relies on inter-agency co-operation and accountability. The purpose of this pilot study was to evaluate the IMG's ability to achieve some of these objectives after a short six month follow-up from the date of assessment. Evaluation of the IMG consists of monitoring the entry criteria and outcome variables, as well as ensuring that a valid and reliable actuarial risk assessment is used to identify the most "at risk" and "at need" young people for this limited resource.

This evaluation sought to discover whether there was any difference between IMG participants and a comparable control group after six-months with respect to:

- 1) A reduction in the risk of recidivism?
- 2) Self-reported offending behaviour?
- 3) Level of therapeutic interventions accepted?



## METHODOLOGY

This pilot evaluation of the IMG was conducted within the context of a larger doctoral study examining the predictive validity of selected risk assessment measures in two samples of youth offender participants. One of these samples, the ‘Clinical’ sample, consisted of participants whose offending matters were before a youth court and had subsequently been directed to a clinical assessment. All IMG participants were subject to such an assessment. The control sample for the pilot study was selected from the remaining ‘clinical’ participants who met the criteria for the IMG but were made subject to standard youth court procedures.

### *Participants*

#### *Source of Participants*

Participants were recruited through the Regional Youth Forensic Service (RYFS) in Auckland. RYFS is a specialist service providing mental health assessment and time-limited clinical treatment of young people aged 14 to 17 years involved within the Youth Justice system. Referrals to RYFS usually request an assessment of a young person’s mental state, offending behaviour, their fitness to plead before the court, or a combination of the above. All participants consisted of young people who had come to the attention of the Youth Court and subsequently been referred to RYFS for an assessment and a report.

#### *Participant Descriptive Statistics*

This pilot evaluation discusses the results obtained from 43 participants who met criteria for the IMG. A total of 83 young people were assessed by RYFS between 01 July 2007 and 30 April 2008 (a ten month study period). These young people made up the ‘Clinical’ sample for the larger doctoral study (see Table A1 below). Approximately half of these young people (N = 43) met criteria for the IMG. Of the 43 participants, males (77%) were overrepresented

compared to females (23%). The range of ages was evenly distributed between 14 year old (30%), 15 year olds (30%), and 16/17 year olds (40%). New Zealand Europeans comprised of 35% of the sample, as did NZ Maori (35%). Only 14% participants were enrolled with a mainstream education provider. Over half were unemployed/ not-enrolled.

Table A1.

**Initial Assessment Demographic Data for the Total Clinical Sample and Pilot Sub-Sample**

DEMOGRAPHIC	CATEGORY	TOTAL CLINICAL N = 83		PILOT SUB-SAMPLE N = 43	
		n	%	n	%
Gender	Male	62	74	33	77
	Female	21	25	10	23
Age at initial assessment	14 years	20	24	13	30
	15 years	25	30	13	30
	16/17 years	38	46	17	40
Ethnicity	NZ European	36	43	15	35
	NZ Maori	31	37	15	35
	Pacific Islander	12	15	10	23
	Other ethnicity	4	5	3	7
Education Status	Unemployed/ Un-enrolled	35	42	22	51
	High School (Mainstream)	13	16	6	14
	Employed (full-time)	7	8	2	5
	Alternative Education	19	23	12	27
	Unknown	9	11	1	3

*Mental Health and Substance Use*

Approximately 88% of the pilot sub-sample received a formal diagnosis according to the DSM-IV-TR (APA, 2002). This high rate is reflective of the entry criteria. Conduct Disorder (76%) was the most common form of diagnosis, followed by Oppositional Defiant Disorder (ODD) (16%), and Substance Abuse/ Dependence Disorders (8%). Over half of the pilot study participants (54%) were identified as problematic substance users, although some did not meet DSM-IV-TR criteria. Overall, 17 (40%) were believed to have both a ‘clinically significant’ substance use concern, as well as a co-morbid mental health disorder.

*Index Offending*

Most young people in this pilot study were presenting with multiple charges of differing modalities. Charges relating the Theft/ Dishonesty (67%) and Good Order (67%) were the most prevalent followed by Violence (60%). Wilful Damage was the next most prevalent (19%), followed by Dug-Related offences (9%), and Traffic offences (7%). Most (88%) participants had previous been involved with Police for offending behaviour.

*IMG Follow-Up Study**Inclusion/ Exclusion Criteria*

All participants committed their offences between the ages of 14 and 16 years of age. Participants identified throughout the assessment process as having cognitive impairments due either an intellectual disability or a traumatic brain injury, were excluded. All participants in the follow-up study consented to a 90-minute follow-up assessment with the primary investigator. All participants were required to be living within the wider Auckland region and had spent less than two of the six follow-up months within the community (i.e. not in custody). IMG entry criteria were identified at initial assessment. All participants who completed the follow-up study participated effectively.

*Sub-Sampled At Follow-Up: IMG N = 11, Control Group N = 22*

Of the 43 young people from the original sub-sample, 12 entered into the IMG. Eleven of these young people were successfully followed up after six-months (25% of total sub-sample sample). The control group consisted of 22 participants who met IMG criteria but were dealt with by standard youth court practice. In total 33 of the potential 43 youth offenders (77%) participated in the quasi-experimental study. The two groups were unable to be matched exactly due to the small sample size. There were no obvious differences between the IMG

and Control group with respect to Ethnicity, Violent Offences, Total Offending Categories, Youth Level of Service/ Case Management Inventory total risk of reoffending score, Mental Health Diagnosis, Drug and Alcohol concerns, Co morbidity, and Conduct Disorder. It was observed that the IMG sample was slightly older, more likely to have had previous involvement with the police, and were more likely to be male.

### ***Instrumentation***

#### *Youth Level of Service/ Case Management Inventory (YLS/CMI) (Hoge & Andrews, 2002)*

The YLS/CMI (Hoge & Andrews, 2002) is a standardized structured instrument for use with juvenile offenders that combines the principles of actuarial decision making (based on a scoring algorithm) as well as clinical decision making. The measure serves as an alternative to purely clinical judgments of a youth offender's level of *risk*, *level of need*, and their *responsivity* to intervention. The YLS/CMI can assist with making a wide range of decisions relating to juvenile offenders (Hoge, 2005). The YLS/CMI is designed to be used by both psychologists and paraprofessionals, and can be completed in 35 to 45 minutes following the standardised interview provided and/or file review. The YLS/CMI scoring sheet consists of 42 items based on empirically identified risk and need factors relevant to juvenile offending. The items are divided into eight subscales: Prior and Current Offences, Family Circumstances/Parenting, Education/Employment, Peer Associations, Substance Abuse, Leisure/Recreation, Personality/Behaviour, and Attitudes/Orientation. Items are summed to arrive at a risk rating of low (0 to 8), medium (9 to 22), high (23 to 34), or very high (35 to 42).

The YLS/CMI was developed as a youth version of the adult Level of Service Inventory – Revised (LSI-R; Andrews and Bonta, 1995). Psychometric data obtained using the YLS/CMI (as well as its variants) with youth offenders identifies the instrument as suitable for assessing *risk* and *need*. Internal consistency coefficient values of YLS/CMI total score ranges from  $\alpha = .8$  (Marczyk et al., 2003; Gretton & Catchpole, 2003) through to  $\alpha = .9$  (Thompson & Pope, 2005; Onifade et al, 2008). Evidence also supports inter-rater reliability for YLS/CMI total score and individual subscales (Schmidt et al, 2002; Thompson & Pope, 2005).

The concurrent validity of the measure has been demonstrated through significant correlations with other well used measures of behavioural difficulties (Schmidt et al., 2002; Marshall et al., 2006). Construct validity between different levels of adjudication has also been demonstrated (Hoge & Andrews, 1996). Further, the YLS/CMI overall risk/need scores have been significantly associated with a variety of index offences, including new convictions, recorded offending within juvenile justice facilities, compliance with probation conditions, and new charges for both general and violent recidivism (Hoge & Andrews, 1996b; Rowe, 2002; Schmidt et al, 2002; Catchpole & Gretton, 2003; Thompson & Pope, 2005, Marshall et al., 2006). Wilson and Rolleston (2005) also demonstrated concurrent and predictive validity of the YLS/CMI in a New Zealand study of incarcerated young adults.

All 43 participants who met IMG criteria at initial assessment were scored on the YLS/CMI. The average score fell within the *High* risk of recidivism level ( $M = 23.02$ ,  $SD = 4.25$ ,  $Range = 12 - 30$ ). Sixty-five percent scored within the *High* range, while the remaining 35% were scored at a *Moderate* risk of recidivism. For the thirty-three (76%) of participants who participated in the quasi-experimental follow-up study the average score dropped to the higher end of the *Moderate* risk of recidivism level ( $M = 20.03$ ,  $SD 5.81$ ,  $Range = 7 - 29$ ).

Forty percent of participants were scored within the *High* risk range while 2 (6%) were scored within the *Low* risk range.

*The Self-Reported Offending Survey (SROS)*

The SROS was developed by the primary investigator for the purposes of recording dependent outcome variables of the larger doctoral study. Multiple established offending self-report measures were considered for this study (for an extensive review see Thornberry & Krohn, 2000). The SROS was created to measure offending behaviour that New Zealand Police Youth Aid Officers dealt with on a regular basis. The primary investigator also wanted to recognise the cumulated seriousness of the self-reported offending. For the purpose of this study “seriousness of offending” reflects the cost to society by accounting for 1) the number of times each offence was committed, 2) the seriousness score assigned to each index offence as recognised by the New Zealand Department of Corrections.

The SROS takes 10 – 15 minutes. All items are read to the participant and the verbal answers are recorded by the administrator. The instrument consists of two separate sections. Section One questions whether the participant has had contact with either the Police or the Court for new offending in the past six-months. A Likert scale is used to score the level of intervention for new offences (i.e. 0 = Nothing/ Unknown; 3 = Court). A Likert scale for the level of service intervention received during the follow-up phase is then scored based on the participants response (i.e. 0 = No Service Intervention, through to 7 = Residential Clinical Intervention). Section Two of the SROS asks participants to report on offending they have committed over the past six-months for which they “may or may not have been caught for”. This section contains eight offending categories consisting of 31 separate offending items. The categories are:

1) Violence or Threats of Violence:	Five Items
2) Wilful Damage:	One Item
3) Arson/ Wilful Damage by Fire:	One Item
4) Theft/ Dishonesty:	Ten Items
5) Offences against Good Order:	Six Items
6) Traffic Offences:	Four Items
7) Sexual Offences:	One Item
8) Drug related offences:	Three Items (two of these items have two separate scores depending drug class procured or sold).

A voluntary response of the number of times the participant has conducted each activity is encouraged. The number of self-reported incidences for each offence is re-scored according to the SROS Likert Scale (0 = No offences, to, 4 = 10 times +).

Each self-reported offending item has a score allocated to it which represents the seriousness of the offence. SROS Likert Scores are multiplied by each seriousness score then totalled to reveal a final “Seriousness of Self-Reported Offending Score”. Thornberry and Krohn (2000) noted that self-report measures have difficulty in obtaining a normal distribution of scores. This is attributed to a small percentage of participants who will admit to committing a large percentage of crime. The SROS attempts to limit this difficulty by not including minor delinquent acts that will only exacerbate a prolific offender’s seriousness score. A further attempt to normalise results was to standardise all seriousness scores.

Results from the larger doctoral thesis report statistically significant correlations between the SROS total score and total scores for the YLS/CMI, the Inventory of Callous and Unemotional Traits (ICU: Frick, 2004) and the Youth Psychopathic Traits Inventory (YPI: Andershed, Kerr, Stattin, & Levander, 2002). The review of youth self-report instruments by Thornberry and Krohn (2000) concluded that self-report measures of offending have acceptable reliability and moderate to high validity, especially for offences of a less serious

nature, and over short-term follow-up periods (Jolliffe, Farington, Hawkins, Catalano, Hill, & Kosterman, 2003).

The SROS was administered to all 33 follow-up participants. Fourteen (42%) admitted to having been in contact with the New Zealand Police for new offending behaviour during this period. Of these 14, 9 participants (69% of recidivism sub-sample) went back to Youth Court with new matters. Most (82%) reported adherence to/or successful completion of their plan.

The intensity level of service intervention during the follow-up period was also self-reported (see Table A2). Only the most intensive service level was recorded. Scores were unevenly distributed across the eight categories. Six (18%) participants participated in a residential treatment facility while a further 5 (15%) participants and their families received multi-systemic therapy. Approximately 30% received no more than a singular targeted intervention.

Table A2.

**Level of Service Intervention for All Participants during the Six-Month Follow-Up Period**

Level of Service Intervention	<i>N</i> = 33	
	<i>N</i>	%
Nothing	4	12
Minimal / Non Targeted	1	3
Singular Target	10	31
Multi-target/ Wraparound	0	0
CYF Residential	3	9
Clinical Intervention	4	12
Multi-Systemic Therapy	5	15
Residential Intervention	6	18

Table A3 exhibits the SROS categories that each participant in the follow-up study indicated. Over 85% of all participants self-reported committing a violent offence, theft/dishonesty, an



offence against good order, and a traffic offence during the six-month follow-up period. All total seriousness scores from the SROS were standardised using z scores.

Table A3.

**SROS Categorised Indicated for All Participants during the Six-Month Follow-Up Period**

<b>SROS CATEGORY INDICATED</b>	<b><i>N</i> = 33</b>	
	<i>N</i>	%
Violence	28	85
Wilful Damage	25	76
Arson	3	9
Theft/ Dishonesty	28	85
Good Order Offence	29	88
Sexual Offence	1	3
Traffic Offence	29	88
Drug Related Offence	18	55

***Procedure***

The procedure for the study was conducted in two phases. *Phase One* consisted of the initial assessment by RYFS clinicians at the request of the youth court. All participants were administered the YLS/CMI as standard practice in determining risk or recidivism. An audit of all assessment reports was completed by the sole primary investigator. All reports were screened for IMG criteria (i.e. moderate to high risk of recidivism; mental health and or drug and alcohol concern). Forty-three participants were identified as meeting criteria after verification with a lead RYFS clinician/ co-investigator. Twelve of these young people were to become involved in the IMG while the remainder received standard youth court practice. The IMG procedure was briefly described earlier in this case study.

Contact and request for follow-up assessment was undertaken by the primary investigator after the initial RYFS assessment. This was *Phase Two* of the study. A time, date, and place were scheduled for re-assessment for all young people who consented to participating in the

research approximately six months after the RYFS assessment. The follow-up assessment was completed by the sole primary investigator and took approximately 90 minutes. The YLS/CMI and the SROS were among five instruments administered as part of the larger doctoral study. All participants received \$10.00 worth of McDonald's vouchers for their participation. The average follow-up period was 189 days.

This study was approved by the Health and Disability Commission (HDC) Northern X Regional Ethics Committee, the Auckland District Health Board's Research Committee and Maori Research Review Committee, as well as the New Zealand Police Research and Evaluation Steering Committee. All data examined in this study was quantitative. Statistical analysis was conducted using SPSS 15.0 (SPSS Inc, 2008).

## RESULTS

The following analyses distinguish between the IMG Sample ( $N = 11$ ) and the Control Sample ( $N = 22$ ). All 33 participants took part in all components of the follow-up procedure.

*Question One: Does a participants' involvement in the IMG decrease the risk of recidivism (according to the YLS/CMI) six-months after the initial clinical assessment?*

An independent sample  $t$ -test was conducted on the two samples to ensure the YLS/CMI total scores were matched. The results showed that the mean total risk score of the IMG group ( $M = 23.36$ ,  $SD = 5.20$ ) was not significantly different from the Control group ( $M = 23.27$ ,  $SD = 4.17$ );  $t(31) = .440$ ,  $p = .512$  (two-tailed) at the beginning of the quasi-experimental study.

A second independent samples  $t$ -test was then performed on the follow-up YLS/CMI scores to examine any differences between IMG ( $N = 11$ ) and the Control ( $N = 22$ ) participants six-

months after their initial RYFS assessment. Although a decrease in the YLS/CMI mean scores was greater for the IMG group, the differences between the two follow-up means was not significant: IMG ( $M = 17.91$ ,  $SD = 7.85$ ) and Control ( $M = 21.09$ ,  $SD = 4.29$ );  $t(31) = -1.51$ ,  $p = .140$  (two-tailed).

The reduction in the mean YLS/CMI total risk score for the IMG group was 24%. This is a greater reduction than the Control Group which decreased by 13%. A third independent samples  $t$ -test was conducted to examine if these reduction differences were statistically significant. The findings showed that reductions of total risk level for the IMG group ( $M = -5.45$ ,  $SD = 4.25$ ) was indeed significantly greater than the mean reduction in YLS/CMI risk score for the Control Group ( $M = -2.50$ ,  $SD = 3.62$ ),  $t(31) = -2.086$ ,  $p = .045$  (two-tailed).

Paired samples  $t$ -tests were conducted on both the IMG and the Control groups to ascertain whether the YLS/CMI total scores recorded during the initial assessment had significantly changed after 6-months. For the IMG group there was a statistically significant decrease in the YLS/CMI scores during the six-month follow-up period ( $M = 23.36$ ,  $SD = 5.201$ );  $t(10) = 4.255$ ,  $p = .002$  (two-tailed). The mean decrease of 5.45 has a 95% confidence interval ranging from 2.6 to 8.3.

The same test was completed for the control group. Despite having a lower reduction in YLS/CMI scores, the decrease was also found to be statistically significant, although not to as great an extent. Control group scores at initial assessment ( $M = 23.27$ ,  $SD = 4.16$ ) significantly decreased during the six-month follow up period ( $M = 21.09$ ,  $SD = 4.29$ );  $t(21) = 2.625$ ,  $p = .016$  (two-tailed). The mean decrease of 2.18 has a 95% confidence interval ranging from 0.45 to 3.91.

*Question Two: Is there a difference in self-reported recidivism rates of IMG participants and the control group after six-months as measured by:*

- 1. Police Contact for further offending?*
- 2. Youth Justice Plan Adherence/Completion?*
- 3. Rates of Self-Reported Recidivism?*

A chi-square test for independence was completed to examine the difference between the IMG Group and the Control Group with respect to Police Contact and Plan Completion. No significant differences between the two groups were found. For the *Police Contact* outcome variable, 46% of IMG participants came into contact with Police for new offending behaviour within six-months of being assessed by RYFS. This was not significantly different from the 64% of control group participants:  $\chi^2 (1, 33) = .992, p = .319$ . Results were similar for the *Court Contact* outcome variable whereby approximately 36% of the IMG sample re-appeared before the Youth Court on new charges compared to approximately 46% of the control group participants:  $\chi^2 (1, 33) = 2.48, p = .618$ . It is noted though that the lowest expected frequency for cells in both of these tests was less than 80%. Larger sample sizes in future research may provide more conclusive evidence to answer this research question.

Severity of self-reported recidivism was also measured using the SROS. An independent-samples *t*-test was conducted to compare mean standardised scores of the two samples on the SROS. The analysis again revealed no significant differences in the rate of delinquent behaviour in the IMG sample ( $M = .401, SD = 1.23$ ) compared to the control group ( $M = .247, SD = 1.07$ );  $t (31) = 0.721, p = .711$  (two-tailed).

*Question Three: Is there a difference in the intensity of resources obtained by IMG participants when compared to a matched control group?*

An independent-samples *t*-test was conducted to compare the level of services received by the IMG group and the Control group. The analysis revealed that the IMG participants received a more intensive level of services ( $M = 5.00$ ,  $SD = 1.78$ ) than the Control group ( $M = 3.18$ ,  $SD = 2.52$ );  $t(31) = 2.13$ ,  $p < .05$  (two-tailed). This result confirms that participation on the IMG assists participants in accessing more intensive clinical intervention services.

## DISCUSSION

### *Limitations of the Research*

The present research needs to be interpreted in light of a number of limitations. The six-month follow-up period was short and began from the time of the assessment by RYFS clinicians. The study did not factor in the time period between assessment and initiation with the IMG. It was also impossible to control for the length of time between police intervention for offending and assessment by RYFS. Sampling was not randomised and the primary investigator was not blind to participants allocated to the IMG versus standard youth court procedure. Many procedural elements of the IMG (such as the number of hearings for each participant, or the length of stay within the IMG for graduates) were unable to be recorded for the pilot evaluation. The sample size for both IMG and the comparable control group were small which limited statistical analysis. The two groups were also unable to be appropriately matched. This would be difficult given the IMG's broad entry criteria. Further, the dependent variable (i.e. re-offending) was measured using the SROS, an unvalidated self-report instrument. Finally, decreased mental health and substance use concerns were not clinically assessed at follow-up (only screens were used as part of the larger doctoral research). The limitations encountered are common to problem-solving youth court

evaluations and are associated with limited funding for thorough evaluation, the immense difficulty in conducting randomised control studies within the legal system, and the dynamic nature of youth offenders (Belenko & Dembo, 2003).

*What to make of the present results...?*

The findings of this study suggested that the IMG is achieving its aim of offering intensive support and monitoring to youth offenders who are at high risk of re-offending and are experiencing significant mental health and substance use concerns. These young people are often referred to as “the worst of the worst”. The IMG is adhering to the risk principle of case management and rehabilitation by providing these at-risk young people with the support to engage in therapeutic interventions. Compared to the control group, the monitoring and support afforded by the IMG meant that these participants received intervention services that were more likely to be evidence-based, intensive, and targeted at multiple offending needs.

The YLS/CMI was used to monitor the IMG entry criteria and to serve as a measure of risk reduction after six-months. The reduction of risk level for both groups is testament not only to the IMG but also to standard youth court practice. However, the decline in risk of recidivism within IMG participants was significantly greater. As risk of recidivism is dynamic, it is hypothesised that this reduction is in part due to the greater intensity of therapeutic intervention afforded to IMG participants. As part of the larger doctoral thesis, use of the YLS/CMI within this pilot study afforded the primary investigator the ability to examine the measures utility in predicting youth offending in a practical community setting.

Despite increased level of services, and a reported reduction of risk, there was no difference in offending outcomes between the two groups. These results need to be interpreted with

consideration to the small sample sizes which violated a number of statistical assumptions. Regardless, this result is consistent with other youth problem-solving court evaluations using a short-follow up period (NSW; Searle & Spier, 2006). A number of questions have been raised to explain the mediocre recidivism outcomes from youth problem-solving courts in the face of favourable results for adult drug courts. A likely answer lies in the youth problem-solving courts attempts to downwardly extend the successful adult drug court model to youth offenders without proper consideration to the youth specific factors identified earlier (i.e. family, negative peers, high recidivism rates). The IMG considered a number of adolescent specific factors, such as being family-focussed and allowing easier access to interventions targeting multiple areas. However, like many other youth problem-solving courts, the IMG is in its infancy and is not yet aware of its potentially effective and not-so-effective components. Only long-term follow-up of the IMG participants will conclusively reveal whether the programme was effective in reducing recidivism. Such data is lacking across the youth problem-solving court literature.

### ***Conclusions and Future Directions***

Evidence from this pilot evaluation justifies further research into the long-term effectiveness of the IMG. As a problem-solving court the IMG exhibits a number of principles consistent with effective therapeutic intervention and behaviour management. It requires collaboration among key players within the youth justice system, case management of an individual's multiple difficulties, and judicial oversight of the process to ensure offender accountability. What is also positive is that the IMG is dynamic and is able to adapt based on the successes and failures of its participants. Until future research on the IMG and other youth problem-solving courts is completed it will be important for the court to keep considering and adhering to empirically supported interventions for youth offenders. Such interventions

include the use of cognitive-behavioural and/or multi-systemic therapy interventions that target multiple areas of concern. Further, because research has consistently found longer terms of treatments more effective than shorter-terms (Yeager, 2003; McCarthy & Waters, 2004), the IMG may be willing to embrace proposed new government legislation to increase the length of sentences for youth offenders. Further evaluation of the IMG may identify gaps in services and the need for greater government support for evidenced-based interventions.

Future research to build on the current pilot study is in development. This research plans to follow-up IMG participants and a comparable control group until adulthood. A qualitative approach will also be implemented to identify specific useful components of the IMG. Follow-up clinical assessments to measure reductions in substance use, mental health concerns, and recidivism will be undertaken. Investigation into the cost-effectiveness of the programme would also be justified. Future research of the IMG highlights the role that psychologists play in problem-solving courts. These arenas offer psychologists the opportunity to adopt empirical supported principles of therapeutic jurisprudence and work with challenging clients with various difficulties. Court-mandated treatment delivered through a problem-solving court model is a natural venue for evidence-based practice and allows psychologists to become involved in the planning and evaluation processes.



## REFERENCES

- American Psychiatric Association, (2000). *Diagnostic and statistical manual of mental disorders – Text Revision (4<sup>th</sup> ed.)*. Washington: American Psychiatric Association.
- Andrews, D. A., & Bonta, J. (1995). *Level of Service Inventory – Revised*. New York: Multi Health Systems.
- Belenko, S. (2001). *Research on drug courts: A critical review: 2001 update*. New York: National Centre on Addiction and Substance Abuse at Columbia University.
- Belenko, S. & Dembo, R. (2003). Treating adolescent substance abuse problems in the juvenile drug court. *International Journal of Law and Psychiatry*, 26, 87-110.
- Belenko, S., DeMatteo, D., & Patapis, N. (2007). Drug Courts. In D. W. Springer, & A. R. Roberts (Eds.). *Handbook of forensic mental health with victims and offenders: Assessment, treatment, and research*. New York: Springer.
- Catchpole, R. E. & Gretton, H. M. (2003). The predictive validity of risk assessment with violent young offenders. *Criminal Justice and Behavior*, 30, 688-708.
- Cocozza, J., & Skowrya, K. (2000). Youth and mental health disorders: Issues and emerging responses. *Office of Juvenile Justice and Delinquency Prevention Journal*, 7, 3-13.
- Deschenes, E. P., Moreno, K. S., Emani, V. M., Thompson, E., & Manatt, K. (2001). *Evaluation of the Los Angeles County juvenile drug court program*. Long Beach, CA.
- Gottfredson, D. C., Najaka, S. S., & Kearley, B. (2003). Effectiveness of drug courts: Evidence from a randomized trial. *Criminology and Public Policy*, 2, 171-196.
- Henggeler, S. W. (2007). Juvenile drug courts: emerging outcomes and key research issues. *Current Opinion in Psychiatry*, 20, 242-246.

- Henggeler, S. W., Halliday-Boykins, C. A., Cunningham, P. B., Randall, J., Shapiro, S. B., & Chapman, J. E. (2006). Juvenile Drug Court: Enhancing outcomes by integrating evidence-based treatments. *Journal of Consulting and Clinical Psychology, 74*, 42-54.
- Hoge, R. D., & Andrews, D. A. (1996). *Assessing the youthful offender: Issues and techniques*. New York: Plenum.
- Hoge, R. D. & Andrews, D. A. (2002). *Youth Level of Service/ Case Management Inventory user's manual*. New York: Multi-Health Systems.
- Hoge, R. D. (2005). Youth Level of Service/ Case Management Inventory. In T. Grisso, T. Vincent, & D. Seagrave (Eds.), *Mental health screening and assessment in juvenile justice*. New York: Guilford
- Hoge, R. D. (2008). Assessment in Juvenile Justice Systems (Chapter). In R. D. Hoge, N. G. Guerra, & P. Boxer (Eds.). *Treating the Juvenile Offender*. New York: Guilford
- Jolliffe, D., Farrington, D. P., Hawkins, D., Catalano, R., Hill, K. G., & Kosterman, R. (2003). Prediction, concurrent, prospective, & retrospective validity of self-reported delinquency. *Criminal Behavior and Mental Health, 13*, 179-192.
- Jung, S. & Rawana, E. P. (1999). Risk and need assessment of juvenile offenders. *Criminal Justice and Behavior, 26*, 69–89.
- MacKenzie, D. (2006). Drug Courts: A strategy for managing drug-involved offenders (Chapter). In D. MacKenzie. *What Works in Corrections*. New York: Cambridge University Press.
- MacMaster, S. A., Ellis, R. A., & Holmes, T. (2009). Combining Drug Court with Adolescent Residential Treatment: Lessons from Juvenile and Adult Programs (Chapter). In R. Ellis (Ed.). *Best practices in residential treatment*. New York: Routledge.

- Marczyk, G. R., Heilbrum, K., Lander, T. (2003). Predicting juvenile recidivism with the PCL:YV, MAYSI, & YLS/CMI. *International Journal of Forensic Mental Health*, 2, 7-18.
- McCarthy S. & Waters, T. F. (2004). Developing treatment programs for drug courts and evaluating effectiveness (Chapter). In A. R. Roberts & K. R. Yeager (Eds.). *Evidence-based practice manual: Research and outcome measure in health and human services*. New York: Oxford University Press.
- Onifade, E., Davidson, W., Livsey, S., Turke, G., & Horton, C (2008). Risk Assessment: Identifying patterns of risk in young offenders with the Youth Level of Service/ Case Management Inventory. *Journal of Criminal Justice*, 36, 165-173.
- Randall, J., Henggeler, S. W., Pickrel, S. G., Brondino, M. J. (1999). Psychiatric comorbidity and the 16-month trajectory of substance-abusing and substance-dependent juvenile offenders. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38, 1118-1124.
- Rowe, R. (2002). *Predictors of criminal offending: Evaluating measures of risk/ needs, psychopathy, & disruptive behaviour disorders*. Unpublished doctoral thesis. Ottawa: Carlton University.
- Schmidt, F., Hoge, R. D., & Robertson, L. (2002). *Assessing risk and need in youthful offenders*. Vancouver: Canadian Psychological Association.
- Searle, W. & Spier, P. (2006). *Christchurch Youth Drug Court pilot: One year follow-up study*. Wellington, New Zealand: Ministry of Justice.
- Simourd, D. J. (2004). Use of dynamic risk/ need assessment instruments among long-term incarcerated offenders. *Criminal Justice and Behavior*, 31, 306-323.
- Steadman, H. J., Davidson, S., & Brown, C. (2001). Mental health courts: Their promise and unanswered questions. *Psychiatric Services*, 52, 457-458.

- Taplin, S. (2002). *New South Wales drug court evaluation: A process evaluation*. Sydney: New South Wales Bureau of Crime Statistics & Research.
- Teplin, L. A., Abraham, K. M., McClelland, G. M., Dulcan, M. K., & Mericle, A. A. (2002). Psychiatric disorders in youth in juvenile detention. *Archives of General Psychiatry*, 59, 1133-1143.
- Thompson, A., & Pope, Z. (2005). Assessing juvenile offenders: Preliminary data for the adaptation of the Youth Level of Service/ Case Management Inventory (YLS/CMI). *Australian Psychologist*, 40, 207-214.
- Thornberry, T. P., & Krohn, M. D. (2000). The self-report method for measuring delinquency and crime. *Measurement and Analysis of Crime and Justice*.
- Veysey, B. M. (2008). Mental Health, Substance Abuse, and Trauma (Chapter). In R. D. Hoge, G. Guerra & P. Boxer (Eds.). *Treating the juvenile offender*. New York: Guilford.
- Welsh, J. L., Schmidt, F., McKinnon, L., & Chattha, H. K. (2008). A comparative study of adolescent risk assessment instruments. *Assessment*, 15, 104-115.
- Wilson, N., & Rolleston, R. (2004.) *A risk-need profile using four measures for youth offenders incarcerated in young offender units*. New Zealand: Department of Corrections Research.
- Winick, B. (2003). Therapeutic jurisprudence and problem-solving courts. *Fordham Urban Law Journal*, 30, 112-134.

## APPENDIX B

### GEOGRAPHIC DISTRIBUTION OF PARTICIPANT REFERRALS



Figure A1. Map of the Counties-Manukau District with Referring Police Youth Aid Sites

Table A4

**Percentage of Completed Initial Assessments for the Diversion Sample as Viewed by Referring Counties-Manukau Police Youth Aid Sites**

DIVERSION SAMPLE:	COUNTIES-MANUKAU YOUTH AID SITES	N = 70	
		N	%
Completed Initial Assessments between 01 January and 30 April 2008	Otara	17	24.3
	Howick	15	21.4
	Manurewa	12	17.1
	Otahuhu	10	14.3
	Mangere	9	12.9
	Papakura	5	7.1
	Papatoetoe	2	2.9





Figure A2. Map of the Greater Auckland Region with Referring Youth Court Sites

Table A5

**Percentage of Referrals by Youth Courts within Auckland to the Regional Youth Forensic Service during the Designated Participant Recruitment Period<sup>2</sup>**

CLINIC SAMPLE	YOUTH COURT LOCATION	CLINIC SAMPLE N = 83	
		N	%
All Assessments completed by RYFS between 01 July 2007 and 30 April 2008	Auckland	23	27.7
	Counties-Manukau City	24	28.9
	Waitakere	21	25.3
	North Shore	7	8.4
	Other (outside of Auckland region)	8	9.6

<sup>2</sup> Table A2 lists the Youth Courts that made referrals to the Regional Youth Forensic Service (RYFS) for an assessment during the 10-month study period. Eighty-three young people referred during the assigned study period were to be considered for the six-month follow-up assessment. Eight participants from the sample were referred from Courts outside of the wider Auckland region. This was due to the location of their residence. They were immediately excluded from the six-month follow-up study. Referrals from the three largest Youth courts in the wider Auckland region are reasonably similar.

## APPENDIX C

## MEASURES USED IN THE STUDY

## DESCRIPTIVE DATA SHEET

**ID NUMBER:****Date:** (ddmmyy)**Study Group:**Diversion/ Alternative Action ☐Clinical (IMG) ☐Clinical (Non-IMG) ☐**Characteristics of the Alleged Offender (at the time of the index offence)**

Age: (years)

Gender: (1=m 2=f)

**Education and Employment Status.** (tick appropriate box).Attending High School ☐Attending Alternative Education ☐Unemployed ☐Employed (Full-time or part-time and not at school) ☐Unknown ☐**Ethnicity:**

Unknown

10 = European

20 = Maori

30 = Polynesian (unspecified)

40 = Asian

31 = Samoa

50 = Other (specify)\_\_\_

32 = Tonga

33 = Fiji

34 = Cook Islands

35 = Nuie

36 = Tokelau

**Characteristics of Alleged Index Offence(s).**

Total Number of Charges:

Types of Charges: (see code): [put number of charges in box]

H ☐AH ☐V ☐S ☐SC ☐OP ☐U ☐GO ☐W ☐A ☐DE ☐FO ☐FF ☐DR ☐T ☐J ☐TR ☐OTH ☐

Alcohol or Substance use at the time of Index Offence? (1=yes 2=no 3=unknown) ☐

[If yes tick boxes which apply]

Alcohol ☐ Cannabis ☐ Solvent ☐

Other ☐ \_\_\_\_\_ ☐

Accomplices? Alone ☐ One other ☐ Several ☐ Unknown ☐

Victim known to Offender: (1=yes 2=no 3=unknown) ☐

**History of Substance Abuse (Clinical Only) ?** (1=yes 2=no 3=unknown) ☐

Diagnosed? ☐ Substance Abuse? ☐ Substance Dependence? ☐

If yes: Alcohol ☐ Cannabis ☐ Solvent ☐ Other ☐ \_\_\_\_\_

**Past Forensic History** (1=yes 2=no 3=unknown) ☐

Total number of previous charges (self-reported)

Previous self-reported criminal behavior (see code) [If yes, please note number of offences in the appropriate categories].

H ☐ AH ☐ V ☐ S ☐ SC ☐ OP ☐

U ☐ GO ☐ W ☐ A ☐ DE ☐ FO ☐

FF ☐ DR ☐ T ☐ TR ☐ J ☐ OTH ☐

Range of criminal versatility:

Age in years at first exhibition of criminal behavior:  Unknown ☐



### ***Definition and Operationalisation of Variables***

#### **Introduction**

Information should be coded if the rater is satisfied that sufficient information is available to support it. Questions will generally begin with a 'root' question, asking for responses of yes, no or unknown. If the answer to the 'root' question is yes then there are a number of more specific questions generally requiring the rater to tick the appropriate box or to respond with the code indicated in the question.

Information will be extracted from information gathered during the YLS/CMI interview. ID number is the specific number allocated to all participants for confidentiality purposes.

#### **Study group**

The study group refers to the specific sample that each participant is allocated. There are two sample groups. Tick one box only. Group one consists of participants who are not at court but are instead being dealt with by way of Diversion/ Alternative Action. Group Two consists of participants whose offending matters are before the youth court. Group two has two sub-groups: those participants who are part of the Intensive Monitoring Group (IMG) at the Auckland Youth Court, and those participants who are before the Youth Court but not part of the IMG.

#### **Characteristics of the Alleged Offender**

- a. Age should be coded in years at the time of the Index offending (i.e. the current offences)
- b. Gender (males/female).
- c. Ethnicity is what ever the young person identifies as and self-reports. Options are self-evident and coded by number. If data is not known collected code unknown.
- d. Education. Tick one box only. At the time of the assessment, does the young person currently attend High School; an Alternative Education provider (including home school). If not, is the young person unemployed or have some form of employment. If at school full-time and has a part-time job, then only mark the High School or Alternative Education box.

#### **Past Forensic History**

- a. Has the young person been in trouble with the Police before the current matters?: 1=yes 2=no 3=unknown. If yes please code total number of previous matters. Also code a tick in each category of charge for which the defendant had have previous convictions.
- b. Note the age in years at first contact with Police.

**Categories of Offending – (New Zealand Department of Corrections, 1992) – Amended**

H	=	Homicide: Murder, Manslaughter.
AH	=	Attempted murder.
V	=	Violence or threats of violence: Assault, injury, intimidation, threatening, aggravated offences, GBH.
S	=	Sex Offences (Adult victim): Rape, Sexual violation, unlawful sexual connection, Sodomy.
SC	=	Sexual offences against children (under 16).
OP	=	Other offences against the person: Resisting arrest, Dangerous driving causing death, dangerous acts, Breach of protection order.
U	=	Unlawful taking of property: Burglary, Theft, Receiving, Conversion.
W	=	Willful damage.
T	=	Trespass.
A	=	Arson, attempted arson.
FF	=	Fraud and false pretences.
FO	=	Forgery and currency offences.
DR	=	Drug offences.
GO	=	Offences against good order: Disorderly behavior, Possession of offensive weapon, Riot, Unlawful assembly, Intent to commit crime, Breach of parole, Breach of periodic detention.
TR	=	Traffic offences: Drink and drive, driving while disqualified, Reckless and dangerous driving.
DE	=	Offences against decency: Indecent exposure, Soliciting, Indecent act, Bestiality.
OTH	=	Other offences: Offences against the Sale of Liquor Act, offences against the Arms Act, Offences against the National interest and Justice administration, etc

**YOUTH LEVEL OF SERVICE/ CASE MANAGEMENT INVENTORY (YLS/CMI)**  
**Hoge and Andrews (2006)**

**For copyright reasons the Youth Level of Service/ Case Management Inventory (YLS/CMI) cannot be reproduced here. However a summary of the instrument is provided below.**

The YLS/CMI assesses factors empirically linked with both the *risk* of recidivism and *need* factors useful for a youth offender's case management purposes. The YLS/CMI is intended to be used when youth offenders first enter the Youth Justice system. The measure can then monitor progress in areas of identified *risk* or *need*. The YLS/CMI can assist with making a wide range of decisions relating to juvenile offenders, such as diversion and detention, waivers to adult court and mental health systems, and post-adjudication dispositions. It is standardized measure that combines the principles of actuarial decision making (based on a scoring algorithm) as well as clinical decision making. Thus, the YLS/CMI serves as an alternative to purely clinical judgments.

The YLS/CMI is designed to be used by both professional psychologists and paraprofessionals who work with youth offenders. It can be administered after a brief training session. The measure can be completed in 35 to 45 minutes following a semi-structured interview and/ or file review. There are six sections to the YLS/CMI. All six sections are briefly described below however the reader is directed to the *YLS/CMI Users Manual* (Hoge & Andrews, 2002) for additional details. Only section I, II, III, and IV were used in the current study. The six sections of the YLS/CMI are:

- *Section I: Assessment of Risks and Needs.* This section contains 42 items based on empirically significant risk and need factors relevant to juvenile offending. The 42 items are divided into eight subscales:

**Prior and Current Offences**

Item 5: Have you ever been involved with the police before this?

**Family Circumstances/ Parenting**

Item 11: Are there a lot of rules at home? Do you think they are fair?

**Education/ Employment**

Item 23: How well have you been getting on with your teachers and other students?

**Peer Associations**

Item 31: Have any of your friends been involved with the Police? Have any been arrested?

**Substance Abuse**

Item 37: Do you usually use drugs when you are by yourself or with friends?

**Leisure/ Recreation**

Item 42: What are the kinds of things that really interest you (sports, hobbies etc.)?

**Personality/ Behaviour**

Item 46: Are you easily frustrated or are you an easy going person?

**Attitudes/ Orientation**

Item 55: [If youth has received a disposition] How do you feel about your sentence?

Items are listed in a checkpoint format and assessors are asked to indicate whether each factor is present. For seven of the eight categories the assessor is asked whether the area is a strength. Items are summed to arrive at one of four risk category ratings: low (0 to 8), medium (9 to 22), high (23 to 34), or very high (35 to 42).

- *Section II: Summary of Risk/ Need Factors.* This section provides an opportunity to summarize the risk/ need factors represented in each of the subscales.
- *Section III: Assessment of Other Needs/ Special Considerations.* Section III provides an opportunity to record the presence of other factors that may be relevant to case planning. These include responsivity factors, e.g., parental substance abuse, depression in the client.
- *Section IV: Your Assessment of the Client's General Risk/ Need Level.* This section provides the assessor with the "professional override" feature of the instrument. The assessor is asked to take into account all the information available about the client and to provide an estimate of the level of risk and need represented by specifying whether it is low, moderate, high, or very high. This section ensures that the final decisions about the client rest with the responsible professional.
- *Section V: Contact Level.* This allows the assessor to record the level of contact required from the youth offender.
- *Section VI: Case Management Plan.* This section concerns the assessors setting of specific goals for youths and identifying the means for achieving those goals.

**YOUTH PSYCHOPATHIC TRAITS INVENTORY – SELF REPORT (YPI)**  
 Andershed, Kerr, Stattin, & Levander, 2002

**GETTING IT SORTED: QUESTIONNAIRE NUMBER ONE**

Name: \_\_\_\_\_ ID Number: \_\_\_\_\_

Date Completed: \_\_\_\_\_

***Instructions:***

This sheet consists of a number of statements that deal with what you think and feel about different things. Read each statement carefully and decide how well the particular statement applies to you. You can choose between four different alternatives on each statement.

**Answer each statement as you most often feel and think, not only how you feel right now.**

Example:

I like reading books.

 Does not  
apply at all

☐

 Does not  
apply well

☐

 Applies  
fairly well

☐

 Applies  
very well

☐

- Put a mark in the box that applies to how you feel.
- Do not think too long on each statement

**REMEMBER:**

- Answer ALL statements
- Do not put a mark between the alternatives
- Only one answer per statement.

**IMPORTANT!!!** There are no answers that are "Right" or "Wrong". You cannot score worse or better than anyone else. I am interested in what you think and feel, not what is "Right" or "Wrong".

	Does not apply at all	Does not apply well	Applies fairly well	Applies very well
1. I like to be where exciting things happen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I usually feel calm when other people are scared.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I prefer to spend my money right away rather than save it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I get bored quickly when there is too little change.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I have probably skipped school or work more than most other people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. It's easy for me to charm and seduce others to get what I want from them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Its fun to make up stories and try to get people to believe them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I have the ability not to feel guilt and regret about things that I think other people feel guilty about.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I consider myself a pretty impulsive person.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I'm better than everyone on almost everything.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. I can make people believe almost anything.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. I think that crying is a sign of weakness, even if no one sees you.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. If I won a lot of money in lotto I would quit school or work and just do things that are fun.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. I have the ability to con people by using my charm and smile.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. I am good at getting people to believe me when I make something up.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. I have often been late to work or classes in school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. When other people have problems, it is often their own fault therefore, one should not help them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

---

18. It often happens that I talk first and think later.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. I have talents that go far beyond other peoples.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. It's easy for me to manipulate people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. I seldom regret things I do, even if other people feel that they are wrong.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. I like to do things just for the thrill of it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. It's important to me not to hurt other people's feelings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Sometimes I lie for no reason, other than because it's fun.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. To be nervous and worried is a sign of weakness.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. If I get the chance to do something fun, I do it no matter what I had been doing before.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. When someone asks me something, I usually have a quick answer that sounds believable, even if I've just made it up.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. When someone finds out about something that I've done wrong, I feel more angry than guilty.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. I get bored quickly by doing the same thing over and over.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. The world would be a better place if I were in charge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. To get people to do what I want, I often find it efficient to con them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. It often happens that I do things without thinking ahead.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. Pretty often I act charming and nice, even with people I don't like, in order to get what I want.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. It has happened several times that I've borrowed something and then lost it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. I often become sad or moved by watching sad things on TV or film.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

---

---

36. What scares others usually doesn't scare me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. I'm more important and valuable than other people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. When I need to, I use my smile and my charm to use others.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39. I don't understand how people can be touched enough to cry by looking at things on TV or movies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. I often don't/ didn't have my school or work assignments done on time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41. I am destined to become a well-known, important and influential person.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42. I like to do exciting and dangerous things, even if it is forbidden or illegal.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43. Sometimes I find myself lying without any particular reason.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44. To feel guilty and remorseful about things you have done that hurt other people is a sign of weakness.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45. I don't let my feelings affect me as much as other people's feelings seem to affect them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
46. It has happened that I've taken advantage of (used) someone in order to get what I want.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
47. I like to spice up and exaggerate when I tell about something.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
48. To feel guilt and regret when you have done something wrong is a waste of time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
49. I usually become sad when I see other people crying or being sad.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50. I've often gotten into trouble because I've lied too much.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

---



## **Youth Psychopathic Traits Inventory (YPI): Scoring Key**

### **Dishonest charm**

- 14. I have the ability to con people by using my charm and smile.
- 6. It's easy for me to charm and seduce others to get what I want from them.
- 27. When someone asks me something, I usually have a quick answer that sounds believable, even if I've just made it up.
- 33. Pretty often I act charming and nice, even with people I don't like, in order to get what I want.
- 38. When I need to, I use my smile and my charm to use others.

### **Grandiosity**

- 10. I'm better than everyone on almost everything.
- 19. I have talents that go far beyond other peoples.
- 30. The world would be a better place if I were in charge
- 37. I'm more important and valuable than other people.
- 41. I am destined to become a well-known, important and influential person.

### **Lying**

- 7. Its fun to make up stories and try to get people to believe them.
- 24. Sometimes I lie for no reason, other than because it's fun.
- 43. Sometimes I find myself lying without any particular reason
- 47. I like to spice up and exaggerate when I tell about something.
- 50. I've often gotten into trouble because I've lied too much.

### **Manipulation**

- 11. I can make people believe almost anything.
- 15. I am good at getting people to believe me when I make something up.
- 20. It's easy for me to manipulate people.
- 31. To get people to do what I want, I often find it efficient to con them
- 46. It has happened that I've taken advantage of (used) someone in order to get what I want.

### **Remorselessness**

- 8. I have the ability not to feel guilt and regret about things that I think other people feel guilty about.
- 21. I seldom regret things I do, even if other people feel that they are wrong.
- 28. When someone finds out about something that I've done wrong, I feel more angry than guilty.
- 48. To feel guilt and regret when you have done something wrong is a waste of time.
- 44. To feel guilty and remorseful about things you have done that hurt other people is a sign of weakness.

**Unemotionality**

- 2. I usually feel calm when other people are scared.
- 25. To be nervous and worried is a sign of weakness.
- 36. What scares others usually doesn't scare me.
- 39. I don't understand how people can be touched enough to cry by looking at things on TV or movies.
- 45. I don't let my feelings affect me as much as other people's feelings seem to affect them.

**Callousness**

- 12. I think that crying is a sign of weakness, even if no one sees you.
- 17. When other people have problems, it is often their own fault therefore, one should not help them.
- 35. I often become sad or moved by watching sad things on TV or film **(R)**.
- 23. It's important to me not to hurt other people's feelings **(R)**.
- 49. I usually become sad when I see other people crying or being sad **(R)**.

**Thrill-seeking**

- 1. I like to be where exciting things happen.
- 4. I get bored quickly when there is too little change.
- 22. I like to do things just for the thrill of it.
- 29. I get bored quickly by doing the same thing over and over.
- 42. I like to do exciting and dangerous things, even if it is forbidden or illegal.

**Impulsiveness**

- 3. I prefer to spend my money right away rather than save it.
- 9. I consider myself a pretty impulsive person
- 26. If I get the chance to do something fun, I do it no matter what I had been doing before.
- 18. It often happens that I talk first and think later.
- 32. It often happens that I do things without thinking ahead.

**Irresponsibility**

- 5. I have probably skipped school or work more than most other people.
- 13. If I won a lot of money in lotto I would quit school or work and just do things that are fun.
- 16. I have often been late to work or classes in school
- 34. It has happened several times that I've borrowed something and then lost it.
- 40. I often don't/ didn't have my school or work assignments done on time.

**YOUTH PSYCHOPATHIC TRAITS INVENTORY: FACTORS****Grandiose/ Manipulative**

Dishonest Charm  
Grandiosity  
Lying  
Manipulation

**Callous/ Unemotional**

Callousness  
Unemotionality  
Remorselessness

**Impulsive/ Irresponsible**

Impulsiveness  
Thrill-Seeking  
Irresponsibility

# INVENTORY OF CALLOUS-UNEMOTIONAL TRAITS (ICU)

Frick (2004)

## GETTING IT SORTED: QUESTIONNAIRE NUMBER TWO

Name: \_\_\_\_\_

ID Number: \_\_\_\_\_

Date Completed: \_\_\_\_\_

*Instructions: Please read each statement and decide how well it describes you. Mark your answer by circling the appropriate number (0-3) for each statement. Do not leave any statement unrated.*

	Not at all True	Somewhat True	Very True	Definitely True
1. I express my feelings openly.	0	1	2	3
2. What I think is "right" and "wrong" is different from what other people think.	0	1	2	3
3. I care about how well I do at school or work.	0	1	2	3
4. I do not care who I hurt to get what I want.	0	1	2	3
5. I feel bad or guilty when I do something wrong.	0	1	2	3
6. I do not show my emotions to others.	0	1	2	3
7. I do not care about being on time.	0	1	2	3
8. I am concerned about the feelings of others.	0	1	2	3
9. I do not care if I get into trouble.	0	1	2	3
10. I do not let my feelings control me.	0	1	2	3
11. I do not care about doing things well.	0	1	2	3
12. I seem very cold and uncaring to others.	0	1	2	3
13. I easily admit to being wrong.	0	1	2	3
14. It is easy for others to tell how I am feeling.	0	1	2	3
15. I always try my best.	0	1	2	3
16. I apologise ("say I am sorry") to people I hurt.	0	1	2	3
17. I try not to hurt others' feelings.	0	1	2	3
18. I do not feel sorry when I do something wrong.	0	1	2	3
19. I am very expressive and emotional	0	1	2	3
20. I do not like to put time into doing things well.	0	1	2	3
21. The feelings of others are unimportant to me.	0	1	2	3
22. I hide my feelings from others.	0	1	2	3
23. I work hard on everything I do.	0	1	2	3
24. I do things to make others feel good.	0	1	2	3

## **Inventory of Callous-Unemotional Traits (ICU): Scoring Key**

### **FACTORS**

#### **Callous**

- 2. What I think is “right” and “wrong” is different from what other people think.
- 4. I do not care who I hurt to get what I want.
- 7. I do not care about being on time.
- 8. I am concerned about the feelings of others. (r)
- 9. I do not care if I get into trouble.
- 10. I do not let my feelings control me.
- 11. I do not care about doing things well.
- 12. I seem very cold and uncaring to others.
- 18. I do not feel sorry when I do something wrong.
- 20. I do not like to put time into doing things well.
- 21. The feelings of others are unimportant to me.

#### **Uncaring**

- 3. I care about how well I do at school or work. (r)
- 5. I feel bad or guilty when I do something wrong. (r)
- 13. I easily admit to being wrong. (r)
- 15. I always try my best. (r)
- 16. I apologise (“say I am sorry”) to people I hurt. (r)
- 17. I try not to hurt others’ feelings. (r)
- 23. I work hard on everything I do. (r)
- 24. I do things to make others feel good. (r)

#### **Unemotional**

- 1. I express my feelings openly. (r)
- 6. I do not show my emotions to others.
- 14. It is easy for others to tell how I am feeling. (r)
- 19. I am very expressive and emotional. (r)
- 22. I hide my feelings from others.

**MASSACHUSETTS YOUTH SCREENING INSTRUMENT – 2 (MAYSI - 2)**  
 Grisso and Barnum (2000)

**For copyright reasons the Massachusetts Youth Screening Instrument – Version 2 (MAYSI-2) cannot be reproduced here. However a summary of the instrument is provided below.**

The MAYSI-2 is a brief self-report measure that can be administered to young people at any entry or transitional point within the youth justice system. At the conclusion of administration all “yes” answers are added for each of the scales using the Scoring Key and Scoring Summary form. Each scale consists of five to nine items and some items contribute to more than one scale. Some items do not contribute to any of the scales. There is no MAYSI-2 total score. All scales are treated as independent and thus a total tally of “Yes” answers is not calculated. Once completed the young persons scores on each scale are compared to cut-off scores as suggested by the manual. Lower scores represent a “Normal” level of distress. The “Caution” cut-off score indicates a “clinical level of significance” while scores above the “Warning” cut-off signifies that the young person has scored higher than 90% of the normative sample at youth justice intake.

The MAYSI-2 consists of a 52-item “Yes/ No” Questionnaire, a Scoring Key, and a Scoring Summary form. The items are separated in seven cores scales. These include:

**Alcohol/ Drug Use**

Item 33: Have you used alcohol or drugs to help you feel better

**Anger-Irritable**

Item 35: Have you felt angry a lot?

**Depressed-Anxious**

Item 34: Have you felt that you don’t have fun with your friends anymore?

**Somatic Complaints**

Item 15: Have you felt too tired to have a good time?

**Suicidal Ideation**

Item 26: Have you felt like killing yourself?

**Though Disturbance**

Item 25: Have other people been able to control your brain or your thoughts?

**History of Traumatic Experiences**

Item 49: Have you ever been raped, or been in danger of getting raped?

## **APPENDIX D**

### **DEVELOPMENT OF THE SELF-REPORTED OFFENDING SURVEY (SROS)**

#### **Purpose of the Self-Report of Offending Survey (SROS)**

Multiple established self-report of offending measures were considered for this study (see Thornberry & Krohn, 2000, for an extensive review). However, the SROS was created to meet the specific circumstances and dependant variables sought within this study. Firstly, the current research sought to measure offending behaviour that Police Youth Aid officers dealt with on a regular basis. Many of the measures used in the reviewed longitudinal literature (Krohn & Thornberry, 2003), such as the Self-Report of Delinquency Scale (SRD; Elliot & Ageton, 1980), were designed to measure a broad definition of delinquency and includes items that would not be serious enough to draw the attention of the Police or the Youth Court. Secondly, many commonly used antisocial behaviour measures fail to account for the true cost to society of repeated offending by young people. Measures such as the SRD use a Likert scale whereby the number of offences committed are accumulated onto a score, however there is no acknowledgement of the actual consequences to society such antisocial behaviour could incur when a final score is calculated. For example, a young person who graffiti's two or three times a year will score similarly to a young person who commits aggravated assault two or three times per year. I wanted to acknowledge not only what types of offending were being conducted by young people involved in the study but also to recognise the cumulated seriousness of the self-reported offending. For the purpose of this study "seriousness of offending" reflects the actual cost to society by accounting for 1) the number of times each offence was committed, and 2) the seriousness score assigned to each index offence as recognised by the New Zealand Department of Corrections.

### Basic Description of the SROS

The SROS consists of two separate sections. Although it is possible for participants to complete this instrument themselves, I administered each SROS and recorded all verbal answers. Section One requires the participant to complete three broad questions. Any positive answer required elaboration and all responses recorded. Question One asks the participant whether they had come into contact with the Police within the last six-months (i.e. since *Phase One*)? If the answer is “yes” then the participants is asked why, and it is questioned whether this was for new offending behaviour or simply as a matter of circumstance (i.e., the police may have come to the house for an unrelated matter). If the participant has had Police contact for new offences then these are to be recorded along with any outcomes that the participant may know about (i.e. have they gone to Court for this new offence etc). A four-point Likert scale is used to score the level of intervention for new offences (i.e. 0 = Nothing/Unknown; 3 = Court). Question Two asks the participant if they have completed (or have adhered to) the Youth Justice Plan that they were directed to complete during *Phase 1* (i.e., Yes/ No). Question Three inquires what intervention services have been involved with the participant since *Phase 1*. The participant is asked to describe the service, including the type of work and amount of contact that the service had with them. A Likert scale for “Service Intervention” during the follow-up phase is then scored based on the participants response (i.e. 0 = No Service Intervention, through to 7 = Residential Clinical Intervention). Only the most seriousness score is to be recorded. For example, if a participant became involved in an after-school youth mentoring programme (a non specific / non clinical intervention / non-intensive = 1) as well as programme targeting dangerous driving (specific/ non clinical intervention/ non-intensive = 2) then this participant would score “2” for “Service Intervention”. Once the information from the above three questions has been qualitatively recorded then the participant can move on to the Section Two of the SROS. An

‘Administration Only Section’ at the bottom of page 1 of the SROS is used record results from the measure.

Section Two of the SROS asks participants to report on offending behaviour that they have committed over the past six-months for which they *may or may not have been caught for*. This section contains 8 offending categories consisting of 31 separate offending items. These categories are the same offending categories used to code the index offending behaviour described on the Descriptive Data Sheet. Each category of the SROS contains a number of items that were selected during the development of the measure. The categories and corresponding number of offending items were:

- |                                     |  |
|-------------------------------------|--|
| 1) Violence or Threats of Violence: | Five Items   |
| 2) Wilful Damage:                   | One Item   |
| 3) Arson/ Wilful Damage by Fire:    | One Item   |
| 4) Theft/ Dishonesty:               | Nine Items   |
| 5) Offences against Good Order:     | Five Items   |
| 6) Traffic Offences:                | Four Items   |
| 7) Sexual Offences:                 | One Item   |
| 8) Drug related offences:           | Three Items (two of these items have two separate scores depending drug class procured or sold). |

Each item is read to the participant who verbally responds. A voluntary response of the number of times the participant has conducted each activity is encouraged. If the young person is confident in the number of times they committed a crime then that number is recorded. The number of self-reported incidences for each offence is to be re-scored according to the SROS Likert Scale in the “Administration Only Section”. The SROS Likert scale ranges from 0 = No offences through to 4 = 10 times or more. If the participant is



unsure of how many times (e.g., says “I don’t know, a few times perhaps” or “heaps, about 100 times”) then the Likert Scale can be used with the participant to confirm what Likert scale score they should receive for each item.

Each self-reported offending item also has a score allocated to it which represents the seriousness of the offence. These scores are based on the New Zealand Department of Corrections Offending Seriousness Scores. Scores have been converted in order to be feasible for the current study and will be discussed below. In order to obtain the participants seriousness score for each item, the SROS Likert Score number is multiplied by the “Offending Item Seriousness Scores” of each item. This final score is then recorded in the column provided. There are two exceptions to this within the “Drug Offences” category. If a participant has produced both Cannabis and Methamphetamine in the past six-months (item D1) or sold Cannabis and Methamphetamine (item D3) then only the most seriousness scores (i.e., the methamphetamine) is recorded. This is to ensure that the act of selling or making illicit substances reflects the different levels of seriousness that these crimes portray. Merging these items also ensures that participants who perform both crimes (i.e., sell both cannabis and methamphetamine) do not get scored twice for the criminal activity of selling illicit substances as this would skew their total seriousness score. Once completed, all “Offending Item Seriousness Scores” are totalled to reveal a final seriousness of self-reported offending score. This score is to be recorded in the instruments Administration section.

Administration of the SROS takes between 10 and 15 minutes. It was read out to participants and responses were recorded by the primary investigator.

### **Development and Psychometrics of the SROS**

The SROS was developed by consulting with Police Youth Aid Officers, Youth Advocates, Youth Justice Social Workers and Clinicians, as well as research supervisors of the primary investigator. A literature review on self-report offending instruments was also undertaken.

The SROS was developed to represent the self-reported cost to society that youth offenders inflict. The instrument provides a more practical and useful reflection of current youth offending compared to scales of delinquency because it contains items that New Zealand Police Youth Aid Officers and Youth Courts deal with on a daily basis.

The three questions used in Section One of the SROS were developed by the primary investigator with consultation from the primary supervisors. These questions were designed to be broad and equivocal so that the administrator can explore participants' answers if they were not initially clear. For example, if a participant answered "Yeah, I think so" when asked if he/ she had completed his plan, then the administrator would be free to ask questions about the participants plan and whether they had finished all components, whether they were still being visited by the Youth Aid Officer, or whether they had received any formal notice that they had completed all components of an FGC plan. Development of the Police Contact Likert Scale (for Question One) and the Level of Service Intervention Likert Scale (Question Three) were also developed using the primary investigators knowledge of available services and through consulting youth justice and clinical professionals. The Level of Service Intervention Scale was developed to reflect three categories of intervention. These intervention categories were:

Specific versus Non-Specific Interventions

Clinical versus Non-Clinical Interventions

Intensive versus Non Intensive Interventions

Seven possible scores were available for the Level of Service Intervention Scale.

0 = No services received during the six-month follow-up period

1 = Non-Specific/ Non-Clinical/ Non-Intensive service (e.g., attendance at a youth group)

2 = Specific/ Non-Clinical/ Non-Intensive (e.g., driver education, substance use education)

3 = Non-Specific/ Non-Clinical/ Intensive (e.g., multi-targeted wrap around programs)

4 = Specific/ Non-Clinical/ Intensive (e.g., CYFS residential care and protection programme)

5 = Specific/ Clinical/ Non-Intensive (e.g., individual counselling/ clinical psychology)

6 = Non-Specific/ Clinical/ Intensive (e.g., multi-systemic therapy)

7 = Specific/ Clinical/ Intensive (e.g., residential interventions for Conduct Disorder)

Development of items for Section Two of the SROS involved consulting youth justice professionals working in the field. Forty items were drafted by the primary investigator. These were selected based on items used in other self-report delinquency questionnaires (namely the SRD and the Causes and Correlates of Delinquency Programme; Krohn & Thornberry, 2003) as well as the primary investigators own professional experience. Importance was placed on selecting the most common types of offending. A balance was required in order to ensure seriousness and cost consuming offences were included, even though they are relatively uncommon (i.e. sexual offences or arson) when compared to moderately severe offences that are frequently dealt with by the Youth Court (e.g. Unlawfully Takes Motor Vehicle). This balance was also required in order to minimise the inevitable positive skew of the distribution due to a small percentage of prolific offenders in the sample. Common offences that are seen in the Youth Court, such as Escapes Lawful Custody, Possession of Cannabis in Public, or Possesses an Instrument to Use Cannabis were considered for the SROS however were omitted in order to minimise the positive skew in

scoring distribution. It was agreed amongst the professionals consulted that serious recidivist offenders would score highly on these items.

The original-40 items that I identified were consulted with 17 experienced youth justice professionals. These professionals were asked to comment on whether any offence items were missing that they considered important, and whether some items should be omitted because they were either not common or not seriousness enough. A total of 31-items remained at the end of consultation. In many cases it was agreed that some of the SROS offending items could be used to score a number of different criminal offences with similar operational themes. For example “V2: Assault or threatened to assault someone in order to get money or things from them” could include offences for aggravated robbery, bag snatching, assault with intent to commit robbery, or “stand-over” tactics whereby an individual will verbally or physically intimidate a victim in order to obtain items from them.

The final stage of development was to assign “seriousness scores” to the 31-items. The New Zealand Department of Corrections has assigned a seriousness score for every criminal offence. This exhaustive list was accessed and scores were extracted to correspond with the 31-items. Scores were averaged out for items with similar subject matter but different seriousness scores (e.g. aggregated assault and aggravated robbery). Each item was then allocated a Likert Score from 1 (least seriousness) through to 8 (most seriousness). Table A6 contains a list of all 31-items with the corresponding New Zealand Department of Corrections seriousness score, and the SROS allocated Likert Score.

Table A6.

**Index Offences included within the Self-Reported Offending Survey (SROS) with Corresponding New Zealand Department of Corrections Seriousness Scores and SROS allocated Likert Scores**

OFFENCE	NZ CORRECTIONS SERIOUSNESS SCORE	SROS CODING	SROS ALLOCATED LIKERT SCORE
Breach of drivers license (TR1)	0	0	1
Fails to stop for police (TR4)	0	0	1
Fights in public (GO4)	0	0	1
Underage purchasing of alcohol (GO3)	0	0	1
Theft ex shop <\$10.00 (T5)	0.2	0.1 - 1	2
Disorderly behaviour in public (GO2)	0.2	0.1 - 1	2
Possession of cannabis in public (D2)	0.2	0.1 - 1	2
Drives with excess breath alcohol (TR2)	0.5	0.1 - 1	2
Careless/ reckless driving (TR3)	1.7	1.1 – 4.9	3
Common assault (V1)	2.0	1.1 – 4.9	3
Willful damage (WD1)	2.0	1.1 – 4.9	3
Theft ex shop <\$500.00 (T6)	2.0	1.1 – 4.9	3
Trespassed (GO5)	2.7	1.1 – 4.9	3
Theft ex shop >\$500 (T7)	10.0	5.0 – 19.9	4
Unlawfully gets into motor vehicle (T2)	15.0	5.0 – 19.9	4
Carries a hidden weapon (GO1)	14.4	5.0 – 19.9	4
Possession of stolen property (T4)	18.0	5.0 – 19.9	4
Theft ex person (T8)	20.0	20.0 – 49.0	5
Cultivates cannabis (D1a)	20.0	20.0 – 49.0	5
Unlawfully takes motor vehicle (T1)	30.0	20.0 – 49.0	5
Threaten to injure/ kill (V3)	58.0	50.0 – 99.0	6
Assault with a weapon (V4)	91.0	50.0 – 99.0	6
Produces drugs – not cannabis (D1b)	92.0	50.0 – 99.0	6
Uses a document to defraud (T9)	94.0	50.0 – 99.0	6
Burglary (T3)	115	100.0 – 290.0	7
Assault with intent to injure (V5)	136.0	100.0 – 290.0	7
Sell cannabis (D3a)	139.0	100.0 – 290.0	7
Arson/ willful damage by fire (A1)	290.0	100.0 – 290.0	7
Aggravated robbery/assault with intent (V2)	421.0	291.0+	8
Sell class A or class B drugs (D3b)	573.0	291.0+	8
Sexual violation (S1)	595.0	291.0+	8

## GETTING IT SORTED!

# Self Reported Offending Survey

ID Number: \_\_\_\_\_ Date: \_\_\_\_\_

**Q1: Have you come into contact with the Police over the past six-months?** Y N  
**If yes, was this for a criminal offence?** Y N  
**If yes, did you have to appear before the Youth Court?** Y N

If Yes, please say why this occurred: \_\_\_\_\_

**Q2: Have you successfully adhered to, or completed the Youth Justice plan you were involved with at the time of the initial assessment?** Y N

**Q3: What services have been involved with you over the past six-months?** (i.e. schools, counsellors, community groups, etc.) \_\_\_\_\_

Intervention Service Score 0 – 7 \_\_\_\_\_

**Please now complete the survey on the following page by saying the number of times over the past six-months that you have done, or tried to do, any of the following crimes.**

**Great, thanks again for your help!**

*Researcher use only:*

Level of Service Involvement:

**0** = No Service; **1** = Minimal/ Unorganised Intervention (e.g. youth groups)  
**2** = Singular Target (e.g. CADS, Driver Education) **3** = Multi-target wrap around (e.g. Cadetmax, boot camps)  
**4** = CYFS Residential Care and Protection; **5** = Clinical Intervention (e.g. RYFS, Clinical Psychology)  
**6** = Multi-systemic therapy (e.g. YHT, RYOP); **7** = Residential Intervention (e.g. YHT, Odyssey House)

Total number of Violence or Threats of Violence (V) \_\_\_\_\_

Total number of Wilful Damage (W) \_\_\_\_\_

Total number of Arson (A) \_\_\_\_\_

Total number of Theft and Dishonesty (T) \_\_\_\_\_

Total number of Offences against Good Order (GO) \_\_\_\_\_

Total number of Traffic Offences (TR) \_\_\_\_\_

Total number of Sexual Offences (S) \_\_\_\_\_

Total number of Drug and Alcohol related charges (D) \_\_\_\_\_

Total number of offences self-reported \_\_\_\_\_

Total number of offence items marked (out of 31) \_\_\_\_\_

Total number of categories marked (out of 8) \_\_\_\_\_

Total Seriousness Score \_\_\_\_\_

Violence or Threats of Violence:	LS	x	SS
V1: Assaulted or threatened to assault someone, including a family member.		3	
V2: Assaulted or threatened to assault someone in order to <u>get money or things from them</u> (e.g. Aggravated Robbery/ Assault with intent to Rob/ Bag snatch).		8	
V3: <u>Threatened</u> to kill or injure someone, including a family member.		6	
V4: Used a <u>weapon</u> for the purpose of assaulting or injuring someone.		6	
V5: Assaulted someone with the <u>intention</u> of seriously injuring or killing them.		7	
<b>Wilful Damage:</b>			
WD1: Tagged, damaged or destroyed property which does not belong to you.		3	
<b>Arson:</b>			
A1: Tried or succeeded in damaging or destroying property using fire.		7	
<b>Theft and Dishonesty:</b>			
T1: Stolen (or tried) to steal a motor vehicle and/ or driven a motor vehicle you knew was stolen.		5	
T2: Gotten into a motor vehicle you knew was stolen.		4	
T3: Burgled a building or a motor vehicle by breaking and entering.		7	
T4: Brought, sold, or been in <u>possession</u> of property you knew was stolen.		4	
T5: Stolen money or property from a shop or petrol station worth <b>less</b> than \$10.00.		2	
T6: Stolen money or property from a shop or petrol station worth <b>less</b> than \$500 (+\$10 - \$500).		3	
T7: Stolen money or property from a shop or petrol station worth <b>more</b> than \$500.		4	
T8: Stolen money or property from another person, incl. family members (i.e. theft ex person).		5	
T9: Illegally deceived/ tricked someone in order to get money or property from them (e.g. fraud)		6	
<b>Good Order:</b>			
GO1: Carried a hidden weapon (e.g. a knife, work tool, airgun, or a firearm) <u>in public or in a car</u> .		4	
GO2: Been loud, disorderly, or deliberately disruptive (incl. being very drunk) in a public place.		2	
GO3: Tried or succeeded in buying alcohol or getting into a bar or a night club.		1	
GO4: Had a fight in a public place (including gang fights).		1	
GO5: Trespassed, or been in a building or an enclosed yard without the permission of the owner.		3	
<b>Traffic Offences:</b>			
TR1: Driven a motor vehicle in a manner that is not a condition of your licence status (e.g. taken passengers, driven after hours). <i>Do you have a licence? Have you driven a car?</i>		1	
TR2: Drank alcohol or used drugs before driving a motor vehicle (i.e. EBA).		2	
TR3: Knowingly driven dangerously or recklessly (e.g. burn-outs, illegal racing etc.).		3	
TR4: Failed to stop for Police/ been in a police chase.		1	
<b>Sexual Offences:</b>			
S1: Touched someone in a sexually inappropriate way which was against their will.		8	
<b>Drug and Alcohol related Offences:</b>			
D1: Grown cannabis or Magic Mushrooms?		5	
Made, or helped make 'P' / Methamphetamine, Heroin, or Cocaine?		6	
D2: Been in <u>possession</u> of cannabis or other drugs <u>in public or in a motor vehicle</u> .		2	
D3: Sold drugs such as Cannabis, Magic Mushrooms, LSD or E (or anything else not mentioned?)		7	
Sold 'P' / Methamphetamine, Heroin, or Cocaine?		8	

LS = Likert Score. SS = Seriousness Score

LIKERT SCORING KEY: Zero = 0; One to Two = 1; Three to Five = 2; Six to Nine = 3; Ten or More = 4

**APPENDIX E**

**CONSENT FORMS AND INFORMATION SHEETS**

**DIVERSION SAMPLE**

**MASSEY UNIVERSITY LETTERHEAD**



## EXPRESS YOUR INTEREST TO HELP GET YOUTH OFFENDING SORTED!

Research Project:

***Getting it Sorted: A project to understand youth offending!***

### **Who am I?**

My name is Nick Mooney and I am a research student from Massey University. Before I started this research project I worked in South Auckland with youth offenders and their families. I am doing this research because I would like to help young people who come to the attention of the Police.

### **What is this all about?**

Lots of things can cause young people to commit crime. These are things like drugs, leaving school, and the influence of friends. This project will help me understand these things better so that I can help young people like you to get their lives sorted!

### **What is this form?**

If you would like more information about this project then please fill in this form. Your Police Youth Aid Officer will pass on these details to me. These are the **ONLY** details that will be passed on. All of this information is confidential. I will then contact you and we can talk more on what this project is all about.

### **Why you?**

All young people who currently have Police Youth Aid Alternative Action or Diversion plans are invited. This group of young people is very important. By giving information about yourself you have the opportunity to give back to your community.

Thanks for your time,

Nick Mooney  
**Primary Researcher**

**EXPRESS YOUR INTEREST HERE!**

Please remember that filling out this form is your choice. Make sure you talk to your family/ whanau members or a caregiver prior to filling in your details.

Name: \_\_\_\_\_

Date of Birth: \_\_\_\_\_

Mail Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Contact Telephone Number(s): \_\_\_\_\_  
\_\_\_\_\_

Name of a Parent or a Guardian who is currently in charge of looking after you:-

\_\_\_\_\_

What is their relationship to you? (e.g. mum, uncle, social worker)

\_\_\_\_\_

I (the young person) \_\_\_\_\_ consent to the above details being passed on to Nick Mooney of Massey University by the New Zealand Police.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

---

POLICE YOUTH AID ONLY:

# SUMMARY SHEET

## *Getting it Sorted: A study to understand youth offending!*

**Primary Researcher:**

**Name:**

**Nick Mooney**

**Role:**

Clinical Psychology Student

### **What is the project about?**

This research project is looking at a lot of the different reasons that can cause teenagers to commit crime.

If you choose to be in the project you will be asked some questions about you and you're offending. The aim of this project is to find out if the questions you are asked are helpful for people who work with youth offenders. What you say will help other young people who are at risk of criminal behaviour.

Participating in this study is voluntary (your choice). You do not have to answer all of the questions, and you will be allowed to stop being a participant at anytime.

### *What happens during the project?*

The assessment takes between 90 and 120 minutes to complete. It will be performed by the researcher (Nick Mooney). Together we will organise a time, date, and a place to meet.

You will be asked some questions about things which can cause crime. These include questions about drug and alcohol use, family/whanau relationships, and thoughts about school. A family member or caregiver can join in this part of the meeting if you want.

After this you will get to play a short computer game where you can win prizes of different values. What prize you win will depend on how you play the game.

Six-months after the meeting you will be contacted again to see how your diversion/alternative action plan went and asked if you have committed any more crime. This part of the project is your choice and we do not have to meet again if you do not want too.

### **What is the role of your family/ whanau, guardian, caregiver, or social worker in this project?**

It is encouraged that you talk to an older family member or friend about this project before you agree to participate. You do not need parental or guardian consent to be part in the project.

### **Confidentiality**

All information that you provide is confidential.

No information that can identify who you are will be reported.

# SUMMARY SHEET

## *Getting it Sorted: A project to understand youth offending!*

<b>Primary Researcher:</b>	Name:	<b>Nick Mooney</b>
	Role:	Clinical Psychology Student

### **What is the study about?**

This young person has been asked to be in a research project that is looking at the reasons that can cause teenagers to commit crime.

The young person will be asked variety of questions about them and their offending. The aim of this project is to find out if these questions are useful for people who work with youth offenders.

Participating in this project is voluntary (their choice). They do not have to answer all of the questions and they can stop being a participant at any time.

### *What happens during the project?*

The assessment takes between 90 and 120 minutes. It will be performed by the researcher (Nick Mooney). Together we will organise a time, date, and a place to meet.

Some of the questions that the young person will be asked will be things about drug and alcohol use, family/ whanau relationships, and thoughts about school. A family member or caregiver can join in this part of the meeting if the young person agrees.

After this the young person will get to play a short computer game where they can win prizes of different values. What prize they win will depend on how they play the game.

Six-months after the meeting the young person will be briefly contacted again to see how their diversion/ alternative action plan went and asked if they have committed any more crime. This part of the project is optional. They do not have to meet again if they do not want too.

### **What is the role of your family/ whanau, guardian, caregiver, or social worker in this project?**

It is encouraged that the young person talks to an older family member or friends about the project before they agree to participate. The young person does not need parental or guardian consent to be in this project.

### **Confidentiality**

All information provided is confidential.

No information that can identify the young person will be reported.

## INFORMATION SHEET FOR THE YOUNG PERSON

### *Getting it Sorted: A Project to Understand Youth Offending!*

<b>Primary Researcher:</b>	<b>Nick Mooney</b> <b>Clinical Psychology Student</b> <b>P.O. BOX 3174, Auckland CBD, Auckland</b> <b>(09) 4140848 x 9448</b>
<b>Primary Supervisor: Name:</b>	<b>Professor Ian Evans</b> <b>Primary Supervisor</b> <b>Private Bag 11222, Palmerston North</b> <b>(09) 4140800 x 2070</b>

You have been invited take part in a research project which is looking at the reasons why teenagers commit crime. My name is Nick Mooney and I am from Massey University. I do not work for the New Zealand Police.

Taking part is voluntary (your choice). If you do not take part then it will not affect your alternative action or diversion plan with the Police. Your Youth Aid officer will not be informed about your participation. You can stop being a participant at anytime and you do not have to give a reason why. You also do not have to answer all the questions you are asked. You can remove any information that you provide to me up until 29 August 2008.

### **So what is it all about?**

Youth offending creates tension between family/ whanau members, increases the risk of drug and alcohol abuse, and limit opportunities to go to school or get a good job. You will be asked some questions to find out things about you and you're offending. The information you provide might help future young offenders to get their lives back on track.

What are the aims of this project?

The aim of the project is to see how good some questions are at finding reasons why young people offend. This project will help anyone who works with youth offenders to be better at finding teenagers who might commit crime. It will also help identify things that will help these young people.

### **Why are you being asked?**

This project involves any young person who has committed a crime and is being dealt with by Police Youth Aid.

Below are the criteria for being in this group:

- You must currently have involvement with a Youth Aid Officer in South Auckland because of some crime you have committed.
- You have admitted to being guilty of the crime that you have been accused of.
- You were between the ages of 14 and 16 years at the time of your offending.
- Your crime was not a sex offence.

### **What happens during the study?**

- You will be assessed anytime between Monday 19 November 2007 and Friday 29 February 2008. The questions will be given to you by me (Nick Mooney). A time, date, and place can be arranged with you. Our meeting can take place in your home, or somewhere within your local community. Our meeting will take between 90 and 120 minutes.
- Our meeting will begin with a 40-minute interview where I will ask you some questions about you and you're offending. For example, some questions are about what you think of school; have you ever used drugs or alcohol; and what your relationship is like with your family. A family/whanau member, guardian, or a caregiver can be in this interview with you if you want. If not we can do the interview alone.
- After a five minute break we will return and you will be given some more questions on your ability to solve social problems, and how you feel about yourself and others. This should take no longer than 25 minutes. During this time you will be interviewed alone and no one else will be able to see or hear your responses.
- After another short break you will play a game on a computer. By playing you will earn points which you can exchange for a prize. The more points you get the better the prize e.g. a lollipop, a bottle of coke, a DVD. You can stop playing at anytime in order to claim your prize, however it will automatically finish after 15 minutes.
- Six-months after this meeting I will contact you again to get a bit more information. This meeting is optional. You will be asked about how your plan went and if you have committed any more crimes. All this is confidential so I can't tell on you. This meeting won't take long and we could do it over the phone if you want.

### **Risks & benefits**

- There are no benefits of being part of this project. However, the information you provide may help similar young people in the future.
- There are a few possible risks to being in this project. Talking and answering questions maybe tiring for you. If you feel tired during the meeting then we can take a break. Also, some of the questions may make you feel upset or angry. I

have a lot experience working with young people and I can talk to you about any problems that may arise. You don't have to answer any questions and you can stop at anytime. After the assessment you may feel upset or angry about the meeting. If you do not want to talk about these issues with me then you can contact my Auckland based supervisor, Ms. Linda Gow. Linda is a Lead Clinical Psychologist for the Regional Youth Forensic Services (Auckland District Health Board). She has extensive work experience with young people and families. Linda is willing to listen and talk about any concerns that you may have and will provide recommendations that she sees as appropriate. To contact Linda please call (09) 623 4646 ext 28689.

What is the role of your family/ whanau, guardian, caregiver, or social worker in this study?

- It is important that you have a friend, family/ whanau support, caregiver, or your social worker to help you understand the risks and benefits of this project, or any other questions that you have.
- This project is looking to gain information about you and you're offending. However, your family/ whanau, a guardian, or a caregiver, can sometimes make it easier for you to talk about certain things. If you want them to be involved in the assessment then they are most welcome. If not, you can be interviewed alone. Write on your consent form if you would like this. These people can only participate if they sign their own consent form.
- You do not need parent or guardian consent to be in this project. However a separate information sheet and agreement form is available for them if they agree with your choice to be in this project.

### **Confidentiality**

- No material that could identify you will be reported. Your Youth Aid Officer will not know if you decide to participate in this project or not.
- All information that you give will be coded so that your name is not identifiable. The consent form you sign will be kept in a locked storage box. All information will be kept at a separate location from the consent forms. All information will be held in a locked storage room at Massey University for a minimum of ten years. After this time period the information and the consent forms can be destroyed.

### **Results**

I am hopeful of publishing the results of this project so that people who work with youth offenders can see the results. This may take up to 12 months from the time the project ends. Remember that these results will not contain any information that can identify you. Please write on the consent form if you would like a report of the final results.

**Who should I contact if I have further questions?**

If you have any further questions regarding this project then please contact Nick Mooney:

**Mail:**

Nick Mooney  
P.O. BOX 3174  
Auckland CBD  
Auckland

**Email:**

[nicholas.mooney.1@massey.ac.nz](mailto:nicholas.mooney.1@massey.ac.nz)

**Phone:**

(09) 4140848 x 9448

If you have any issues resulting from this research process and would like to discuss these with someone other than the Nick Mooney then please call either Ms. Linda Gow (09) 623 4646 ext 28689, or the primary supervisor, Professor Ian Evans (Massey University) (09) 4140800 ext 2070.

**Advocacy Statement.**

If you have any queries or concerns regarding your rights as a participant in this research study, you can contact an independent Health and Disability Advocate. This is a free service provided under the Health and Disability Commissioner Act:

Telephone (NZ wide):	0800 555 050
Free Fax (NZ wide):	0800 2787 7678 (0800 2 SUPPORT)
Email:	<u><a href="mailto:advocacy@hdc.org.nz">advocacy@hdc.org.nz</a></u>

**Compensation Statement.**

In the unlikely event of a physical injury as a result of your participation in this study, you may be covered by ACC under the Injury Prevention, Rehabilitation and Compensation Act. ACC cover is not automatic and your case will need to be assessed by ACC according to the provisions of the 2002 Injury Prevention Rehabilitation and Compensation Act. If your claim is accepted by ACC, you still might not get any compensation. This depends on a number of factors such as whether you are an earner or a non-earner. ACC usually provides only partial reimbursement of costs and expenses and there may be no lump sum compensation payable. There is no cover for mental injury unless it is the result of physical injury. If you have ACC cover, generally this will affect your right to sue the researcher.

If you have any questions about ACC, contact your nearest ACC office or the researcher.

**This study has received ethical approval from the Northern X Regional Ethics Committee.**

***Thank you for taking the time to read about, and considering taking part in this study.***

Kind regards,

Nick Mooney  
**Primary Researcher**



## INFORMATION SHEET FOR PARENTS AND GUARDIANS

*Getting it Sorted: A Project to Understand Youth Offending!*

<b>Primary Researcher:</b>	<b>Nick Mooney</b> Clinical Psychology Student P.O. BOX 3174, Auckland CBD, Auckland (09) 4140848 x 9448
<b>Primary Supervisor: Name:</b>	<b>Professor Ian Evans</b> Primary Supervisor Private Bag 11222, Palmerston North (09) 4140800 x 2070

Dear Sir/ Madam, you are a parent, caregiver, or a guardian of a young person who has been asked to participate in a research project looking at the different reasons why teenagers commit crime. My name is Nick Mooney and I am from Massey University. I do not work for the Zealand Police.

Taking part is voluntary (their choice). Deciding not to take part will not affect any involvement that they may have with the Police. Their Police Youth Aid officer will not be informed about their participation. They can stop being a participant at anytime and they do not have to give a reason for wanting to stop. The young person also does not have to answer all the questions that they are asked. They may also remove any information that is provided up until 29 August 2008.

### **So what is it all about?**

Youth offending can cause tension between family/ whanau members, increase the risk of drug and alcohol abuse, and limit opportunities to go to school or get a good job. This study will ask questions to find out things about the young persons offending. The information they provide may help future young offenders to get their lives back on track.

What are the aims of this project?

The aim of the project is to see how good some questions are at finding reasons why young people offend. This project will help anyone who works with youth offenders to be better at finding teenagers who might commit crime. It will also help identify things that will help these young people.

### **Why is this young person being asked?**

This project involves any young person who has committed a crime that is being dealt with by Police Youth Aid.

Below are the criteria for being a participant:

- The young person must currently have involvement with a Youth Aid Officer in South Auckland because of their offending behaviour.

- The young person has admitted to being guilty of the crime that they have been accused.
- The young person was between the ages of 14 and 16 years at the time of the offending behaviour.

### **What happens during the study?**

- The young person will be assessed anytime between Monday 19 November 2007 and Friday 29 February 2008. The questions will be given by me (Nick Mooney). A time, date, and place can be arranged with you and the young person. The meeting can take place at the young person's home, or somewhere in the community. The meeting will take between 90 and 120 minutes.
- The meeting will begin with a 40-minute interview where I will ask the young person some questions about them and their offending. For example, some questions are about what they think of school; what drugs they have used; and what they think of their relationship with their family and friends. Parents, guardians, or caregivers can be present during this interview, but only if the young person agrees. If not, then the young person will be interviewed alone.
- After a five minute break we will return and the young person will be given some more questions on their ability to solve social problems, and how they feel about themselves and others. This should take no longer than 25 minutes. During this time the young person must be interviewed alone.
- After another short break the young person will play a game on the computer. By playing the game they will earn points which they can exchange for a prize. The more points they earn the better the prize, e.g. lollipop, bottles of coke, or a DVD. They will be able to stop playing at anytime in order to claim the prize. However, it will automatically finish after 15 minutes.
- Six-months after this meeting I will contact the young person to get a bit more information. This meeting is optional. The young person will be asked about how they went on their plan and if they have committed any more crimes. All of this information will be confidential. This meeting will not take long and could be conducted over the phone if it easier for the young person.

### **Risks & benefits**

- There are no benefits of being part of this project. However, the young person will be aware that the information they provide will help other young offenders in the future.
- There are a few possible risks to being a participant. Talking and answering questions maybe tiring for the young person. If they feel tired during the meeting then we can take breaks. Also, some of the questions may make the young person upset or angry. I have a lot of experience working with young offenders and I can talk to them about any problems that may arise. The young person does not have to answer every question and they are allowed to stop the meeting at any time. The young person may also feel upset after the meeting. If

you or the young person do not want to talk about these issues with me then you can contact my Auckland based supervisor, Ms. Linda Gow. Linda is a Lead Clinical Psychologist for the Regional Youth Forensic Services. She has extensive work experience with young people and families. Linda is willing to listen and talk through any concerns that you may have, and will provide professional recommendations that she sees as appropriate. To contact Linda please call (09) 623 4646 ext 28689.

What is the role of your family/ whanau, guardian, caregiver, or social worker in this study?

- It is recommended that young people participating in this project consult a friend, family/ whanau support, caregivers, or a social worker in order to help them understand the benefits and risks of this study.
- This project is looking to gain information about the young person and their offending. Support from family/ whanau, a guardian, a caregiver, or a social worker, can sometimes make it easier for them to talk about certain things. These people are welcome to participate in the assessment if the young person agrees. Any person asked by the young person to participate is required to sign their own consent form.
- The young person does not require parental/ guardian consent in order to be in this project. However a family/ whanau agreement form is available for you to sign if you agree with the young person's decision to participate.

### **Confidentiality**

- No material that could identify the young person will be reported. The young persons Youth Aid Officer will not know if the young person chose to participate. All information provided by the young person will be coded so that the young persons name is not identifiable.
- The consent form that the young person signs will be kept in a locked storage box. All information will be kept at a separate location from the consent forms. All information will be held in a locked storage room at Massey University for a minimum of ten years. After this time period the information and the consent forms can be destroyed.

### **Results**

I am hopeful of publishing the results of this project so that people who work with youth offenders can see the results. This may take up to 12 months from the time that the project ends. Remember that these results will not contain any information that can identify the young person. The young person is entitled to a report of the final results of this project.

**Who should I contact if I have further questions?**

If you have any questions regarding this project then please contact Nick Mooney:

**Mail:**

Nick Mooney  
P.O. BOX 3174  
Auckland CBD  
Auckland

**Email:**

[nicholas.mooney.1@uni.massey.ac.nz](mailto:nicholas.mooney.1@uni.massey.ac.nz)

**Phone:**

(09) 4140848 x 9448

If you have any issues resulting from this research process and would like to discuss these with someone other than Nick Mooney then please call either Ms Linda Gow (09) 623 4646 ext 28689 or the primary supervisor, Professor Ian Evans, (Massey University) (09) 414 0800 ext 2070.

**Advocacy Statement.**

If you have any queries or concerns regarding your rights, or the young person's rights as a participant in this research study, you can contact an independent Health and Disability Advocate. This is a free service provided under the Health and Disability Commissioner Act:

Telephone (NZ wide):	0800 555 050
Free Fax (NZ wide):	0800 2787 7678 (0800 2 SUPPORT)
Email:	<a href="mailto:advocacy@hdc.org.nz">advocacy@hdc.org.nz</a>

**Compensation Statement.**

In the unlikely event of a physical injury as a result of the young person's participation in this study, he/ she may be covered by ACC under the Injury Prevention, Rehabilitation and Compensation Act. ACC cover is not automatic and the case will need to be assessed by ACC according to the provisions of the 2002 Injury Prevention Rehabilitation and Compensation Act. If the young persons claim is accepted by ACC, they still might not get any compensation. This depends on a number of factors such as whether the young person is an earner or a non-earner. ACC usually provides only partial reimbursement of costs and expenses and there may be no lump sum compensation payable. There is no cover for mental injury unless it is the result of physical injury. If the young person has ACC cover, generally this will affect his/ her right to sue the researcher.

If you have any questions about ACC, contact your nearest ACC office or the researcher.

**This study has received ethical approval from the Northern X Regional Ethics Committee.**

*Thank you for taking the time to read about this study.*

Kind regards,

Nick Mooney  
Primary Researcher

## CONSENT FORM FOR THE YOUNG PERSON

### *Getting it Sorted: A Project to Understand Youth Offending!*

Please read the following points carefully. If you are happy to take part in this project please sign the bottom of the page.

- You have read and/or have been told about the information sheet dated 29 August 2007 for young people taking part in this project. You know that the project will help people understand the reasons why young people commit crime.
- You have found out all about the project from the researcher (Nick Mooney).
- You have had time to talk about the project to your family/whanau members, your social worker, your caregiver, or a friend.
- You understand that taking part in this project is your choice (voluntary) and that you can stop being involved whenever you like.
- You understand that all information is confidential. No one other than the researcher will know what you do or say.

You do not require your family's consent to be in the project. However, would you like your family to be asked if they agree with your decision to participate? (circle): **YES** **NO**

Do you consent to being in the follow-up phase of this study in six months time? (circle): **YES** **NO**

Would you like members of your family, a legal guardian, or a caregiver to attend the assessment phase of this project? (circle): **YES** **NO**

If yes, please say the names of these people:

1. \_\_\_\_\_
2. \_\_\_\_\_

Do you want to receive a written report of the results of this study? (circle): **YES** **NO**

I \_\_\_\_\_ (*full name*) hereby consent to take part in this study.

Signature \_\_\_\_\_ Date \_\_\_\_\_

**Project explained by** \_\_\_\_\_ **Project role** \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

## **AGREEMENT FORM FOR FAMILY/ WHANAU, CAREGIVERS AND GUARDIANS** *Getting it Sorted: A Project to Understand Youth Offending!*

Dear family/ whanau member, caregiver or legal guardian.

\_\_\_\_\_ (*young person*) would like to be in a research project that will help to understand the reasons why young people commit crime.

Your agreement to the young person's decision to participate is sought. Before you sign, please read the following points carefully:

- You have read and/or have been told about the information sheet dated 29 August 2007 for young people taking part in this research project.
- You have discussed the study with the researcher (Nick Mooney).
- You have discussed this project with the young person and you are happy with his / her understanding of the project.
- You understand that the young persons decision to take part in this project is voluntary and that they can withdraw (drop-out) at any time.
- You understand that this young person's participation is confidential. No one other than the researcher will know what the young person says or does in the project.

I \_\_\_\_\_ (*your full name*) agree  
to \_\_\_\_\_ (*young person*) being part of this project.

Signature \_\_\_\_\_ Date: \_\_\_\_\_

***If the young person would like certain family/ whanau, caregivers, or guardians to be present during the assessment, these people need to sign their own consent to participate.***

1. I \_\_\_\_\_ (*full name*) hereby give my consent to  
accompany

\_\_\_\_\_ (*young person*) during the interview assessment.

Signature: \_\_\_\_\_ Date \_\_\_\_\_

2. I \_\_\_\_\_ (*full name*) hereby give my consent to  
accompany

\_\_\_\_\_ (*young person*) during the interview assessment.

Signature: \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

## **APPENDIX F**

### **CONSENT FORMS AND INFORMATION SHEETS**

#### **CLINICAL SAMPLE**

#### **AUCKLAND DISTRICT HEALTH BOARD LETTERHEAD**

## SUMMARY SHEET

### *Getting it Sorted: A Project to Understand Youth Offending!*

<b>Primary Researcher:</b>	<b>Name:</b>	<b>Nick Mooney</b>
	<b>Role:</b>	<b>Clinical Psychology Student</b>

#### **What is the project about?**

This research project is looking at a lot of the different reasons that can cause teenagers to commit crime.

If you choose to be in the project you will be asked some questions about you and you're offending. The aim of this project is to find out if the questions you are asked are helpful for people who work with youth offenders. What you say will help other young people who are at risk of criminal behaviour.

Participating in this study is voluntary (your choice). You do not have to answer all of the questions, and you will be allowed to stop being a participant at anytime.

#### *What happens during the project?*

The assessment is in two parts. The first part is your assessment directed by Youth Court. You will also have the option to have a follow-up assessment after six-months. This follow-up assessment takes between 90 and 120 minutes to complete. It will be performed by the researcher (Nick Mooney). Together we will organise a time, date, and a place to meet.

During the six-month follow-up assessment you will be asked some questions about things which can cause crime. These include questions about drug and alcohol use, family/whanau relationships, and thoughts about school. A family member or caregiver can join in this part of the meeting if you want.

After this you will get to play a short computer game where you can win prizes of different values. What prize you win will depend on how you play the game.

#### **What is the role of your family/ whanau, guardian, caregiver, or social worker in this project?**

It is encouraged that you talk to an older family member or friend about this project before you agree to participate. You do not need parental or guardian consent to be part in the project.

#### **Confidentiality**

All information that you provide is confidential.

No information that can identify who you are will be reported.



## SUMMARY SHEET

### *Getting it Sorted: A Project to Understand Youth Offending!*

<b>Primary Researcher:</b>	<b>Name:</b>	<b>Nick Mooney</b>
	<b>Role:</b>	<b>Clinical Psychology Student</b>

#### **What is the study about?**

This young person has been asked to be in a research project that is looking at the reasons that can cause teenagers to commit crime.

The young person will be asked variety of questions about them and their offending. The aim of this project is to find out if these questions are useful for people who work with youth offenders.

Participating in this project is voluntary (their choice). They do not have to answer all of the questions and they can stop being a participant at any time.

#### *What happens during the project?*

The project is in two parts. The first part is the assessment completed by a clinician from the Regional Youth Forensic Service. The second part is the optional follow-up assessment after a six-month period for research purposes. This six month follow-up assessment takes between 90 and 120 minutes. It will be performed by the researcher (Nick Mooney). Together we will organise a time, date, and a place to meet.

Some of the questions that the young person will be asked will be things about drug and alcohol use, family/ whanau relationships, and thoughts about school. A family member or caregiver can join in this part of the meeting if the young person agrees.

After this the young person will get to play a short computer game where they can win prizes of different values. What prize they win will depend on how they play the game.

#### **What is the role of your family/ whanau, guardian, caregiver, or social worker in this project?**

It is encouraged that the young person talks to an older family member or friends about the project before they agree to participate. The young person does not need parental or guardian consent to be in this project.

#### **Confidentiality**

All information provided is confidential.

No information that can identify the young person will be reported.

## INFORMATION SHEET FOR THE YOUNG PERSON

### *Getting it Sorted: A Project to Understand Youth Offending!*

<b>Primary Researcher:</b>	<b>Nick Mooney</b> <b>Clinical Psychology Student</b> <b>P.O. BOX 3174, Auckland CBD, Auckland</b> <b>(09) 4140848 x 9448</b>
<b>Primary Supervisor: Name:</b>	<b>Professor Ian Evans</b> <b>Primary Supervisor</b> <b>Private Bag 11222, Palmerston North</b> <b>(09) 4140800 x 2070</b>

You have been invited take part in a research project which is looking at the reasons why teenagers commit crime. My name is Nick Mooney and I am from Massey University.

Taking part is voluntary (your choice). If you do not take part then it will not affect your current involvement with the Youth Court. Your Youth Aid officer will not be informed about your participation. You can stop being a participant at anytime and you do not have to give a reason why. You also do not have to answer all the questions you are asked. You can remove any information that you provide to me up until 29 August 2008.

#### **So what is it all about?**

Youth offending creates tension between family/ whanau members, increases the risk of drug and alcohol abuse, and limit opportunities to go to school or get a good job. You will be asked some questions to find out things about you and you're offending. The information you provide might help future young offenders to get their lives back on track.

What are the aims of this project?

The aim of the project is to see how good some questions are at finding reasons why young people offend. This project will help anyone who works with youth offenders to be better at finding teenagers who might commit crime. It will also help identify things that will help these young people.

#### **Why are you being asked?**

This project involves any young person who has committed a crime that is being dealt with by the Youth Court AND has been assessed by the Regional Youth Forensic Services.

Below are the criteria for being in this group:

- You must currently have criminal offending matters that are being dealt with by the Youth Court.

- You have admitted to being guilty of the crime that you have been accused of, or you have been found guilty by the Youth Court.
- You were between the ages of 14 and 16 years at the time of your offending.

### **What happens during the study?**

Below is a brief description of what will happen during the study:

- There are two parts to the study. The first part is the initial assessment. The Regional Youth Forensic Services will carry this out. By consenting to participate in the study, the researcher (Nick Mooney) will be able to look at the information collected from this assessment.
- The second stage of this study consists of a follow-up meeting approximately six-months after the initial assessment. Participation in the follow-up assessment is optional. The questions will be given to you by me (Nick Mooney). A time, date, and place can be arranged with you. Our meeting can take place in your home, or somewhere within your local community. Our meeting will take between 90 and 120 minutes.
- This follow-up assessment will begin with a 40-minute interview where I will ask you some questions about you and you're offending. For example, some questions are about what you think of school; have you ever used drugs or alcohol; and what your relationship is like with your family. A family/whanau member, guardian, or a caregiver can be in this interview with you if you want. If not we can do the interview alone.
- After a five minute break we will return and you will be given some more questions on your ability to solve social problems, and how you feel about yourself and others. This should take no longer than 25 minutes. During this time you will be interviewed alone and no one else will be able to see or hear your responses.
- After another short break you will play a game on a computer. By playing you will earn points which you can exchange for a prize. The more points you get the better the prize e.g. a lollipop, a bottle of coke, a DVD. You can stop playing at anytime in order to claim your prize, however it will automatically finish after 15 minutes.

### **Risks & benefits**

- There are no benefits of being part of this project. However, the information you provide may help similar young people in the future.

- There are a few possible risks to being in this project. Talking and answering questions maybe tiring for you. If you feel tired during the meeting then we can take a break. Also, some of the questions may make you feel upset or angry. I have a lot experience working with young people and I can talk to you about any problems that may arise. You don't have to answer any questions and you can stop at anytime. After the assessment you may feel upset or angry about the meeting. If you do not want to talk about these issues with me then you can contact my Auckland based supervisor, Ms. Linda Gow. Linda is a Lead Clinical Psychologist for the Regional Youth Forensic Services (Auckland District Health Board). She has extensive work experience with young people and families. Linda is willing to listen and talk about any concerns that you may have and will provide recommendations that she sees as appropriate. To contact Linda please call (09) 623 4646 ext 28689.

What is the role of your family/ whanau, guardian, caregiver, or social worker in this study?

- It is important that you have a friend, family/ whanau support, caregiver, or your social worker to help you understand the risks and benefits of this project, or any other questions that you have.
- This project is looking to gain information about you and you're offending. However, your family/ whanau, a guardian, or a caregiver, can sometimes make it easier for you to talk about certain things. If you want them to be involved in the follow-up assessment then they are most welcome. If not, you can be interviewed alone. Write on your consent form if you would like this. These people can only participate if they sign their own consent form.
- You do not need parent or guardian consent to be in this project. However a separate information sheet and agreement form is available for them if they agree with your choice to be in this project.

### **Confidentiality**

- No material that could identify you will be reported. All information provided by the young person will be coded so that the young persons name is not identifiable.
- All information that you give will be coded so that your name is not identifiable. The consent form you sign will be kept in a locked storage box. All information will be kept at a separate location from the consent forms. All information will be held in a locked storage room at Massey University for a minimum of ten years. After this time period the information and the consent forms can be destroyed.

### **Results**

I am hopeful of publishing the results of this project so that people who work with youth offenders can see the results. This may take up to 12 months from the time the project ends. Remember that these results will not contain any information that can identify you. Please write on the consent form if you would like a report of the final results.

**Who should I contact if I have further questions?**

If you have any further questions regarding this project then please contact Nick Mooney:

**Mail:**

Nick Mooney  
P.O. BOX 3174  
Auckland CBD  
Auckland

**Email:**

[nicholas.mooney.1@massey.ac.nz](mailto:nicholas.mooney.1@massey.ac.nz)

**Phone:**

(09) 4140848 x 9448

If you have any issues resulting from this research process and would like to discuss these with someone other than the Nick Mooney then please call either Ms. Linda Gow (09) 623 4646 ext 28689, or the primary supervisor, Professor Ian Evans (Massey University) (09) 4140800 ext 2070.

**Advocacy Statement.**

If you have any queries or concerns regarding your rights as a participant in this research study, you can contact an independent Health and Disability Advocate. This is a free service provided under the Health and Disability Commissioner Act:

Telephone (NZ wide):

0800 555 050

Free Fax (NZ wide):

0800 2787 7678 (0800 2 SUPPORT)

Email:

[advocacy@hdc.org.nz](mailto:advocacy@hdc.org.nz)

**Compensation Statement.**

In the unlikely event of a physical injury as a result of your participation in this study, you may be covered by ACC under the Injury Prevention, Rehabilitation and Compensation Act. ACC cover is not automatic and your case will need to be assessed by ACC according to the provisions of the 2002 Injury Prevention Rehabilitation and Compensation Act. If your claim is accepted by ACC, you still might not get any compensation. This depends on a number of factors such as whether you are an earner or a non-earner. ACC usually provides only partial reimbursement of costs and expenses and there may be no lump sum compensation payable. There is no cover for mental injury unless it is the result of physical injury. If you have ACC cover, generally this will affect your right to sue the researcher.

If you have any questions about ACC, contact your nearest ACC office or the researcher.

**This study has received ethical approval from the Northern X Regional Ethics Committee.**

***Thank you for taking the time to read about, and considering taking part in this study.***

Kind regards,

Nick Mooney  
**Primary Researcher**

## INFORMATION SHEET FOR PARENTS AND GUARDIANS

*Getting it Sorted: A Project to Understand Youth Offending!*

<b>Primary Researcher:</b>	<b>Nick Mooney</b> <b>Clinical Psychology Student</b> <b>P.O. BOX 3174, Auckland CBD, Auckland</b> <b>(09) 4140848 x 9448</b>
<b>Primary Supervisor: Name:</b>	<b>Professor Ian Evans</b> <b>Primary Supervisor</b> <b>Private Bag 11222, Palmerston North</b> <b>(09) 4140800 x 2070</b>

Dear Sir/ Madam, you are a parent, caregiver, or a guardian of a young person who has been asked to participate in a research project looking at the different reasons why teenagers commit crime. My name is Nick Mooney and I am from Massey University.

Taking part is voluntary (their choice). Deciding not to take part will not affect any involvement that they may have with the Youth Court. They can stop being a participant at anytime and they do not have to give a reason for wanting to stop. The young person also does not have to answer all the questions that they are asked. They may also remove any information that is provided up until 29 August 2008.

### **So what is it all about?**

Youth offending can cause tension between family/ whanau members, increase the risk of drug and alcohol abuse, and limit opportunities to go to school or get a good job. This study will ask questions to find out things about the young persons offending. The information they provide may help future young offenders get their lives back on track.

What are the aims of this project?

The aim of the project is to see how good some questions are at finding reasons why young people offend. This project will help anyone who works with youth offenders to be better at finding teenagers who might commit crime. It will also help identify things that will help these young people.

### **Why is this young person being asked?**

This project involves any young person whose criminal behaviour is being dealt with by Youth Court AND has been assessed by the Regional Youth Forensic Services.

Below are the criteria for being a participant:

- The young person must currently have criminal offending matters that are being dealt with by the Youth Court.
- The young person has admitted to being guilty of the crime that they have been accused, or they have been found guilty by the Youth Court.
- The young person was between the ages of 14 and 16 years at the time of the offending behaviour.

### **What happens during the study?**

Below is a brief description of what will happen during the study:

- There are two parts to the study. The first part is the initial assessment. The Regional Youth Forensic Services will carry this out. The researcher (Nick Mooney) will be able to look at the information collected from this assessment.
- The second stage of this study consists of a follow-up meeting approximately six-months after the initial assessment. This is optional. The questions will be given to you by me (Nick Mooney). A time, date, and place can be arranged with young person. Our meeting can take place in your home, or somewhere within the local community. Our meeting will take between 90 and 120 minutes.
- The meeting will begin with a 40-minute interview where I will ask the young person some questions about them and their offending. For example, some questions are about what they think of school; what drugs they have used; and what they think of their relationship with their family and friends. Parents, guardians, or caregivers can be present during this interview, but only if the young person agrees. If not, then the young person will be interviewed alone.
- After a five minute break we will return and the young person will be given some more questions on their ability to solve social problems, and how they feel about themselves and others. This should take no longer than 25 minutes. During this time the young person must be interviewed alone.
- After another short break the young person will play a game on the computer. By playing the game they will earn points which they can exchange for a prize. The more points they earn the better the prize, e.g. lollipop, large bags of sweets, or a DVD. They will be able to stop playing at anytime in order to claim the prize. However, it will automatically finish after 15 minutes.

### **Risks & benefits**

- There are no benefits of being part of this project. However, the young person will be aware that the information they provide will help other young offenders in the future.



- There are a few possible risks to being a participant. Talking and answering questions maybe tiring for the young person. If they feel tired during the meeting then we can take breaks. Also, some of the questions may make the young person upset or angry. I have a lot of experience working with young offenders and I can talk to them about any problems that may arise. The young person does not have to answer every question and they are allowed to stop the meeting at any time. The young person may also feel upset after the meeting. If you or the young person does not want to talk about these issues with me then you can contact my Auckland based supervisor, Ms. Linda Gow. Linda is a Lead Clinical Psychologist for the Regional Youth Forensic Services. She has extensive work experience with young people and families. Linda is willing to listen and talk through any concerns that you may have, and will provide professional recommendations that she sees as appropriate. To contact Linda please call (09) 623 4646 ext 28689.

What is the role of your family/ whanau, guardian, caregiver, or social worker in this study?

- It is recommended that young people participating in this project talk to a friend, family/ whanau support, caregivers, or a social worker in order to help them understand the benefits and risks of this study.
- This project is looking to gain information about the young person and their offending. Support from family/ whanau, a guardian, a caregiver, or a social worker, can sometimes make it easier for them to talk about certain things. These people are welcome to participate in the assessment if the young person agrees. Any person asked by the young person to participate is required to sign their own consent form.
- The young person does not require parental/ guardian consent in order to be in this project. However a family/ whanau agreement form is available for you to sign if you agree with the young person's decision to participate.

### **Confidentiality**

- No material that could identify the young person will be reported. All information provided by the young person will be coded so that the young persons name is not identifiable.
- The consent form that the young person signs will be kept in a locked storage box. All information will be kept at a separate location from the consent forms. All information will be held in a locked storage room at Massey University for a minimum of ten years. After this time period the information and the consent forms can be destroyed.

### **Results**

I am hopeful of publishing the results of this project so that people who work with youth offenders can see the results. This may take up to 12 months from the time that the project ends. Remember that these results will not contain any information that can identify the young person. The young person is entitled to a report of the final results of this project.



**Who should I contact if I have further questions?**

If you have any questions regarding this project then please contact Nick Mooney:

**Mail:**

Nick Mooney  
P.O. BOX 3174  
Auckland CBD  
Auckland

**Email:**

[nicholas.mooney.1@uni.massey.ac.nz](mailto:nicholas.mooney.1@uni.massey.ac.nz)

**Phone:**

(09) 4140848 x 9448

If you have any issues resulting from this research process and would like to discuss these with someone other than Nick Mooney then please call either Ms Linda Gow (09) 623 4646 ext 28689 or the primary supervisor, Professor Ian Evans, (Massey University) (09) 414 0800 ext 2070.

**Advocacy Statement.**

If you have any queries or concerns regarding your rights, or the young person's rights as a participant in this research study, you can contact an independent Health and Disability Advocate. This is a free service provided under the Health and Disability Commissioner Act:

Telephone (NZ wide):

0800 555 050

Free Fax (NZ wide):

0800 2787 7678 (0800 2 SUPPORT)

Email:

[advocacy@hdc.org.nz](mailto:advocacy@hdc.org.nz)

**Compensation Statement.**

In the unlikely event of a physical injury as a result of the young person's participation in this study, he/ she may be covered by ACC under the Injury Prevention, Rehabilitation and Compensation Act. ACC cover is not automatic and the case will need to be assessed by ACC according to the provisions of the 2002 Injury Prevention Rehabilitation and Compensation Act. If the young persons claim is accepted by ACC, they still might not get any compensation. This depends on a number of factors such as whether the young person is an earner or a non-earner. ACC usually provides only partial reimbursement of costs and expenses and there may be no lump sum compensation payable. There is no cover for mental injury unless it is the result of physical injury. If the young person has ACC cover, generally this will affect his/ her right to sue the researcher.

If you have any questions about ACC, contact your nearest ACC office or the researcher.

**This study has received ethical approval from the Northern X Regional Ethics Committee.**

*Thank you for taking the time to read about this study.*

Kind regards,

Nick Mooney

**Primary Researcher**

## CONSENT FORM FOR THE YOUNG PERSON

### *Getting it Sorted: A Project to Understand Youth Offending!*

Please read the following points carefully. If you are happy to take part in this project please sign the bottom of the page.

- You have read and/or have been told about the information sheet dated 29 August 2007 for young people taking part in this project. You know that the project will help people understand the reasons why young people commit crime.
- You have found out all about the project from a member of the Regional Youth Forensic Service and/ or the researcher (Nick Mooney).
- You have had time to talk about the project with a family/whanau member, your social worker, your caregiver, or a friend.
- You understand that taking part in this study project is your choice (voluntary) and that you can stop being involved whenever you like.
- You understand that all information is confidential. No one other than the researcher will know what you do or say.

You do not require your family's consent to be in the project. However, would you like your family to be asked if they agree with your decision to participate? (circle): **YES** **NO**

Do you consent to being in the follow-up phase of this study in six months time? (circle): **YES** **NO**

Would you like members of your family, a legal guardian, or a caregiver to attend the assessment phase of this project? (circle): **YES** **NO**

If yes, please write down the names of these people:

1. \_\_\_\_\_
2. \_\_\_\_\_

Do you want to receive a written description of the results of this study (circle): **YES** **NO**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (full name) hereby consent to take part in this project.

Signature \_\_\_\_\_ Date \_\_\_\_\_

**Project explained by** \_\_\_\_\_ **Project role** \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

## AGREEMENT FORM FOR FAMILY/ WHANAU, CAREGIVERS AND GUARDIANS

### *Getting it Sorted: A Project to Understand Youth Offending!*

Dear family/ whanau member, caregiver and/ or legal guardian.

\_\_\_\_\_ (*young person*) would like to be in a research project that will help to understand the reasons why young people commit crime.

Your agreement to the young person's decision to participate is sought. Before you sign, please read the following points carefully:

- You have read and/ or been told about the information sheet dated 29 August 2007 for young people taking part in this research project.
- You have discussed the project with a member of the Regional Youth Forensic Service and/ or the researcher (Nick Mooney).
- You have discussed this project with the young person and you are happy with his/ her understanding of the project.
- You understand that the young person's decision to take part in this project is voluntary and that they can withdraw (drop-out) at any time.
- You understand that this young person's participation is confidential. No one other than the researcher will know what the young person says or does in the project.

I \_\_\_\_\_ (*your full name*) agree to \_\_\_\_\_ (*young person*) being part of this study.

Signature \_\_\_\_\_ Date: \_\_\_\_\_

***If the young person would like certain family/ whanau, caregivers, or guardians to be present during the assessment, these people need to sign their own consent to participate.***

1. I \_\_\_\_\_ (*full name*) hereby give my consent to accompany \_\_\_\_\_ (*young person*) during the interview assessment.

Signature: \_\_\_\_\_ Date \_\_\_\_\_

2. I \_\_\_\_\_ (*full name*) hereby give my consent to accompany \_\_\_\_\_ (*young person*) during the interview assessment.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Project explained by \_\_\_\_\_ Project role \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

## APPENDIX G

### SUPPLEMENTARY RESULTS

#### CONVERGENT VALIDITY OF THE RISK ASSESSMENT MEASURES

---

##### **Correlation Analyses between the YLS/CMI, the YPI and the ICU**

The relationship between the total scores of the Youth Level of Service/ Case Management Inventory (YLS/CMI), the Youth Psychopathic Traits Inventory (YPI), and the Inventory of Callous/ Unemotional Traits (ICU) was examined using Pearson product-moment correlation coefficients. Preliminary analyses were performed, and there were no violations of the assumptions of normality, linearity, outliers, or homoscedasticity. Tables A7 and A8 shows the results of all correlation analyses, including factor scores and risk domains scores, for the YLS/CMI, the YPI, and the ICU. Analyses are one-tailed as it was expected from the reviewed literature that the measures would be positively associated with each other.

Table A7

**Pearson Product-Moment Correlations between the YLS/CMI, the YPI, and the ICU (including Subscales and Factor scores) for the Diversion Sample ( $N = 70$ )**

	Measure	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	YLS/CMI Previous Offending	---	.26*	-.05	.16	.30*	.17	.15	.28*	.35*	.13	.17	.28*	.22*	.03	.22*	.13	.18
2	YLS/CMI Family Circumstances	.26*	---	.34*	.65*	.47*	.57*	.55*	.59*	.83**	.34**	.49**	.41**	.47*	.52**	.28**	.01	.45**
3	YLS/CMI Education/ Employment	-.05	.34**	---	.46**	.17	.21*	.34**	.24*	.50**	.29**	.26*	.29**	.32**	.31**	.26*	.12	.32**
4	YLS/CMI Peer Relationships	.16	.65**	.46**	---	.57**	.48**	.56**	.65**	.84**	.46**	.58*	.45**	.56**	.54**	.53**	.03	.59**
5	YLS/CMI Substance Abuse	.30*	.47**	.17	.57**	---	.39**	.45**	.46**	.69**	.18	.31**	.34**	.31*	.27**	.44**	.14	.43**
6	YLS/CMI Leisure/ Recreation	.17	.57**	.21*	.48**	.39**	---	.39**	.53**	.68**	.34**	.42**	.43**	.45**	.32**	.38**	.01	.38**
7	YLS/CMI Personality/ Behaviour	.15	.55**	.34**	.56**	.45**	.39**	---	.50**	.76**	.44**	.47**	.50**	.53**	.49**	.33**	.05	.47**
8	YLS/CMI Attitudes/ Orientation	.28**	.59**	.24*	.65**	.46**	.53**	.50**	---	.78**	.42**	.53**	.48**	.53**	.56**	.44**	.18	.60**
9	<b>YLS/CMI Total Score</b>	.35*	.83*	.50**	.84**	.69**	.68**	.76**	.78**	---	.48**	.60**	.58**	.62**	.58**	.52**	.10	.63**
10	YPI Grandiose - Manipulative	.14	.35**	.28**	.46**	.18	.34**	.44**	.42**	.48**	---	.65**	.68**	.92**	.31**	.24*	-.05	.28**
11	YPI Callous - Unemotional	.17	.49**	.26*	.59**	.31**	.42**	.47**	.53**	.56**	.6**	---	.56**	.82**	.54**	.44**	.08	.56**
12	YPI Impulsive - Irresponsible	.28**	.41**	.29**	.45**	.34**	.43**	.50**	.47**	.58**	.68**	.56**	---	.86**	.46**	.27*	-.09	.37**
13	<b>YPI Total Score</b>	.22*	.47**	.32**	.56**	.30*	.44**	.53**	.53**	.62**	.92**	.81**	.86**	---	.47**	.34**	-.04	.44**
14	ICU Callousness	.03	.52**	.31**	.54**	.27*	.32**	.49**	.56**	.58**	.31**	.54**	.46**	.48**	---	.33**	.16	.79**
15	ICU Uncaring	.23*	.28**	.26*	.53**	.44**	.38**	.33**	.44**	.52**	.24*	.44**	.27**	.34**	.33**	---	.18	.76**
16	ICU Unemotional	.13	.01	.02	.03	.14	.01	.05	.18	.09	-.05	.08	-.09	-.04	.16	.18	---	.50**
17	<b>ICU Total Score</b>	.18	.45**	.32**	.59**	.43**	.38**	.47**	.60**	.63**	.28**	.56**	.37**	.44**	.79**	.76**	.50**	---

\*  $p < .05$  (two-tailed) \*\*  $p < .01$  (two-tailed).

Table A8

**Pearson Product-Moment Correlations between the YLS/CMI, the YPI, and the ICU (including Subscales and Factor scores) for the Clinical Sample ( $N = 44$ )**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Measure Subscale/ Factor																	
1 YLS/CMI Previous Offending	---	-.05	-.01	.34*	.02	.11	.00	.19	.28	.11	.10	.05	.12	.02	-.03	.17	.04
2 YLS/CMI Family Circumstances	-.05	---	.09	.43**	.49**	.27	.58**	.46**	.71*	.47**	.22	.48**	.53**	.37*	.34*	.04	.39*
3 YLS/CMI Education/ Employment	-.01	.09	---	.22	-.11	.32*	.21	.27	.41**	.11	.36*	.23	.27	.16	.45**	.04	.32*
4 YLS/CMI Peer Relationships	.34*	.43**	.22	---	.47**	.45**	.33*	.64**	.78**	.24	.47**	.44**	.45**	.49**	.35*	.15	.49**
5 YLS/CMI Substance Abuse	.02	.49**	-.11	.47**	---	.29	.24	.48**	.58**	.14	.09	.25	.21	.34*	.31*	.27	.41**
6 YLS/CMI Leisure/ Recreation	.11	.27	.32*	.45**	.29	---	-.02	.50**	.55**	.05	.23	.36*	.25	.41**	.24	.02	.35**
7 YLS/CMI Personality/ Behaviour	.00	.59**	.02	.32*	.24	.02	---	.54**	.64**	.39**	.25	.46**	.49**	.35**	.37**	.04	.39**
8 YLS/CMI Attitudes/ Orientation	.19	.46**	.27	.65**	.48**	.50**	.54**	---	.85*	.21	.43**	.56**	.48**	.59**	.47**	.34	.65**
9 <b>YLS/CMI Total Score</b>	.29	.71**	.41**	.79*	.59**	.55**	.65**	.85	---	.37*	.43**	.59**	.59**	.56**	.53**	.22	.63**
10 YPI Grandiose - Manipulative	.11	.47**	.11	.24	.14	.05	.39**	.21	.37*	---	.45*	.45**	.84**	.10	.03	-.03	.06
11 YPI Callous - Unemotional	.10	.22	.36*	.47**	.09	.23	.25	.43**	.43**	.45*	---	.41*	.59**	.55**	.37*	.30*	.57**
12 YPI Impulsive - Irresponsible	.05	.48**	.23	.44**	.25	.36*	.46**	.56**	.59**	.45**	.41**	---	.80**	.54**	.53**	-.06	.55**
13 <b>YPI Total Score</b>	.12	.53**	.27	.45**	.21	.25	.49**	.48**	.59**	.84**	.59**	.80**	---	.45**	.34*	.05	.44**
14 ICU Callousness	.02	.37*	.16	.49**	.34**	.41**	.35*	.59**	.56**	.10	.55**	.54**	.45**	---	.54**	.08	.85**
15 ICU Uncaring	-.03	.34**	.45**	.35*	.31**	.24	.37**	.47**	.53**	.03	.37*	.53**	.34	.54**	---	.22	.84**
16 ICU Unemotional	.17	.04	.04	.15	.27	.02	.04	.34*	.22	-.03	.30*	-.06	.05	.08	.22	---	.41**
17 <b>ICU Total Score</b>	.04	.39*	.32*	.49**	.41**	.35**	.39**	.65**	.63**	.06	.57**	.55**	.44**	.85**	.84**	.41**	---

\*  $p < .05$  (two-tailed) \*\*  $p < .01$  (two-tailed).

---

## THE SELF-REPORTED OFFENDING SURVEY

---

### Self Reported Offending

The Self-Reported Offending Survey (SROS) was administered to participants' in *Phase Two* of the study, six-months after the initial assessment. This included 63 participants from the Diversion sample and 44 participants from the Clinical sample. Part 2 of the SROS asked participants to identify how many times (if any) they had committed any of the 31 listed offence items. Of interest was the total number of items that were carried out during the six-month follow-up period, as well as the amount of criminal variability (or versatility) across the eight domains of offending. Table A9 shows the percentage rates of all 33 self-report items for both the Diversion sample and the Clinical sample.

### Associations between the Risk Assessment Measures and the SROS Variables

The relationship between the three risk assessment measures and the outcome variables was explored using Pearson Product-Moment correlations and Point-Biserial Pearson Product-Moment correlations. The results for the Diversion sample and the Clinical sample are tabulated in Tables A10 and A11 respectively.

Table A9

**Percentage Rates of Self-Reported Offending Items for the Diversion Sample and the Clinical Sample**

SELF-REPORTED OFFENDING	DIVERSION N = 63		CLINICAL N = 44	
	n	%	n	%
<b>VIOLENCE</b>	<b>32</b>	<b>51</b>	<b>37</b>	<b>84</b>
Common Assault	31	49	33	75
Assault/ (Threat) with Intent to Rob	7	11	12	27
Threat to kill/ injure	4	6	7	16
Uses Weapon during Assault	5	7	7	16
Assault with Intent to Kill/ Injure	4	6	6	14
<b>WILFULL DAMAGE</b>	<b>26</b>	<b>37</b>	<b>34</b>	<b>77</b>
<b>ARSON</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>9</b>
<b>THEFT/ DISHONESTY</b>	<b>33</b>	<b>52</b>	<b>38</b>	<b>86</b>
Unlawfully takes Motor Vehicle	18	29	19	43
Unlawfully gets into Motor Vehicle	16	25	16	36
Burglary	15	21	15	34
Buy/ Sell/ Possess stolen goods	20	32	19	43
Theft ex shop <\$10.00	10	16	23	52
Theft ex shop <\$500.00	9	14	20	46
Theft ex shop >\$500.00	3	5	8	18
Theft ex person	21	33	8	18
Uses doc. for Pecuniary advantage	0	0	3	7
<b>GOOD ORDER OFFENCE</b>	<b>49</b>	<b>78</b>	<b>39</b>	<b>89</b>
Carried hidden weapon	20	32	20	46
Disorderly behaviour in public	28	44	29	66
Purchased (attempts) Alcohol	28	44	24	55
Fighting in Public - groups	24	38	15	34
Trespasses	15	24	18	41
<b>TRAFFIC OFFENCE</b>	<b>43</b>	<b>68</b>	<b>37</b>	<b>84</b>
Breach of Drivers Licence	43	68	37	84
Drank /consumed drugs and drove	16	25	17	39
Careless/ Dangerous Driving	12	19	16	36
Fails to stop for Police	5	8	2	5
<b>SEXUAL OFFENCE</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>
<b>DRUG RELATED OFFENCE</b>	<b>30</b>	<b>43</b>	<b>24</b>	<b>55</b>
Grown Cannabis	0	0	4	9
Possess Cannabis in public	26	41	21	48
Possess Methamphetamine in public	0	0	0	0
Sold Cannabis	13	21	11	25
Sold Methamphetamine	1	2	0	0



Table A10

**Pearson Product-Moment Correlations between the Three Risk Assessment Measures and Self-Reported Outcome Variables for the Diversion Sample ( $N = 63$ )**

Measure	SROS Total Score	Police Contact	Court Contact	Plan Adherence
<b>YLS/CMI Total Score</b>	.64**	.43**	.52**	.50**
YLS: Previous Offending	.34**	.21	.35**	.22*
YLS: Family/ Parenting	.53**	.26*	.44**	.49**
YLS: Education/ Employment	.41**	.14	.16	.29*
YLS: Peer Relationships	.54**	.33**	.43**	.41**
YLS: Substance Abuse	.43**	.15	.26*	.29**
YLS: Leisure/ Recreation	.34**	.50**	.51**	.46**
YLS: Personality/ Behaviour	.51**	.34**	.37**	.33**
YLS: Attitudes/ Orientation	.52**	.47**	.47**	.32**
<b>YPI Total Score</b>	.31**	.29**	.36**	.31**
YPI: Dishonest Charm	.12	.15	.19	.14
YPI: Grandiosity	.04	.11	.17	.11
YPI Lying	.14	.14	.15	.19
YPI Manipulation	.25*	.08	.17	.22*
<i>YPI Grandiose/ Manipulation</i>	.16	.14	.19	.19
YPI: Remorselessness	.20	.32**	.27*	.27*
YPI: Unemotionality	.26*	.22*	.25*	.27*
YPI Callousness	.41**	.24*	.38*	.13
<i>YPI: Callous/ Unemotional</i>	.37**	.34**	.39**	.29*
YPI: Thrill Seeking	.18	.28*	.31**	.25*
YPI Impulsivity	.25*	.29**	.38**	.35**
YPI Irresponsibility	.42**	.33**	.35**	.25*
<i>YPI: Impulsive/ Irresponsible</i>	.34**	.36**	.41**	.35**
<b>ICU Total Score</b>	.38**	.34**	.21*	.18
<i>Callousness Factor</i>	.24*	.32**	.23*	.26*
<i>Uncaring Factor</i>	.42**	.31**	.19	.13
<i>Unemotional Factor</i>	.10	.00	-.06	-.11

\*  $p < .05$  (one-tailed) \*\*  $p < .01$  (one-tailed).

Table A11

**Pearson Product-Moment Correlations between the Three Risk Assessment Measures and Self-Reported Outcome Variables for the Clinical Sample ( $N = 44$ )**

Measure	SROS Total Score	Police Contact	Court Contact	Plan Adherence
<b>YLS/CMI Total Score</b>	.37*	.51**	.39**	.19
YLS: Previous Offending	.11	.08	.05	.02
YLS: Family/ Parenting	.09	.32*	.32*	.02
YLS: Education/ Employment	.29*	.42**	.05	.05
YLS: Peer Relationships	.30*	.34*	.30*	.12
YLS: Substance Abuse	.27*	.10	.26*	.18
YLS: Leisure/ Recreation	.38**	.33*	.34*	.19
YLS: Personality/ Behaviour	-.12	.06	.08	.02
YLS: Attitudes/ Orientation	.29*	.43**	.27*	.23
<b>YLS/CMI Follow-up Score</b>	.60**	.73**	.64**	.47**
YLS: Previous Offending	.26*	.16	.17	.00
YLS: Family/ Parenting	.38*	.63**	.57**	.39**
YLS: Education/ Employment	.07	.34*	.09	.07
YLS: Peer Relationships	.51**	.53**	.56**	.35**
YLS: Substance Abuse	.54**	.45**	.49**	.41**
YLS: Leisure/ Recreation	.34*	.43**	.33*	.31*
YLS: Personality/ Behaviour	.29*	.38**	.37**	.27*
YLS: Attitudes/ Orientation	.59**	.63**	.53**	.51**
<b>YPI Total Score</b>	.35*	.30*	.29	.27
YPI: Dishonest Charm	.23	.15	.12	.05
YPI: Grandiosity	.22	.06	.17	.17
YPI Lying	.12	.08	.10	.04
YPI Manipulation	.27*	.17	.27*	.06
<i>YPI Grand/ Manipulation</i>	.24	.13	.19	.09
YPI: Remorselessness	.23	.33*	.26*	.27*
YPI: Unemotionality	-.15	-.02	.08	.19
YPI Callousness	.25	.18	.13	.24
<i>YPI: Callous/ Unemotional</i>	.18	.24	.22	.32*
YPI: Thrill Seeking	.28*	.19	.16	.18
YPI Impulsivity	.36**	.35*	.25*	.32*
YPI Irresponsibility	.32*	.36**	.29*	.25*
<i>YPI: Impulsive/ Irresponsible</i>	.38**	.36**	.28*	.30*
<b>ICU Total Score</b>	.53**	.49**	.34*	.43**
<i>Callousness Factor</i>	.42**	.44**	.40**	.45**
<i>Uncaring Factor</i>	.42**	.35**	.17	.28*
<i>Unemotional Factor</i>	.35**	.26*	.10	.21*

\*  $p < .05$  (one-tailed) \*\*  $p < .01$  (one-tailed).

