

**THE EFFECTS OF POSITIVE PEER CULTURE ON THE RECIDIVISM RATES
OF MALE YOUNG OFFENDERS IN MANITOBA**

A thesis

presented to the University of Manitoba

in partial fulfillment of the requirements for the degree

MASTER OF SOCIAL WORK

Michael Dylan Caslor

2003

THE UNIVERSITY OF MANITOBA
FACULTY OF GRADUATE STUDIES

COPYRIGHT PERMISSION PAGE

**The Effects of Positive Peer Culture on the Recidivism Rates of
Male Young Offenders in Manitoba**

BY

Michael Dylan Caslor

**A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University
of Manitoba in partial fulfillment of the requirements of the degree
of
MASTER OF SOCIAL WORK**

MICHAEL DYLAN CASLOR ©2003

Permission has been granted to the Library of The University of Manitoba to lend or sell copies of this thesis/practicum, to the National Library of Canada to microfilm this thesis and to lend or sell copies of the film, and to University Microfilm Inc. to publish an abstract of this thesis/practicum.

The author reserves other publication rights, and neither this thesis/practicum nor extensive extracts from it may be printed or otherwise reproduced without the author's written permission.

I hereby declare that I am the sole author of this thesis.

I authorize the University of Manitoba to lend this thesis to other institutions or individuals for the purposes of scholarly research.

Michael Caslor

I further authorize the University of Manitoba to reproduce this thesis by photocopying or by other means, in total or in part, at the request of other institutions or individuals for the purpose of scholarly research.

Michael Caslor

Abstract

The study analysed a sample of male youth correctional discharges within Manitoba from January 1, 2000 to December 31, 2000. Agassiz Youth Centre (AYC) discharges were compared to a matched sample of discharges from other institutions using archival data (N = 150). Subsequent numbers of charges, convictions, months incarcerated and times incarcerated from each group were examined over two years in order to assess the effectiveness of AYC's Positive Peer Culture (PPC) program. These variables were compared while controlling for age, race, education, place of residence, family background, gang affiliation, type of offence, seriousness of most serious offence, number of times incarcerated, past risk of suicide, and risk to reoffend. Results suggest that PPC does have a significant impact on certain measures of recidivism, including total number of times incarcerated, total number of months incarcerated, seriousness of the most serious offence and time before reinvolvement. Exploratory analysis also measured PPC's comparative effect on offenders with different personal characteristics. Results suggest that youth who live in rural areas, who do not have a history of suicide risk, who reside with at least one parent, or who are a low risk to reoffend had better outcomes if they were discharges from AYC than from the comparison group. Although this study is unable to isolate all confounding variables, it will be able to give some insight into the effect of PPC on recidivism. Recommendations address the application and interpretation of PPC at AYC as well as the direction for future research. An extensive literature review is also included.

Acknowledgments

Over the time it has taken to complete this project, many people have contributed to its fruition. Foremost, I must thank my advisor, Denis Bracken, for his regular guidance, encouragement and wisdom. A special thank you to Brenda Bacon for being a regular contributor to my entire graduate experience and particularly in the "end days" as we battled through multiple regression analysis together. I would also like to thank my external committee member, Russell Smandych, for his insights and for editing my manuscripts.

This project would not have been possible without the support of the Department of Justice. A special thanks to Carolyn Brock, Acting Executive Director, and Ron Coles, Director of Research and Evaluation, for supporting this research. I would also like to thank the administrations from each youth correctional facility for their cooperation, especially at the Agassiz Youth Centre. I have immensely enjoyed my time there.

In a more general way, I would like to thank Trevor Markesteyn for his early role in shaping my professional career direction. It was probably the project at HCI that cemented my passion for research and evaluation. Thank you Trevor for your continued support.

I would like to thank my parents (Paul and Jackie) and my siblings (Angela and Matthew) for their regular encouragement and early contribution to who I am today. Finally, I would like to thank Jessica, my wife, for her amazing tolerance of late night (and all night) typing/printing marathons and for trying to care about the amazing world of multivariate analyses. Thank you for being there, all of you.

Table of Contents

Abstract	iv
Acknowledgments	v
Table of Contents	vi
Introduction	1
Historical Roots	3
Theoretical Roots	6
Basic Principles	11
Program Goals	12
Program Assumptions	12
Program Roles	15
Staff expectations	15
Staff techniques	17
Youth expectations	20
Program Components	21
12 problems	21
3 Cs	25
Group meeting	26
Stages of Group	28
Essential Components	33
Effectiveness	38
Self-Concept	38
Inappropriate Behaviour	40
Antisocial Attitudes	41
Recidivism	42
Conclusions	46
Program Limitations	46
The Agassiz Youth Centre	50
The Problem	51
Research Questions	52
Research Hypotheses	52

Design	55	
Method	55	
Variables	57	
Sampling	59	
Source of Data	65	
Results	66	
Effects of Place of First Incarceration	66	
Effect at next incarceration	66	
Effect on longer term recidivism	74	
Effects of Place of Multiple Incarcerations on Longer-Term Recidivism	81	
Multiple Regression	84	
Factors predicting total number of charges	88	
Factors predicting total number of convictions	91	
Factors predicting total number of months incarcerated	94	
Factors predicting total number of times incarcerated	97	
Discussion	101	
PPC's Effect on Recidivism	101	
The Effect of Individual Characteristics on PPC's Success	103	
Limitations	107	
Recommendations	110	
References	112	
Appendix A	Classification of Offences	136
Appendix B	Description of EQUIP Program	139
List of Tables		
Table 1	Nominal Level Population Characteristics by Place of Discharge	60
Table 2	Ordinal Level Population Characteristics by Place of Discharge	61
Table 3	Ratio Level Population Characteristics by Place of Discharge	61
Table 4	Nominal Sample Characteristics by Place of Discharge	63
Table 5	Ordinal Sample Characteristics by Place of Discharge	64
Table 6	Ratio Sample Characteristics by Place of Discharge	64
Table 7	The Difference Between the Recidivism Rates at AYC and Other at Next Incarceration	66

Table 8	The Difference Between the Recidivism Rates at AYC and Other at Next Incarceration Across the Individual Characteristics of the Youth	68
Table 9	The Difference Between the Recidivism Rates at AYC and Other After Two Years	74
Table 10	The Difference Between the Recidivism Rates at AYC and Other After Two Years Across the Individual Characteristics of the Youth	77
Table 11	The Difference Between the Recidivism Rates of Those with Multiple Discharges from AYC and Other After Two Years	82
Table 12	The Difference Between the Recidivism Rates for Those with Multiple Discharges from AYC and Other After Two Years Across the Individual Characteristics of the Youth	85
Table 13	Hierarchical Regression Analysis for variables predicting Total Number of Charges using the Whole Sample	89
Table 14	Hierarchical Regression Analysis for variables predicting Total Number of Charges using the Matched Sample	90
Table 15	Hierarchical Regression Analysis for variables predicting Total Number of Charges using Multiple Discharges from the Same Group	91
Table 16	Hierarchical Regression Analysis for variables predicting Total Number of Convictions using the Whole Sample	92
Table 17	Hierarchical Regression Analysis for variables predicting Total Number of Convictions using the Matched Sample	93
Table 18	Hierarchical Regression Analysis for variables predicting Total Number of Convictions using Multiple Discharges from the Same Group	94
Table 19	Hierarchical Regression Analysis for variables predicting Total Number of Months Incarcerated using the Whole Sample	95
Table 20	Hierarchical Regression Analysis for variables predicting Total Number of Months Incarcerated using the Matched Sample	96

Table 21	Hierarchical Regression Analysis for variables predicting Total Number of Months Incarcerated using Multiple Discharges from the Same Group	97
Table 22	Hierarchical Regression Analysis for variables predicting Total Number of Times Incarcerated using Whole Sample	98
Table 23	Hierarchical Regression Analysis for variables predicting Total Number of Times Incarcerated using Matched Sample	99
Table 24	Hierarchical Regression Analysis for variables predicting Total Number of Times Incarcerated using Multiple Discharges from the Same Group	100

List of Figures

Figure 1	The Difference Between the Length of Next Incarceration at AYC and Other Across Race Using the Matched Sample	69
Figure 2	The Difference Between the Number of Charges at Next Incarceration at AYC and Other Across PRA Risk Score Using the Matched Sample	70
Figure 3	The Difference Between the Length of Next Incarceration at AYC and Other Across PRA Risk Score Using the Matched Sample	71
Figure 4	Time Until Next Charge After First Release	73
Figure 5	Time Until Next Incarceration After First Release	73
Figure 6	The Difference Between the Total Number of Months Incarcerated After Two Years at AYC and Other Across Place of Residence Using the Matched Sample	78
Figure 7	The Difference Between the Total Number of Months Incarcerated After Two Years at AYC and Other Across Family Status Using the Matched Sample	79
Figure 8	The Difference Between the Total Number of Charges After Two Years at AYC and Other Across PRA Risk Score Using the Matched Sample	80
Figure 9	The Difference Between the Seriousness of the Youth's Most Serious Offence after Multiple Discharges from the Same Group	83

Figure 10	The Difference Between the Total Number of Charges for Those with Multiple Releases from AYC and Other Across History of Suicide Risk	86
Figure 11	The Difference Between the Total Number of Convictions for Those with Multiple Discharges from the Same Group Across History of Suicide Risk	87

Introduction

Over the past three decades, a theoretical shift has occurred in the criminal justice system. This shift has affected the perceived purpose of corrections and the best interventions to reduce recidivism. A theoretical pendulum has swung in corrections from a justice focus to a rehabilitation focus. The justice perspective states that rehabilitation and "treatment" does not reduce recidivism; these "soft" interventions do not hold offenders accountable or deter future offending, therefore, recidivism is unaffected. Scared Straight, "Bootcamps" and "getting tough on youth crime" are all justice-based initiatives. A rehabilitation perspective asserts that punishment and deterrence simply creates angrier and more hardened criminals; consequently rehabilitation and treatment is seen as the best ways to reduce recidivism. Rehabilitative interventions could include anger management, addictions counselling or vocational training (Andrews, Zinger, Hoge, Bonta, Gendreau and Cullen, 1990).

In the 1974, the justice perspective gained momentum with Robert Martinson's publication of What Works? Questions and Answers about Prison Reform. Martinson stated "the rehabilitative efforts that have been reported so far have no appreciable effect on recidivism" (Martinson, 1974, p. 25). This report led to the claim that "nothing works" in correctional rehabilitation. This perspective gained popularity through the early 1980's, consequently correctional facilities largely abandoned treatment efforts and focused on punishment and deterrence to decrease recidivism (Bernard, 1992; Rothman, 1980).

An empirical response to Martinson's work and the justice perspective began to gain momentum in the 1980's. Research (Basta & Davidson, 1988; Currie, 1989; Garrett,

1985; Geismar & Wood, 1985; Greenwood & Zimring, 1985; Lipsey, 1989; Palmer, 1983; Ross & Fabiano, 1985) started identifying programs that had an effect on certain offenders under certain conditions. This was the beginning of the "principles of effective practice" literature; this body of literature is now a driving force in the development of effective correctional programs. In essence, advocates of the rehabilitation perspective claim "some things do work". This perspective is widely held by contemporary correctional officials and program developers.

The first edition of Positive Peer Culture written by Harry Vorrath and Larry Brendtro was published in 1974, the same year as the Martinson report. Unlike the popularly held beliefs that only punishment and deterrence could reduce recidivism, Vorrath and Brendtro offered a very different perspective. The foreword to their book states that " the central position of this book is that young people can develop self-worth, significance, dignity and responsibility only as they become committed to the positive values of helping and caring for others" (Vorrath & Brendtro, 1973, p. xi). Not surprisingly, this model was not widely accepted by the mainstream criminologists of that era. In spite of this limitation, Positive Peer Culture (PPC) was implemented in several correctional facilities throughout the 1970's and continues to be run in many facilities across North America.

Although many of PPC's basic principles have been practiced since the 1950's (McCorkle, Elias & Bixby, 1958), the model is still not well understood or accepted. This study not only addresses the general impact of PPC on the recidivism rates of young offenders, but also the specific effect of PPC on certain types of offenders. The research will also inform stakeholders about the history, theory, practices and innovations

surrounding PPC as a rehabilitative intervention model.

First, the historical origins of the model will be discussed followed by its theoretical roots. Second, a brief overview of the model's basic principles and components is included. This will include the model's goals, assumptions, expectations, therapeutic techniques as well as the intervention's active elements. Third, the model will be assessed according to its theoretical position regarding group dynamics and the stages of group development. Fourth, complications arising from program modification will be considered and guidelines will be given to ensure that the program's basic principles are maintained. Fifth, the model's efficacy will be considered by assessing the program's performance during actual evaluations. Finally, the program limitations will be considered followed by a brief review of the Agassiz Youth Centre.

Historical Roots

Positive Peer Culture (PPC) is a therapeutic model for young offenders that have been developed through the experience of many authors and practitioners. Although PPC was publicized with Vorrath and Brendro's (1974) publication of Positive Peer Culture, its roots existed far before. PPC's foundation, the group based intervention, has been utilized since the turn of the last century, when Pratt (1907) used the group process to motivate tubercular and psychotic patients in a residential medical centre. Jones' (1953, 1956, 1968) concept of the therapeutic communities also possibly contributed to the development of this group based intervention (Agee & McWilliams, 1984). The therapeutic community model emphasizes the importance of cooperative decision-making through group empowerment (Jones, 1953) as well as the importance of normalized treatment within real life situations (Jones, 1968).

In a more direct way, PPC is an adaptation of Guided Group Interaction (GGI) (McCorkle, Elias, & Bixby, 1958), a model that was popular during the 1960's and 1970's. GGI was developed by McCorkle (1949) at the Fort Knox Rehabilitation Centre in Kentucky near the end of World War II to reform delinquent and unfit soldiers (Harstad, 1976). Although individual psychotherapy was the foundation of the treatment program, many (Abrahams & McCorkle, 1946; Stephenson & Scarpitti, 1974) have recognized that this was the first serious attempt to use the group process in the treatment of offenders. In 1950, McCorkle implemented GGI at Highfields in Hopewell, New Jersey. This residential treatment program for delinquent youth met early success (McCorkle, Elias & Bixby, 1958; Weeks, 1958) and GGI gained momentum. By the early 1970's, GGI programs had been established at Collegefields (Pilnick et al., 1967) and Essexfields (Pilnick, Elias & Clapp, 1966) in New Jersey, at Silverlake in Los Angeles (Empey & Lubeck, 1971), at Southfields in Kentucky (Miller, 1970) and at the Pinehills Program Centre in Utah (Empey, 1966; Empey & Erickson, 1972; Empey & Rabow, 1961).

At about this same time, Harry Vorrath, who began as a group leader in the Highfields program, began implementing a modified GGI program in other community and residential settings. This revised form of GGI was first implemented at the State Training School for Boys in Red Wing, Minnesota in 1968 and later was renamed Positive Peer Culture (Vorrath & Brendtro, 1974). Since this time, PPC has also been modified into Peer Group Counselling (Boehm, 1976), The Teaching Family Model (Ammons, 1979), The Iowa Group Work Program (Grasso & Hoel, 1982), Group Behavior Management Program (Virden, 1984), Peer Culture Development (Hoover,

1984), Peer Mediation Intervention (Salend, Jantzen & Giek, 1992), Peer Group Process (Giacobbe & Traynelis-Yurek, 1993) and most recently EQUIP (Leeman, Gibbs & Fuller, 1993). PPC type programs have been used in a variety of different locations including maximum-security correctional facilities (Agee & McWilliams, 1984), schools (Boehm, 1976; Eggert, Nicholas & Owen, 1995; Franklin & Streeter, 1991; Giles, 1975; Minneapolis Public Schools, 1972), and group homes (Keller & Alper, 1970). It has been used with boys and girls (Cronin, 1974; Vincent, Houlihan & Mitchell, 1994) ranging in age from young children (Kreisle, 2002; Virden, 1984) to older adolescents (Hoover, 1984). PPC has also addressed a variety of different problems including mental illness (Cronin, 1974; Herstien & Simon, 1977), violence (Agee, 1987), sexual offending (Brannon & Troyer, 1991; Heinz, Gargaro & Kelly, 1987) and chemical dependency (Fodesi & Soyering, 1993). There is also evidence that PPC may be effective within a multicultural context (Kreisle, 2002; Moody & Lupton-Smith, 1999; Sherer, 1985; Shindo, 1981).

Many authors (Garrett, 1985; Gottfredson, 1987; Harstad, 1976; Meyer, 1974) have stated that GGI and PPC contain only minor differences, while PPC's authors (Vorrath & Brendtro, 1974; 1985) maintain that the more contemporary model is significantly modified. Vorrath asserts that without the caring focus offered by PPC, GGI is susceptible to becoming "adult-sanctioned peer bullying under the guise of treatment" (Brendtro, 1994, p. iv). Although the models share the same theoretical foundation and utilise similar terminology and group meeting formats (Brabant, 1990; Taylor & Hepburn, 1977), there are differences. According to Stacy (1985), GGI tends to use larger groups than PPC (20 versus 9 residents); GGI tends to be more confrontational,

while PPC tends to be more supportive (Moody & Lupton-Smith, 1999; Vorrath & Bredtro, 1985). The therapeutic impact of these differences has largely been empirically overlooked, but Robinson (1980) found that PPC slightly outperformed GGI across measures of self-esteem, attitudinal change, anger management and recidivism. These marginal results do not adequately clarify the issue. For this reason, a distinction will be made between PPC and other group based treatment programs whenever possible and appropriate.

Theoretical Roots

PPC is theoretically rooted in the work of Sutherland's (1947) differential association theory, Cohen's (1955) delinquency subculture theory and Sykes's (1958) concept of the pains of imprisonment. Like PPC, each theory identifies the important impact that delinquent subcultures have on the behaviour of individuals and the therapeutic potential of correctional institutions. Sutherland's (1947) differential association theory states that "criminal behaviour, just like any other type, is learned and that it is learned through association and interaction with others who were already delinquent" (Stephenson & Scarpitti, 1974, p. 6). The most influential learning occurs within the context of intimate personal peer groups. This learning not only includes the practical techniques for committing crime but also the motives, drives, rationalizations and attitudes that support these criminal behaviours (Sutherland, 1947). "A person becomes delinquent because of an excess of definitions favourable to violation of law over definitions unfavourable to violation of law" (Sutherland & Cressey, 1978, p. 81). In this sense, differential association theory recognizes a criminal continuum based on varied "frequency, duration, priority and intensity" of criminal associations (Sutherland,

1947, p. 7). Sutherland (1947) also asserts that criminals commit crimes for the same reasons that law-abiding citizens seek “honest employment”; these may include financial security and social approval. Theoretically, delinquency can be unlearned by altering a delinquent’s intimate peer group into a more positive, law abiding cohort.

PPC recognizes the power of the peer group (Gold & Osgood, 1992; Vorrath & Brendtro, 1985). As many authors (Berger, 1977; Elliott, Huizinga & Ageton, 1985; Hawkins, Catalano & Miller, 1992; King & Coles, 1992; Schaefer, 1980; Whittaker, 1979a) have found, the peer group has a substantial influence on the lives of today’s youth and not surprisingly the biggest impact in a correctional environment (Brendtro & Wasmond, 1989; Feldman, 1983; Flackett & Flackett, 1970; Gibbs, 1993; Jussim & Osgood, 1989; Lyman, Prentice-Dunn, Wilson & Taylor, 1989; Polsky, 1962). For these reasons, PPC aims to transform the negative peer group, which perpetuates criminal behaviour, into a prosocial peer group that reforms youth. “As the peer group culture develops, students begin to adopt positive expectations and theories of behaviour modeled by adults and other youths” (Brendtro, 1988, p. 21). The means that are used to accomplish this transformation will be discussed later. Vorrath & Brendtro (1985) state that as youth experience the benefits of caring and helping, within a socially supportive environment, they will no longer be prone to a life of crime, in other words, they have unlearned criminality.

Cohen (1955) found that most delinquent behaviour occurs within the context of groups rather than individuals. Contrary to Sutherland (1947), Cohen (1955) found that most juvenile crime did not serve any utilitarian function. Based on these findings, Cohen (1955) suggested that these criminal actions are an attempt to gain social status

from their impoverished peer cohort. Consequently, the theory states that delinquent subcultures develop when lower-income youth feel that they cannot attain the goals of the middle class society. This experience of social rejection causes youth to discard the mainstream culture and create a counterculture that is often against mainstream norms and values. These powerfully influential delinquent groups tend to violate conventional norms by committing crime and breaking laws (Allen, Pilnick & Silverzweig, 1969). Cohen (1955) even goes as far as to say that impoverished youth are more dependant and influenced by their peer group, as compared to youth from a higher social class, since these youth generally gain less status from their families and schools. This position has gained more recent support from the work of Schaefer (1980) who found that there was an inverse relationship between the impact of parents and peers on the lives of youth. In other words, as the social influence of the families decreases, the influence of peers increases. In a more general sense, the link between peers and the behaviour of youth have been well established in more recent literature (Berenson, 1988; Harris, 1998; Hawkins, Catalano & Miller, 1992; Jussim & Osgood, 1989; King, Wold, Tudor-Smith & Harel, 1996; Thornberry & Krohn, 1997; Saunders, Rusnick, Hoberman & Blum, 1994).

PPC empowers youth to succeed at a variety of prosocial tasks by “demanding greatness” from them (Harstad, 1976). Maximizing the opportunities to accomplish prosocial goals and minimizing the opportunities to engage in antisocial goals does this. For this reason, keeping youth busy and productive is an important part of the rehabilitation program (Brendtro, 1994; Brendtro & Ness, 1983; McCorkle, Elias & Bixby, 1958; Stephenson & Scarpitti, 1974). This can be done through community service projects (Brendtro, 1985) or through helping each other in group meetings. Staff

empowers the group to take responsibility for each other and to come to a shared group goal (Brendtro & Ness, 1983; Meyer, 1974; Whittaker, 1979a). This group ownership of goals ensures that the group does not feel that expectations are excessive or unilateral (Atwood & Osgood, 1987; Kapp, 2000), otherwise encouraging the development of a more antisocial subculture (Gold & Osgood, 1992; Martin & Osgood, 1987; Osgood, Gruber, Archer & Newcomb, 1985; Schaefer, 1980). In these ways, PPC theoretically discourages the development of antisocial youth subcultures that thrive in traditionally oppressive environments.

Finally, PPC is based on Sykes's (1958) deprivation theory. This theory states that the pains of imprisonment, including loss of liberty, individual autonomy, personal security, and goods and services, deeply affect the inmate subculture. These difficulties seem just as applicable today as they did in the late 1950's (Brannon, Brannon, Craig & Martray, 1988; Wortley, 2002). These difficult factors stimulate the growth of inmate subcultures that help minimize these pains. Clemmer (1940) discussed a similar phenomenon called prisonization that describes the process whereby new inmates are socialized into the norms and values of the prison inmate population. These subcultures are generally anti-staff and anti-authority; as the pains of imprisonment increase through escalating sanctions and coercive control, the inmate subculture grows more cohesive.

Peer group interventions aim to avoid the pains of imprisonment that breed anti-establishment subcultures (Pilnick, 1971; Stephenson & Scarpitti, 1970). This atmosphere is created by replicating life on the outside of jail by involving work, school, sport, and free time into the institution's daily regime (Brendtro & Ness, 1982; McCorkle, Elias & Bixby, 1958; Weeks, 1963; Whittaker, 1979b). In addition to this

normalized routine, PPC insists that the correctional environment must be safe and supportive before any therapeutic progress can be made (Brendtro, 1994); this further decreases these imprisonment pains. PPC also recognizes how inmate autonomy positively affects treatment outcomes (Atwood & Osgood, 1987; Erst, 1977; Martin & Osgood, 1987; Pilnick, 1971). Cooperative decision-making has long been recognized as an important component of creating a therapeutic community (see Jones, 1953, 1956, 1968). For this reason, PPC encourages group decision-making and group empowerment. PPC staff are expected to “control without controlling” – a delicate balance between maintaining the safety and security of the institution while avoiding an authoritarian aura (Turnquist, 1984). The resultant sense of autonomy not only mitigates the growth of antisocial subcultures, but it also maximises the therapeutic potential of the program. Theoretically, there is a positive relationship between the pains of imprisonment and prisonization, and these concepts have a negative relationship with therapeutic outcomes.

PPC is a peer oriented group intervention that empowers other youth to actively become involved in the treatment process. In this way, it captures the power of peers and utilizes “peer pressure” to compel youth toward caring for others (Atwood & Osgood, 1987; Osgood, Gruber, Archer & Newcomb, 1985; Wasmund, 1988b) and not toward rebellious behaviour that is traditionally associated with incarcerated peer groups. Creating a cooperative therapeutic environment (see Jones, 1953, 1956, 1968) and avoiding a coercive, controlling environment (Brendtro, 1988; Brendtro & Ness, 1983; Schaefer, 1980) accomplishes this. The potential of the peer becomes clear when one considers that peers have the greatest influence on the behaviour of youth (Brendtro &

Ness, 1983; Gibbs, 1993; Schaefer, 1980; Sherer, 1985), and that inmate culture has a significant effect on treatment outcomes (Lyman, Prentice-Dunn, Wilson & Taylor, 1989; Schaefer, 1980). Therefore, “delinquents will be more responsive to change if pressure comes from his peers and not from correctional authority” (Flackett & Flackett, 1970, p. 30). This is the basic premise of PPC.

In summary, PPC states that antisocial peers are a major cause of crime in juveniles (Brendtro & Ness, 1983). Antisocial peer groups generally thrive in the repressive, controlling environment of juvenile correctional centres; this compromises the institution's therapeutic effectiveness. PPC aims to harness the power of the peer group and direct youth towards unlearning criminal behaviour via the same means by which they learned it; their social interactions with peers. The peer group is not only seen as a major cause of delinquency, but it can be directed towards becoming a significant part of the cure as well.

Basic Principles

PPC is an intensive program that attempts to alter a youth's peer environment in a way that would encourage positive self-reflection and change. Several specific aspects of the program will be considered below. Once the program's primary goal is examined, a review of the program's assumptions will be outlined. Second, the basic roles of the program will give insight into specifically how youth and staff behave in a PPC program; these roles will include staff expectations, staff techniques, and youth expectations. Finally, the basic components of the program will be considered; these include the 12 problems, the 3 Cs and the group meeting.

Program Goals

The ultimate goal of PPC tends to vary depending on the orientation of the writer. Some emphasise the importance of increasing self-esteem, others focus on controlling behaviour, while others desire to decrease recidivism. In spite of this ambiguity, many authors agree that PPC generally aims to change a youth's behaviours, attitudes and values (Alissi, 1987; Davis, Hoffman & Quigley, 1988b; Moody & Lupton-Smith, 1999). It is also agreed that PPC focuses on transforming negative youth peer groups into prosocial support groups (Brendtro & Ness, 1991; Gibbs, Potter, Barriga & Liao, 1996; Stacy, 1985). Many authors would agree that the goal of PPC is to create a climate of change through care and concern that enables peers to experiment with caring and helping one another in a supportive environment; thereby experiencing the benefits of prosocial behaviour, the youth will be compelled to adopt more prosocial behaviour, attitudes and values after release. Inherent within this goal are many assumptions that must be found true if PPC is to have its desired effect.

Program Assumptions

Although there are many theoretical assumptions that must be accepted before critics can accept the efficacy of PPC, these assumptions have not been adequately identified in the literature. The following list of assumptions represents the accumulated work of many authors (Erst, 1977; Harstad, 1979; Martin & Osgood, 1987; Leeman, Gibbs & Fuller, 1993; Pilnick, 1971; Vorrath & Brendtro, 1985; Wasmond, 1988b).

- Delinquency is primarily a peer group phenomenon.
- An individual's behaviours, attitudes and values will be predictably based on peer group characteristics.

- Peer group characteristics can be directed in a prosocial direction.
- Once an individual experiences the intrinsic benefit of prosocial behaviours, attitudes and values (within a PPC group), the youth will internalize these values and reject the clearly inferior criminal values.
- Once these prosocial behaviours, attitudes and values are adopted, they will continue to guide and direct the youth after release.

Since the efficacy and credibility of PPC rests on the stability of these assumptions, it is important that they are explicitly identified and critiqued. Critics of PPC have questioned the assumption that all youth are equally affected by their peers. Some authors (Glasser, 1975; Ho, 1974; Lee, 1995, 1996; Leeman, Gibbs & Fuller, 1993) state that “loners” and maladjusted youth do poorly in PPC-like interventions since, for these youth, peer groups have a minimal influence on their behaviour. Therefore, the assumption that delinquency is a group phenomenon may also be compromised since some youth are more prone to act regardless of peer influence.

The Missouri General Assembly House of Representatives (1980) pointed out that peer group interventions might encourage submission and “faking the system” more than true internal change. Since participation is generally mandatory and early release may depend on success in the program, individuals may feel coerced into putting on a positive front (faking) (Kapp, 2000). This positive front, therefore, could easily taint outcome evaluations of PPC programs since assessments may be measuring a false change versus a real change. Although PPC states that this front will eventually become genuine once the intrinsic benefits of prosocial behaviour, attitudes and beliefs are realized, this also has to be questioned (Gibbs, Potter & Goldstein, 1995; Gottfredson, 1987).

Consequently, many (Brendtro & Wasmond, 1989; Garrett, 1985; Gold, 1974; Jussim & Osgood, 1989; Morrison, 1993; Palmer & Herrera, 1972; Slotnick, 1977) have questioned whether the impact of peer-based interventions have a lasting effect after release. While this might relate to the possibility that youth “fake it” while in PPC groups and no real change occurs, it may also relate to the following possible contradiction within the assumptions of PPC. While PPC asserts that individuals are affected by peer group characteristics (whether positive or negative) prior to and during incarceration, it appears that PPC assumes that the values learned while incarcerated within a PPC group will remain regardless of the characteristics of future peer groups after release. As an illustration, PPC claims that delinquent peers contribute to the criminality of those around them; this creates more criminals. Once the youth is within a PPC group, the positive support of his peers encourages prosocial behaviour. PPC's position is that these prosocial values are internalized and guide the youth after release. It seems more logical that the youth would continue to adopt the characteristics of his peer group (whether positive or negative) just as he had done before and during incarceration. PPC does not explicitly advocate for any post release follow up peer support. Some state (Gibbs, 1993; Gibbs, Potter & Goldstein, 1995) that PPC overlooks the impact of future delinquent peer groups and does not properly equip youth to deal with this difficulty. Advocates of PPC have responded by saying that PPC increases the self-esteem of youth to the degree that they are less prone to the future impact of negative peers (Gold & Osgood, 1992), but mainstream research has largely been unable to link self-esteem and recidivism (Andrews, Bonta & Hoge, 1990; Andrews, Zinger, Hoge, Bonta, Gendreau & Cullen, 1990; Bonta, 1997; Gendreau & Andrews, 1990). This section briefly addresses

the underlying assumptions of PPC as well as highlights some of the popular critiques relating to the program's assumptions.

Basic Roles

This overview is meant to be a brief introduction to the basic roles of the Positive Peer Culture Program. For a more exhaustive review of the program, Positive Peer Culture by Vorrath and Brendtro (1985) is a good start. Clearly outlined roles for both the staff and the residents within PPC programs will be considered. A review of basic staff interventions will also be included.

Staff expectations. Staff at PPC facilities have a variety of complex responsibilities. While many seem contrary to a traditional correctional paradigm, properly trained staff is an essential part of a successful PPC type program (Brendtro, 1994; Ferrara, 1992; Grissom, 1981; Moody & Lupton-Smith, 1999; Stacy, 1985). Laufenberg (1987) found that “the weakest aspect of many PPC programs is a poorly trained staff” (p. 141). Staff are responsible for creating a “climate for change” (Vorrath & Brendtro, 1985, p.11). This involves a de-emphasis on control and behavioural submission and an emphasis on care, concern, trust and openness (Brendtro & Ness, 1982, 1991; Moody & Lipton-Smith, 1999; Vorrath & Brendto, 1985). Staff should not seek to suppress and punish the negative behaviour of youth; instead they need to make caring fashionable (Brendtro & Wasmund, 1989). This emphasis is consistent with behaviour modification literature that states that punishment is not as effective as the “differential reinforcement of incompatible responses” (Martin & Pear, 1992, p. 98). For example, if a caseworker wants to eliminate aggressive behaviour, than reinforcing helping behaviour is one of the most effective ways to accomplish this goal. This

effective technique offers replacement behaviour for the undesired response.

Correspondingly, PPC requires that youth maintain privileges by helping, while hurting behaviour is challenged (Pilnick, 1971). To maximize its long-term effect, these privileges and consequences should be logical and natural (Pilnick, 1971; Vincent, Houlihan & Mitchell, 1994). For example, each week residents are responsible to clean their living area. If the cleaning is done poorly and jobs are missed, then it is logical to have the group redo the jobs until they are completed properly. The extra time that is required to redo the job will likely decrease the amount of time the group subsequently has for sports or free time. The loss of free time is a natural consequence for poorly completing cleaning responsibilities. Conversely, a group that efficiently cleans their unit naturally has more time to enjoy sports or free time. Staff expectations seem to be logical and supported by behavioural literature.

This climate of change is created through the use of social reinforcements and consequences, considered later, that encourage youth to practice caring and helping others. A climate of change can also be produced through the creative use of stress. While creating stress in group may appear to be counterproductive, if correctly done it compels individuals to embrace teamwork and change. For example, a staff may take a group on a weekend camping trip with only the minimum of supplies. Staff may inform the group that they are responsible for building a shelter, creating a fire pit, gathering wood and cooking meals. This trip will move a group out of a state of apathetic complacency, towards actions, self-reflection and change. This therapeutic environment cannot be attained without the staff's personal relationship with the youth (Brendtro & Ness, 1983). This relationship, while often overlooked, is an important predictor of the

effect of PPC (Stacy, 1985). Wasmund and Tate (1988) found that personality characteristics, including assertiveness and independence, were better predictors of staff success than age, education or experience. Similarly, Brendtro and Ness (1983) found that staff who are responsible, independent, and humorous are better able to encourage change in youth. Tannehill (1987, p. 119) concisely summaries the follow expectations for staff working with PPC.

- Encourage the expression and identification of problems.
- Motivate students to work on their problems as a group.
- Insist that the students take responsibility for one another's problems.
- Provide guidance and direction as needed, while allowing the group to resolve problems.
- Consistently support the positive and confront negative behaviour.

In summary, staff need to maintain a relationship with the youth and move them towards helping each other, while de-emphasizing the degree of control and coercion. This can be accomplished through a variety of staff interventions.

Staff techniques. Vorrath and Brendtro (1985) have identified many PPC staff interventions that are recommended for intervening with troubled youth. The success of each depends on its timely execution and stage of group (considered below). Although it is not necessary or practical to consider them all, Brendtro and Wasmund (1989) state that the key methods for creating a positive peer culture include modeling care, relabeling behaviour, and reversing responsibility.

Modeling is one of the most basic techniques of PPC. Considering the influence of social learning theory (Sutherland, 1947), youth are in the position to learn from those

around them. At the least, staff modeling caring behaviour offers youth an alternate to the socialization of their delinquent peers. Vorrath and Brendtro (1985) state that it is important for staff to model prosocial masculine behaviour for boys that do not involve violence or victimizing. This modeling should occur throughout the day and may include how the staff responds to an aggravating youth or to a late shift change. An important part of modeling is congruence, or practicing what you preach. This has been found to be a powerful technique within counselling literature at large (Kirst-Ashman & Hull, 1999). PPC states that giving directions is not enough; staff must be able to live the principles that he/she asserts to be an effective model. The impact of an adult's modeling on the behaviours of youth depends mainly on characteristics of the relationship. Staff who gain the respect of youth through fairness tend to have the greatest impact (Brendtro & Ness, 1983; Schaefer, 1980).

Relabeling behaviour involves giving a youth an alternate subjective interpretation of an event. This alternate interpretation challenges antisocial values that may be perpetuated within the peer group. By attaching socially desirable labels to helping behaviour and socially undesirable labels to hurting behaviour, the peer group is redirected to inadvertently support prosocial values (Jussim & Osgood, 1989). This technique should be performed within the group context for greater outcomes. For example, a youth who is swearing at group, may be referred to as "a young boy who can not even hold his tongue", while a youth who handles adversity well (without swearing) as "a true man who is ready for the real world". Alternately, a youth who is emotionally escalating himself to the point of violence may be addressed as "a kid having a little tantrum". In each example, the youth is faced with a social dilemma. While the youth's

intentions were to gain social status from this tough, aggressive behaviour, the staff's intervention has given the group an alternate possible interpretation of the behaviour. If the youth continues to act out, he faces the possibility that the group may embrace the new interpretation and the youth would lose valuable social credibility. Alternately, the youth who is displaying prosocial values is supported for his "strength" in the presence of his peers in a language that would encourage similar behaviour among others. This is another form of the well-documented behaviour modification technique of "reinforcing an alternate incompatible behaviour" mentioned above (Martin & Pear, 1992). The relabel technique is also similar to a "reframe"; this staple of structural family therapy has been found by practitioners to be a powerful technique (Nichols & Schwartz, 2001).

Moody and Lupton-Smith (1999) stated that the PPC's ability to reverse a youth's responsibility back onto the youth is one of the model's strengths. Vorrath and Brendtro (1985) found that delinquent youth have a keen ability to avoid responsibility for their actions. They may either blame others, or minimize the impact of their actions. They are often able to shift personal responsibility for their crimes onto their parents (because they beat me), onto the police (because they set me up), or onto the judge (because he/she is racist). These defence mechanisms (projecting, minimizing, etc.) allow the youth to rest in a comfortable place where he/she believes that no personal change is needed (Vorrath & Brendtro, 1985). This mentality perpetuates the view of "putting in your time" and compromises their need for help. PPC directly addresses this issue in the rehabilitation of youth. The following examples of reversals can be found in Vorrath and Brendtro (1985, p. 39, 41).

Youth1: "I got in trouble because both of my parents are alcoholics and don't care about me. "

Staff1: "Do you mean that all people with parents who have problems get in trouble?"

Youth2: "It is my life, I can do with it what I want."

Staff2: "Is Ann saying she has the right to mess over herself and to hurt those who care about her?"

As the youth is continually unable to project and minimize his/her problems, the youth is directed toward the task of self-reflection and possible personal change (Erst, 1977; Ferrara, 1992; Harstad, 1976). For this reason, PPC addresses a significant roadblock in the rehabilitation process.

In summary, PPC has a number of prescribed techniques that are recommended for use within group interventions. While only a few were considered here, many authors (Harry, 1999; McCorkle, Elias & Bixby, 1958; Meyer, 1974; Pilnick, 1971) agree that these techniques address important issues and seem to make sense and appear to work; others question their long term impact (Kapp, 2000; Phillips, 1975; Schaefer, 1980; Spergel, 1975). This concern regarding long-term impact will be specifically addressed in a later section.

Youth expectations. Simply stated, the youth's expectation is to participate in the change process by helping others (Tannehill, 1987; Wasmund, 1988a, 1988b). PPC makes an interesting distinction between receiving help, which is voluntary, and giving help, which is mandatory within the program (Vorrath & Brendto, 1985). This important

distinction helps to lower the youth's defences. Since receiving help tends to involve openness and vulnerability, it is more difficult and is not expected of the youth. Conversely, helping others may not involve any vulnerability on the helper's behalf. This ensures that youth are able to experience the benefits of caring in an unthreatening environment. PPC states that once the youth see the benefits of helping others, they may be more likely to receive that help in the future. This stance may also be influenced by literature that states those who give help may receive as much help as those they offer the help to (Laufenberg, 1987; Riessman, 1965). PPC prescribes a variety of ways for youth to help each other.

Program Components

PPC is unlike many other group interventions. While PPC involves the typical daily group meeting, it also includes unique components that incorporate aspects of daily life outside the group meeting into the therapeutic realm. Therefore, PPC is influencing youth every hour of their waking day, seven days a week. The 12 problems, the 3 Cs and group meeting, which are basic components of PPC, will be considered below.

The 12 problems. According to PPC, a problem is "anything that damages one self or another person" (Vorrath & Brendtro, 1985, p. 28). PPC has established a standardized list of 12 problems that are used to teach and identify hurting behaviour within the group. Any hurting behaviour can be identified as one of the 12 problems. The PPC problem list ensures that a common language is used thereby increasing congruent communications within the group. Group members develop an ability to identify hurting behaviour as one of the 12 problems and move toward helping that group

member overcome the problem. The following is the list of 12 problems as they appear in Vorrath & Brendtro (1985, p. 30-31):

- Low self-image: has a poor opinion of self; often feels put down or of little worth
- Inconsiderate to others: does things that are damaging to others
- Inconsiderate to self: does things that are damaging to self
- Authority: does not want to be managed by anyone
- Misleads others: draws others into negative behaviour
- Easily misled: is drawn into negative behaviour by others
- Aggravates others: treats people in negative, hostile ways
- Easily angered: is often irritated or provoked or has tantrums
- Stealing: takes things that belong to others
- Alcohol and drugs: misuses substances that could hurt self
- Lying: cannot be trusted to tell truth
- Fronting: puts on an act rather than be real

It is not uncommon to hear youth within a PPC group discussing their major problem and how to overcome it. As an illustration, Bob may have an authority problem when he refuses to follow staff's directions. According to PPC, problems are seen as opportunities to help themselves and others (Brendtro, 1988; Brendtro & Wasmund, 1989). "As a person's problems become visible, the way to a solution becomes clearer" (Vorrath & Brendtro, 1985, p. 17). For example, another youth may talk with Bob about how important it is to follow the directions of their probation officer, their boss or their landlord on the "outside". In this sense, it is quite clear how an authority problem can

cause difficulty in many areas of the youth's life. Following the staff direction now can be framed as "good practice" for when you are released. People simply need to follow rules that they may not like. Curfews, difficult work assignments and paying rent are good examples.

PPC not only identifies and explains PPC's 12 problems, but it also explains what will happen when each PPC problem has been solved. This offers the youth concrete behaviours that they can practice as they experiment with overcoming their problems. Each PPC problem is listed beside an explanation that will indicate to the youth the behaviours that will be present when the problem is solved. The following excerpts are taken from Vorrath and Brendtro's (1984) explanation of when each PPC problem is solved.

- Low self-image: Doesn't feel sorry for self even though he may have shortcomings. Believes he is good enough to be accepted by anybody.
- Inconsiderate to others: Shows concern for others even if he does not like them or know them well. Tries to help people with problems rather than hurt them or put them down.
- Inconsiderate to self: Shows concern for self, tries to correct mistakes and improve self. Understands limitations and is willing to discuss problems.
- Authority: Shows an ability to get along with people in authority. Is able to accept advice and directions from others.
- Misleads others: Shows responsibility for the effects of his behaviour on others who follow him. Shows concern and helps rather than taking advantage of others.

- Easily misled: Seeks out friends who care enough about him not to hurt him. Doesn't blindly follow others to buy friendship.
- Aggravates others: Does not need to get attention by irritating or annoying others. Respects others enough not to embarrass, provoke or bully them.
- Easily angered: Is not easily frustrated. Knows how to control and channel anger, not letting it control him.
- Stealing: Sees stealing as hurting another person. Knows appropriate ways of getting things he wants. Would not stoop to steal even if he could get away with it.
- Alcohol and drug: Does not need to get high to have friends or enjoy life. Can face problems without a crutch.
- Lying: Is concerned that others trust him. Has strength to face mistakes and failures without trying to cover up.
- Fronting: Has no need to act superior, con people, or play the show-off role. Is not afraid of showing his true feelings.

Vorrath and Brendtro (1985) briefly explain their reasoning for the specifics of the problem list but do not attempt to demonstrate its link with psychology or personality theory. In spite of this possible oversight, Brannon, Brannon, Craig and Martray (1989) found that identifying a youth's primary problem area (Vorrath & Brendtro, 1985) significantly predicted the youth's temperament, intelligence, guilt proneness, extraversion and emotionality using the Cattell High School Personality Questionnaire (Cattell & Cattell, 1975). This evidence suggests that the PPC problem list is supported by some psychological research. Now that a common problem language has been

identified and explained, PPC also has developed a standardized means to identify problems when they occur.

The 3 Cs. The 3 Cs are an intervention continuum that is used to address and deal with the 12 problems. The purpose of the 3 Cs is for the group to inform the youth that he/she is having a problem and point out the effect of the problem while maintaining the safety of the youth and staff. Tannehill (1987, p. 117-118) gives the following explanation:

- **Checking:** The group reminds the student experiencing the problem to “check” his behaviour and bring it under control if needed.
- **Confronting:** Group members challenge negative, irresponsible behaviour if checking fails, and make the student aware of the effects of his behaviour on others.
- **Containing:** If a student is unable or unwilling to control behaviour that is physically hurting another, the group may have to physically restrain him until the immediate physical threat has subsided.

It is important to notice the active involvement of the group through this process and the passive role of the staff. This process is based on the work of previously mentioned authors (Brendtro & Ness, 1983; Flackett & Flackett, 1970; Gibbs, 1993; Lyman, Prentice-Dunn, Wilson & Taylor, 1989; Schaefer, 1980; Schaefer, 1980) that found youth are more responsive to the direction of peers than adults or correctional staff. For this reason, better results can be expected. It is also important to recognize that this is a continuum. If the youth takes a look at his problem and ceases the behaviour, then neither a confrontation nor containment are required. Likewise, if the behaviour ceases

after the group has confronted him, then a containment is not required. Generally speaking, the 3 Cs are followed in a sequential way, except in the occurrence of an unanticipated violent assault. In this case, the youth is immediately contained until he commits to not harm himself or others.

The group meeting. The group meeting is seen as the formal problem-solving vehicle in PPC (Harstad, 1976; Vorrath & Brendtro, 1985) and is treated with reverence by those committed to the change process. This group led meeting occurs 5 times per week for about one and a half hours (Vorrath & Brendtro, 1985) and is supervised by a specially trained group leader. Group leaders are seen as “a special kind of teacher or coach” (Vorrath & Brendtro, 1985, p. 68) that teaches the group how to run a successful meeting. Group leaders generally rely on well-timed questions to guide the group. While a staff group leader is present during the meeting, he/she may remain relatively quiet through most of the meeting. These roles are reinforced by the physical layout of the meeting. The group sits on chairs in a circle, while the group leader sits behind a desk on the outside of the circle. This layout encourages group discussion while discouraging group leader over-involvement; the group meeting must belong to the group (Harstad, 1976). Vorrath and Brendtro (1985) devised a four-stage group meeting that would guide the group through the problem-solving process. The four stages are reporting problems, awarding the meeting, problem solving and the summary. While this process may be emotionally intense, trust, openness, care and concern must always be emphasized throughout this process (Brendtro & Wasmund, 1989).

A group meeting starts by having each member take turns reporting any problems from the 12-problem list that he had since the last meeting. For example, Bob may say

that he had an authority problem when he refused to mop the kitchen, and he had an easily angered problem when he pushed a group member when he blocked his shot during the basketball game. If a member forgets or omits problems, it is the group's responsibility to ensure that they are identified.

Once each member has identified his problems since the last meeting, the group must determine who will "get the meeting". Each meeting is granted by the group to one resident using the following criteria: who needs the meeting the most, who would use the meeting the best, who is fighting for the meeting the most, and who has not had a meeting for the longest time. Once the meeting is awarded to an individual, the "meat" of the meeting is dedicated to helping that member with a specific problem.

The problem-solving stage involves an in-depth look at a group member's behaviour, attitudes and values. Harstad (1976, p. 117-118) has identified several questions that should be addressed within this stage of the group process.

- What situations cause the member to act or feel the way he does?
- What does the member feel about his actions or feeling?
- What does he feel about others who his actions and feelings affect?
- What can he do to improve himself or change the situation that cause the problems?
- What does and can he do about the things that he cannot change?
- What are the member's strengths in regard to the problem?

Similarly, Ferrara (1992) recommends that the following steps should be addressed in an effective group meeting.

- The youth must accept responsibility for his problem.
- The group must understand why the behaviour is a problem.

- The group must connect the youth's current problem with similar problems from his past.
- The youth must develop alternatives to his negative behaviour.
- The group must develop a way to monitor and recognize the youth's efforts to change.

The group leader should remain quiet as the group works toward helping each other. In some cases, a group leader may guide the group toward a desired direction, but the group leader should save most of his/her comments or concerns until the last stage of the group meeting.

The summary is the only stage of the meeting in which the group leader has an explicit role. The staff gives the group feedback about its efforts to help and suggests ways to better help its members in the future. At this time it is appropriate for the staff to make suggestions and to ensure that the meeting ends on a positive, supportive note.

In conclusion, PPC offers many ways for members to help each other. They involve the 12 problems, the 3 Cs and the group meeting. While they generally emphasize helping others, Mihel and Waskin (1989) state that youth inadvertently gain insight into their own lives and their own issues as they empathetically help others through their problems.

Stages of Group

Since PPC is a group-based intervention, Vorrath and Brendtro (1985) have included a section on the stages of group development. Their four-stage model not only acts as a guide for understanding a specific group dynamic, but it also directs the staff toward the most appropriate intervention. For these reasons, it is an important part of the PPC program and requires some attention. Once Vorrath and Brendtro's (Vorrath &

Brendtro, 1985) model has been reviewed, it will be compared and contrasted with other group development models.

Although it is generally implied that the group moves through the stages in a sequential fashion, the authors not only emphasize that the length of time that a group remains in a certain stage varies significantly but also that a group may revert back to the previous stage. These positions have been supported by recent literature (MacKenzie, 1994; Toseland & Rivas, 2001; Wheelan, 1994; Worchell, 1994). The first stage in the PPC model is “casing”. It involves a “feeling out” time that allows staff and residents to get familiar with one another. Minimal group culture exists at this point. Since this stage is characterized by uncertainty, individuals are defensive and avoid showing their true selves. Mihel and Waskin (1989) state that it is at this stage that members “determine how they fit into the group” (p.13).

“Limit testing” is the second stage. Youth start “to reveal their basic personalities and true behaviour” (Vorrath & Brendtro, 1985, p. 46); this involves gravitating to other individuals with similar characteristics. This phenomenon can develop into dangerous cliques that may compromise positive group development. Members “attempt to hold on to their individuality by resisting expectations made by the group and the staff” (Mihel & Waskin, 1989, p. 13).

Thirdly, the group continues into the “polarization of values” stage. “Members begin to accept the positive norms [of the group] while remaining in some internal conflict” (Mihel & Waskin, 1989, p. 13). This internal conflict is the result of conflicting views that must be reconciled; their criminal lifestyle that they embraced while in the community versus a lifestyle characterized by caring concern that is offered in PPC. This

conflict may evoke strong emotions that may result in a fight or flight response including withdrawal, an assault or an escape. Group identity tends to solidify, and cliques become tenuous. A group may "polarize" positively if the majority of group embraces the new values or a group may "polarize" negatively if the majority of group continues to embrace antisocial values. Vorrath & Brendtro (1985) state that with appropriate staff interventions, groups at this stage can be directed toward polarizing positively.

The final stage is "positive peer culture". This stage is reached when "students have formed a strong, cohesive, clique-free group that embodies a value system of mutual care and concern" (Vorrath & Brendtro, 1985, p. 47). In essence, each group member is able to act as a virtual counsellor for each other as well as demonstrate these values for new members. It is at this stage, ideally, that residents are prepared for discharge from the PPC group.

While the recognition of the stages of group is an important aspect of the positive peer culture program, critics may question the model's simplicity and resulting validity. A search of group theory literature results in the discovery that many other models of group development compare strikingly to the positive peer culture model. The following is a brief consideration of several earlier models of group development.

Developmental stages	TUCKMAN (1963)	NORTHERN (1969)	HARTFORD (1971)	KLEIN (1972)
Beginning	Forming Storming	Planning Orientation	Pregroup planning Convening Group formation	Orientation Resistance
Middle	Norming Performing	Exploring/testing Problem solving	Disintegration Group functioning	Negotiation Intimacy
End		Termination	Pretermination Termination	Termination

As is clearly illustrated in this chart, that was adapted from Toseland and Rivas (2001, p. 90), the positive peer culture stages of group have many similarities to these early models. They all seem to include some sort of “feeling out” stage, a conflict stage, a functioning stage and an ending stage. PPC’s model does not include a termination stage, mainly because PPC groups are ongoing; newly sentenced offenders replace released members. So in this sense, the group never truly terminates. Critics may further suggest that these models simply represent an era in theoretical thinking and that this paradigm does not apply to today’s context. The following models seem to suggest otherwise.

Developmental stages	HENRY (1992)	WHEELAN (1994)	CRAGAN & WRIGHT (1995)
Beginning	Initiation	Dependency	Self realization of a new identity
Middle	Convening Conflict Maintenance	Delusion Counter dependency Trust	Group identity through polarization Establishment of new values
End	Termination	Termination	Acting out new consciousness

It appears that PPC’s stages of group development are consistent with other group theories that span three decades and a variety of contexts. PPC uses the stages of group development to assess the current state of the group and to guide group leaders towards the most successful interventions. Each stage of group development requires different interventions from staff to move the group to the subsequent stage. These prescribed staff roles seem to have support in contemporary groups literature.

In the casing stage, staff should “encourage all interactions, positive or negative, in a non-authoritarian, non-judgemental fashion” (Vorrath & Brendtro, 1985, p. 47).

Vorrath and Brendtro (1985) also state that staff should convey to the group their confidence in the group's ability to accomplish their goals. More recent group theorists (Toseland & Rivas, 2001) seem to support these sentiments as they state that "workers should provide a safe and positive group environment so that members can fully explore the group's purpose" (p. 92).

In the limit testing stage, staff "calmly reverses the [group's] problems and displays their continuing confidence that the group will come to see the wisdom of helping, and they are smart enough and strong enough to care.... The group leader begins to challenge the group to assume responsibility for all behaviors of its members" (Vorrath & Brendtro, 1985, p. 48-49). In a more general sense, Toseland and Rivas (2001) state that "the worker should help members understand that these expressions [of resistance] are a normal part of group development" (p. 93).

During the polarization of values stage, "the group leader becomes more selective in the type of verbal interactions he/she encourages. Since participation is now established, the leader must help the group learn to discriminate between helpful and nonhelpful communication... The group leader escalates the attack on negative behavior by attaching negative labels to it" (Vorrath & Brendtro, 1985, p. 49). Correspondingly, current literature (Toseland and Rivas, 2001) states that the "worker should help members stay focused on the purpose of the group [helping], challenge members to develop an appropriate culture of work, and help the group overcome obstacles to goal achievement" (p. 93).

During the positive peer culture stage, the group leader should point out the positive changes within individuals in the group and "to help them maintain a high

morale as the group finds pride in their emerging ability to deal with difficult problems” (Vorrath & Brendtro, 1985, p. 49). Toseland and Rivas (2001) echo these sentiments by stating that workers should review with the group the work that they have accomplished and point out areas where progress can still be made.

This review of staff roles as they relate to the stage of group is an important aspect of PPC. It allows staff to assess current group dynamics within a context of group development as well as prescribe interventions that are likely to have success. This section has also acknowledged that more current group theorists have also identified specific staff roles as they relate to the stage of group.

It is also interesting to note Cragan and Wright’s (1995) four signs of a strong group. These authors, that have no affiliation with PPC, state that a fully developed group should develop a 1) universal acceptance of group goals, 2) formation of group rules, 3) significant interpersonal trust and empathy, and 4) significant group identity and pride. Many of these conditions are at least implicitly addressed within PPC. For these reasons, the PPC principles and stages of group development seem to be validated by literature.

Essential Components

An interesting debate has developed within PPC literature regarding the proper implementation of its principles (Brendtro, 1994). On one side of the debate, those advocating for pure PPC assert that the intervention must remain as consistent as possible with the detailed guidelines set forth by Vorrath & Brendtro (1985). This would not only include the use of exact terminology, but also the restriction that only those interventions prescribed within the pages of Positive Peer Culture 2nd Edition (Vorrath & Brendtro,

1985) should be used. Harry Vorrath, co-author of PPC, can generally be placed here (see Brendtro, 1994). On the other side of the debate, those advocating for authentic PPC are less interested in following the "letter of the law" as prescribed in Vorrath & Brendtro (1985) and are more interested in ensuring that essential principles of PPC are maintained. Larry Brendtro, the other co-author of PPC, is found in this camp (see Brendtro & Ness, 1982; Eggert, Nichilas & Owen, 1995). Those on the pure PPC camp are accused by the other side of the debate of being rigidly narrow minded and ignoring the limitations of PPC (Harstad, 1976), while those in the authentic PPC camp are accused by the purists of "bastardizing" the program (Brendtro, 1994, p. vi).

Fuel has been added to this debate as many modified PPC programs, consistent with the authentic PPC camp, are being evaluated and often found to be more effective than pure PPC programs (Brannon & Troyer, 1991; Giacobbe & Traynelis-Yurek, 1992; Heinz, Garagaro & Kelly, 1987; Leeman, Gibbs & Fuller, 1993). Perhaps these authors' conscious effort to address the limitations of PPC, at least partially, account for their improved outcomes. Conversely, it is also important to note that group-based interventions that are unable to redirect youth's negativity towards prosocial behaviours, create negative effects, including increased subsequent recidivism (Dishion, McCord & Poulin, 1999; O'Donnell, 1992). The adverse affect of negative group dynamics has also been raised within PPC literature (Alissi, 1987; Brendtro, 1988; Sherer, 1985; Vorrath & Brendtro, 1985). This research tends to support the position that following the basic principles of PPC is sufficient to establish a successful group based program. Recently Brendtro (1994) acknowledged that more research is needed to assess how PPC should be implemented to bring it to its full fruition. This open invitation to experiment with

informed program modifications clearly illustrates the trend in the literature towards authentic PPC. The following guidelines may offer important parameters to ensure that modifications do not deviate from authentic PPC.

Brendtro, Brockenleg and Van Bockern (1990) identified four basic principles of PPC that must be upheld to maintain a successful authentic PPC based intervention.

- Attachment- The program must foster close relationships between residents, their families and staff. This should not be a mere acquaintance based on pleasantries, but a deep sense of belonging rooted in genuine caring concern.
- Achievement- The program must help residents discover their potential to experience and overcome difficult tasks and situations. This could involve successfully completing a community service job, a school assignment or controlling his anger in a stressful situation.
- Autonomy- The program must empower residents to take responsibility for their actions and their lives in general. Residents must feel free to choose their path and not to be coerced or punished into obedience.
- Altruism- The program must help residents to appreciate and experience the intrinsic value of helping one another. Helping should not come out of selfish ambition but out of an altruistic motivation.

Later, Brendtro and Ness (1991, p. 178-179) published these four principles to help guide the appropriate implementation of a quality group treatment program.

- Caring- The central value in PPC is that one is to act in a caring, not hurting way to others and to self.

- Nonpunitiveness- Youth in positive peer culture programs are given a sanction to help, not to punish.
- Least Intrusive Management- Positive peer culture as a youth empowerment program is committed to developing responsible autonomy in each youth. Coercive controls contradict this principle.
- Accountability- Without careful management and accountability, the most positive treatment philosophy can mutate into malpractice.

It appears, according to research (Brannon & Troyer, 1991; Giacobbe & Traynelis-Yurek, 1992; Heinz, Garagaro & Kelly, 1987; Leeman, Gibbs & Fuller, 1993), that an authentic PPC program that integrates these eight principles performs just as well as, if not better than, a pure PPC program. For this reason, staff should be encouraged to enact these principles with creativity and an open mind while being vigilant of possible inappropriate variants. For sake of clarity, several possible misuses of the program identified by Brendtro & Ness (1982) are mentioned below and should be avoided.

The most frequently cited inappropriate variant involves the abuse of confrontations (Brendtro & Ness, 1982). While confrontations are supposed to help build trust and openness in the group, its misuse can lead to a hostile verbal interplay that intimidates more than helps residents. Authentic PPC programs should ensure that confrontations are helpful and supportive.

Secondly, due to the substantial amount of terminology used in PPC, programs could become susceptible to “mechanical verbalizations” (Brendtro & Ness, 1982, p. 313). This inappropriate variant results in the regurgitation of catchphrases that lacks sincerity and caring concern. In an authentic PPC program, helping behaviour grows

naturally out of a mutual concern for one another. Brendtro and Ness (1982) state that staff are responsible to model these genuine communications.

Programs may also overemphasize the use of the peer group process and overlook the potential of the family as a change agent. In these cases, programs would unnecessarily restrict access to family members based on group functioning or the actions of another group member. Visits are restricted and emphasis is placed on the importance of group, while the importance of family would be overlooked. An authentic PPC program integrates the family as an important agent of change; family visits are seen as a right and not a privilege to be earned through participation in the program.

While PPC focuses on confronting negative behaviour and helping the youth find new ways of responding to situations, too often only the former is emphasized. The result is a confrontational group experience that identifies problems but does not actively attend to the youth's needs. A true PPC program should not only be able to identify hurting behaviour but should also be able to guide and teach more appropriate responses with caring concern.

Attacking at the heart of PPC is the misconception that staff needs to remain relationally distant from the residents (Brendtro & Ness, 1982; Schafer, 1980). This is said to be necessary to ensure that the group process remains the primary focus. While an authentic PPC program is rooted in a caring relationship that is built within the helping process, this variant models insincere under-involvement to youth. Staff must become full participants in the helping process (Brendtro, 1979; Greenwood & Zimring, 1985).

While the pursuit of pure PPC is generally seen as counterproductive (Brendtro, 1994; Brendtro & Ness, 1982), it is very important that the implementation of PPC is

consistent with the core principles of the program and avoid many of the logistical traps that compromise its values and affect its efficacy. Supervisors need to be vigilant of these concerns; this is especially true considering that PPC as a model is prone to general misuse and abuse (Alissi, 1987; Brendtro & Ness, 1982; Gibbs 1993; Kapp, 2000; Wasmund, 1988b).

Effectiveness

Many authors (Meyer, 1974; Phillips, 1975; Serri & Selo, 1974) have criticized the early implementation of PPC in many correctional institutions prior to any convincing empirical research confirming its efficacy. Until more recently (Garrett, 1985; Gottfredson, 1987), many of the evaluations that were completed lacked appropriate methodological rigour (Alissi, 1987; Garrett, 1985; Serri & Selo, 1974; Stacy, 1985); this compromised the credibility of their results.

Evaluating the effectiveness of a program is often a multifaceted task. There are many outcomes that are important to the overall functioning of a treatment program. PPC literature tends to focus on increasing the self-concept of youth, controlling inappropriate behaviour, changing antisocial values and attitudes as well as decreasing recidivism. Each of these dependant variables is considered below.

Self-Concept. Early PPC advocates insist that the self-concept of youth does significantly affect criminal behaviour and future delinquency (McCorkle, Eilas & Bixby, 1958). This foundation led to the empirical use of self-esteem as a primary dependant variable in selected studies (Erst, 1977; Wasmund, 1980a, 1980b). More recently, the importance of self-esteem as an outcome is under some dispute (Bonta, 1997). While Davis, Hoffman and Quigley (1988b) reinforce the impact of improved self-esteem on

delinquency, Wasmond and Brannon (1987) found that changes in self-esteem did not predict successful reintegration or future criminality after discharge from a PPC program. Similarly, more recent findings (Andrews, Bonta & Hoge, 1990; Andrews, Zinger, Hoge, Bonta, Gendreau & Cullen, 1990; Bonta, 1997; Gendreau & Andrews, 1990) state that self-esteem does not seem to affect recidivism. For this reason, studies measuring self-esteem may be less practical from a strictly rehabilitative standpoint, since correctional institutions are primarily interested in decreasing recidivism. Regardless of this possibility, several studies that measured the impact of PPC on the self-esteem of youth will be considered.

Research seems to consistently support the significant impact of PPC on the increased self-esteem of youth. While Davis, Hoffman and Quigley (1988b) implemented a pretest-posttest method without a control group, Wasmond and Brannon (1987) utilized a control group within the methodology and both found the same significant positive result. Using The Jesness Inventory (Bakan, 1966), McKinney, Miller, Beier and Bohannon (1978) found that PPC had a significant impact of the self-concept of youth; Davis, Hoffman and Quigley (1988b) also found similar results using the Tennessee Self Concept Scale (Fitts, 1965). Atwood and Osgood (1987), Brendtro and Lindgren (1988), Brendtro and Wasmond (1989) and Martin and Osgood (1987) all found that PPC significantly increased the self-esteem of youth participants. Conversely, Stephenson and Scarpitti (1974) found a non-significant impact. It should also be mentioned that two well-controlled Canadian studies (Calderwood, 1991; McVicar, 1991) have also found that PPC significantly increased the self-concept of participants.

Overall, it appears that PPC consistently and significantly improves the self-concept of those who attend the program.

Inappropriate behaviour. The importance of targeting inappropriate behaviour is an essential part of maintaining the safety and security of correctional facilities. For this reason, PPC's impact on the behaviour of youth in correctional settings is an important dependent variable.

Some well-developed evaluations have been used to assess the behavioural impact of PPC on incarcerated youth. Using a demographically similar comparison group, Mitchell and Cockrum (1980) found that the PPC was significantly more effective at decreasing "runaways, physical aggression towards staff, destruction of property, and self-injurious behaviour" (p. 403) than was a behaviour modification program that used a levelling system to shape and control behaviour. Using a control group, a Canadian study (McVicar, 1991) found that PPC was effective at lowering antisocial and disruptive behaviour in a secure custody setting. Garrett (1985) used meta-analysis to assess several well-controlled studies and found that PPC based programs had a substantially positive effect on institutional behaviour. While these results are impressively consistent, one published study contradicts these results. Roberts and Schervish (1988) found that PPC was only marginally effective at behaviour management. It is important to note that these authors admitted that methodological flaws, including a low response rate, lack of a representative sample and missing information compromised the validity of the results (Roberts & Schervish, 1988). It appears clear that the well-designed studies consistently find a significant positive result.

In a practical sense, PPC type programs are able to meet the basic safety and security needs of a youth correctional institutions (Ferrara, 1992; Mitchell & Cockrum, 1980), while offering “the conditions for effective group treatment” (Gold & Osgood, 1992, p. 212). PPC’s ability to create more long-term change is less clear and is considered below.

Antisocial attitudes. Schaefer (1980) argued that PPC simply suppresses negative behaviours while the youth is within the group; this likely results in no long-term positive effect. This notion is consistent with the concern that youth simply submit to the program, whereby no real beliefs or values are challenged (Gold & Osgood, 1992; Kapp, 2000; Larsen, 1970). Authors have suggested that the youth’s values and attitudes are a more appropriate measure of success within the PPC program (Giacobbe & Traynelis-Yurek, 1992). This position not only recognizes antisocial values as a criminogenic need, (Bonta, 1997) but also recognizes that changing a youth’s values and attitudes may have a longer-term effect than merely controlling the youth’s behaviour while incarcerated (Giacobbe & Traynelis-Yurek, 1992).

Overall, the research on PPC’s effect on the attitudes and values of youth are far more equivocal than the previous results. While Giacobbe and Trynelis-Yurek (1992) found that there was a significant improvement in attitudes, as measured by the Jesness Behavior Checklist (Buros 1978), and Sherer (1985) found similar results using Ziv’s (1976) moral development measure, other results are not as promising. Neither Roberts and Schervish (1988) nor Gold and Osgood (1992) were able to identify noteworthy changes in the attitudes of youth participants.

Although these results are equivocal, some authors insist that they are not as important an outcome as recidivism. These authors point to the tendency that within the PPC evaluations discussed above, the methods do not utilize any follow up measures. Generally, the methodologies compare the youth's attitudes and values at discharge to their attitude and values at intake. This oversight negates the researcher's ability to make any inferences about the effect of the program after the youth is discharged. This ultimately overlooks the program's true rehabilitative effect. For this reason, recidivism rates are the most widely used and arguably most important outcome measure for PPC programs.

Recidivism. While recidivism is the most researched outcome measure in PPC literature, there remains much that is not clearly understood about the program's effect. To help clarify the ambiguities, the following section will divide the outcome studies in two ways. First, studies that assessed the outcome of GGI are divided from those studies assessing the outcome of PPC. This should help clarify a distinct trend. Secondly, each of these two groups will be divided into studies with a strong empirical method, using a similar comparison group for example, and those with a weak methodology, using a simple pretest-posttest method. This distinction should also clarify the need for further research.

One of the first published evaluations of GGI (Abraham & McCorkle, 1947) identified a recidivism rate of only 6% among those that completed the program. Although it is an impressive success rate, it is important to acknowledge that without a comparison group, inferences cannot be made on the true impact of the program. This limits the ability to apply the results to other settings.

Subsequent evaluations of GGI utilized stronger methodologies and produced fairly positive results. Weeks (1958) compared the recidivism rates of Highfields, an institution implementing GGI, and Annandale, an institution that did not run the program. The study found that those that attended Highfields were significantly less likely to return to custodial care in the future (Freeman & Weeks, 1956), as well they remained out of care three times longer (Weeks, 1958). Since the comparison group tended to be older, more delinquent and less educated than the experimental group, the results are somewhat compromised (Korn & McCorkle, 1959). McCorkle, Elias and Bixby (1958) also evaluated the recidivism rate at Highfields and found a significant decrease in the reoffence rate of participants. Later, Stephenson and Scarpitti (1974) evaluated Essexfields in New Jersey and found that those completing the program at that institution had only marginally lower recidivism rates compared to the comparison group.

Miller (1970) compared the recidivism rates at Southfields, an institution with GGI, to Kentucky Village, an institution with no programming, and to probation. Miller (1970) found that the recidivism rates at Southfields were significantly lower than at the institution with no programming, but actually higher than the recidivism rates of youth on probation. Therefore, it may seem that GGI was clearly better than nothing was, but not better than probation. These findings are affected by the fact that between group differences were not controlled. Although the author did explain that the population in Southfields was more delinquent than the youth on probation but less delinquent than the youth at Kentucky Village, the analysis did not attempt control for the differences. Although it appears that many of the evaluations implement a fairly strong methodology,

many methodological concerns continue to be raised. The effect of group interventions on recidivism remains unclear.

As GGI was modified into PPC, interesting evaluation trends began to occur. Practitioners associated with PPC tended to be less interested in evaluation than their GGI predecessors (Sarri & Selo, 1974); this seemed to encourage more frequent use of weaker methodologies. First, the evaluations with more compromised methodologies will be considered, followed by the more decisive studies. While Brannon and Troyer (1991), Katsiyannis and Archwamety (1997) and Heinz, Gargan and Kelly (1987) identified low recidivism rates from PPC type programs, 2%, 6% and 10% respectively; the lack of a comparison group negates the ability to infer the true effect of the program. This same issue remains in other studies that found recidivism rates at PPC institutions ranging from about 30% (Slotnick, 1977) to 50% (Sarri & Selo, 1974). Other more optimistic results, using a pretest-posttest method, have identified a significant drop in recidivism after PPC was implemented (Gendreau & Ross, 1980; Minnesota Department of Corrections, 1974; Stanford, 1973). Due to the lack of a comparison group, the impact of these rates is disputable. Berger (1977) stated that often PPC was implemented within institutions in a state of chaos. He argued that a positive evaluation, in these cases, might be evidence that things could not get any worse, more than it was the effect of the treatment itself. In other words, there is “no place to go but up”. This concept is roughly similar to the threat of internal validity known as statistical regression (Maxfield & Babbie, 1998). Although Gerrard (1975) used a comparison group and found that PPC had a positive effect, other authors point out that extraneous variables were not well

controlled (Giacobbe, Traynelis-Yurek, Powell & Laursen, 1994). A well-controlled research design utilising a comparison group is necessary to control for this threat.

In light of these results, many authors (Gibbs, Potter & Goldstein, 1995; Kodluboy & Evenrud, 1993; Palmer & Herrera, 1972; Zimpfer, 1992) have proclaimed that PPC does not significantly affect the recidivism rates of youth participants. These statements are partially based on the evidence from Gottfredson's (1987) and Garrett's (1985) well-controlled studies. Gottfredson (1987) reanalyzed many of the previously mentioned studies that yielded positive results and found that once other variables were more controlled, PPC type programs had little or no effect on the recidivism rates of participants. While this may appear to seriously cripple the ability for PPC advocates to defend their stance that this "total system for building a positive youth subculture" affects recidivism (Vorrath & Brendtro, 1985, p. xx), it should be pointed out that Gottfredson (1987) focused on the effects of GGI, not PPC. Garrett (1985) combined GGI programs with PPC programs for the purposes of analysis. As mentioned earlier, Vorrath and Brendtro (1985) claim that PPC is significantly different than GGI. Until this claim is validated, proponents of PPC are likely to claim that Gottfredson's (1987) evaluation of GGI does not apply to the efficacy of PPC and that Garrett's inclusion of GGI programs contaminated the efficacy of the PPC programs.

It seems clear that PPC has a significant effect on the self-concept and inappropriate behaviour of youth within the program. Some equivocal results were found regarding the program's impact on the attitudes and values of youth and even more so regarding recidivism. While several studies have found that GGI and PPC do significantly decrease recidivism rates, many of these results seem to be disputed due to

compromised methodologies (Gottfredson, 1987). For these reasons, well-controlled research is needed to clearly measure the impact of PPC on the various dependant variables considered above, especially recidivism.

Conclusions

Since PPC views delinquent peers as the primary cause of crime, the peer group is the primary emphasis of the program. The model focuses on empowering youth to care for and help others through a variety of PPC principles and techniques. This focus is consistently represented in the staff's roles and therapeutic intervention as well as the program's many components. PPC's practical success regarding its positive effect on self-concept and behaviour control is well documented. More equivocal results are associated with the program's ability to affect antisocial values, attitudes and recidivism. Research seems to suggest that PPC has a significant "here and now" effect on youth while they are incarcerated, but the program's long-term effect is quite unclear. More work is needed to fully assess PPC's effect of recidivism rates after discharge from correctional institutions.

Program Limitations

Several general limitations of PPC have been identified in the literature. Each limitation will be addressed and linked to concepts and concerns raised above. Many of these results will be retested in this current study to determine if the results can be consistently replicated. While many authors in the 1970's (Christensen, 1976; Meyer, 1971; Phillips, 1976) have criticized PPC advocates for over zealously implementing the program without sufficient empirical evidence that it works, there continues to be many areas within the PPC literature that require empirical clarification.

Authors (Alissi, 1987; Brendtro & Ness, 1982; Wasmund, 1988b) have found that PPC is easily misused and abused. Although clear guidelines are set out (Vorrath & Brendtro, 1985), several common misuses have been identified (Brendtro & Ness, 1982). These may include hostility, aggression, coercion and the use of mechanical jargon all under the guise of caring concern. This differential implementation of PPC may partly explain the lack of consistent outcomes across different PPC settings. These concerns blur the distinctions between GGI, PPC and other modified programs.

Others have criticized PPC's lack of family involvement (Flackett & Flackett, 1970; Schaefer, 1980; Schwartz & Lindgren, 1984; Vincent, Houlihan & Mitchell, 1994). These authors state that PPC would have more success if it not only addressed the power of the peer but also the power of the family as well (Giacobbe & Traynelis-Yurek, 1993; Gold & Osgood, 1992). While PPC states that the peer is the strongest force in the lives of today's youth, critics may point toward other empirically documented forces, like the family (Curtner-Smith & MacKinnon-Lewis, 1994; Jensen, 1972; Flowers, 1990; Pombeni, Kirchler & Palmonari, 1990; Smith, 1985), that should also be addressed in treatment (Henggeler, Schoenwald, Borduin, Rowland & Cunningham, 1998). In fact, Wright and Wright (1994) found that incarcerated youth who maintained contact with their family performed better after release than youth who did not maintain family contact. Interestingly, other modified PPC programs have been developed that use peer group work and family counselling as the primary interventions (Agee & McWilliams, 1984; Ammons, 1979; Giacobbe & Traynelis-Yurek, 1993). These types of attempts may address this limitation.

In a more general sense, critics state that PPC de-emphasizes reintegration from correctional facilities (Brabant, 1990; Flackett & Flackett, 1970; Jackson, 1982; Spergel, 1975; Vincent, Houlihan & Mitchell, 1994). Jussim and Osgood (1989) raise the concern that due to the coercive nature of the program and correctional institutions, the experiences that a youth gains while incarcerated may not generalize to the “outside” after his/her release. If this concern is true, then unimpressive outcome studies measuring recidivism can be expected. Even Larry Brendtro, one of the founders of PPC, has admitted that this is a concern (Brendtro & Wasmund, 1989). The Peer Group Process (Giacobbe & Traynelis-Yurek, 1993), a modified PPC program, developed an extensive community resource network for its discharged youth. This support system involved monthly problem solving meetings with family members and professional counselling.

There have also been concerns raised about the appropriateness of PPC’s universal use. Authors (Glasser, 1975; McCorkle, Elias & Bixby, 1958; Missouri General Assembly of Representatives, 1980; Webber, 1988) have suggested that PPC-type programs are not suitable for all youth. For example, Lyman, Prentice-Dunn, Wilson and Taylor (1989) state that PPC is only appropriate for youth with a “high level of intellectual and verbal ability and not [appropriate] for those with psychological disorders” (p. 89). Lee (1995, 1996) found that it is often not appropriate for abused and neglected youth or social loners; these youth may be prone to psychological harm from the treatment. Gold and Osgood (1992) found that emotionally overwhelmed youth did not perform well in PPC type groups.

Preliminary research has found that PPC is less successful after release for minorities (African Americans) than for the Caucasian majority (Minnesota Department of Corrections, 1974; Stephenson & Scarpitti, 1974). Interestingly, McCorkle, Elias and Bixby (1958) found that GGI (PPC's predecessor) was more successful for youth who came from "broken homes" than for youth who came from two parent families. Other early research suggests PPC type programs are better for more delinquent youth (McCorkle, Elias & Bixby, 1958; Stephenson & Scarpitti, 1974). More recently, Gibbs (1993) argued that PPC type programs are more successful for gang members than non-gang members since the program format specifically addresses delinquent peers; an important roadblock in the rehabilitation of gang members (Goldstein & Huff, 1993). These results are in stark contrast to Vorrath and Brendtro's (1985) claim that the program is equally appropriate for all troubled youth.

The final limitation that will be considered here identifies PPC's inability to equip youth to help others. While PPC expects youth to care for others, the model has been accused of not adequately addressing youth's helping deficiencies (Carducci, 1980; Gibbs, 1993; Leeman, Gibbs & Fuller, 1993). Literature has identified an important link between FAS/E, for example, and a youth's inability to learn from the surrounding environment (Breen, 2000; Conroy, 1996; Soby, 1994). While PPC states that all youth have an ability to help, others insist that delinquent youth often need a lot of guiding and equipping before they are able to help (Ferrara, 1992; Gibbs, 1993; Gibbs, Potter, Barriga & Liau, 1996; Leeman, Gibbs & Fuller, 1993). The EQUIP program, a modified PPC program, attempts to address this concern (Gibbs, Potter & Goldstein, 1995).

The Agassiz Youth Centre

AYC was built on the outskirts of Portage la Prairie, Manitoba in 1890, but its name and many buildings have changed since that date. The City of Portage la Prairie has a population of approximately 15,000 residents and is located approximately 75 kilometres west of Manitoba's largest city, Winnipeg. AYC is situated on 59 acres of lawn, fruit/vegetable fields, sports fields and animal housing. AYC contains four resident cottages, each cottage contains two groups of about 10 residents. AYC also includes an administration building, a school, a conference centre, a powerhouse building, a meat processing building, numerous storage facilities, a hockey rink and a high security unit, Lakewood, for special needs/aggressive youth. The administration building contains clerical, laundry and kitchen facilities. In a general sense, the youth are responsible to maintain many aspects of the institution. Under the supervision of staff, AYC residents often rake leaves, shovel snow, and paint as well as work in the kitchen and laundry room. Residents are involved with raising and butchering pigs that are cared for on the grounds. The youth are also active in harvesting the vegetable fields that cover several acres of the institution's grounds. The institution has operated in this manner for several decades, with the exception of AYC's new meat processing program that was built in 2001.

While many characteristics of AYC are unique among juvenile correctional facilities, the circumstances surrounding the implementation of PPC is typical of other institutions that currently run the program. The following information was gathered after interviewing several senior staff and reviewing archived documents at AYC. Before the implementation of PPC at AYC in the mid 1970's, the institution was in a state of chaos.

Escapes were at an all time high and there was some controversy in the justice department around the use of corporal punishment at AYC as a means of controlling aggressive behaviour. These issues were partially addressed with a change in administration; Terry Rempel became superintendent of AYC in November of 1972. New ideas came with a new administration. GGI was implemented in an effort to bring the institution back under control without the use of corporal punishment. Over the next several years, as PPC gained publicity, many AYC staff traveled to Minnesota and North Dakota to witness PPC. The staff were impressed and by the mid 1970's, PPC was fully implemented at AYC. PPC has been the foundation of AYC's treatment efforts since that time.

The Problem

In recent years, Manitoba Justice has increasingly embraced many principles of effective practice within their programming. One result of this policy position is that it requires that programs be evaluated to ensure they are meeting appropriate standards of efficacy. This is a fairly intensive endeavour since Manitoba Justice runs many programs within its institutions. In spite of this, Manitoba Justice is committed to evaluate each correctional program. The importance of efficacy has also been clearly stated in Manitoba Correction's vision statement. It states that, "we will have the lowest recidivism and incarceration rates in Canada". If this goal is to be attained, Positive Peer Culture, the primary program at one of Manitoba's largest youth facilities, must be appropriately critiqued to ensure that it is having a rehabilitative effect.

The Agassiz Youth Centre (AYC) in Portage la Prairie has been using the Positive Peer Culture program (PPC) (Vorrath & Brendtro, 1974; 1985) since the early 1970's.

Since PPC's inception at AYC the program has not been empirically assessed for its rehabilitative effect. This, therefore, is an ideal opportunity to assess PPC as a treatment model at a time when efficacy is a divisional priority. The results from this study will be a substantial contribution to Manitoba Justice's commitment to evaluate its programs as well as an addition to PPC literature at large.

Research Questions

This project will answer the following research questions.

- Do participants in the PPC program have a lower recidivism rate than offenders who do not attend the program while incarcerated?
- Is the success of PPC related to certain offender characteristics?

Research Hypotheses

Since the research questions have been established, it is now critical to formulate the research hypotheses that will guide the collection and analysis of the data. These testable relationships will answer the research.

- Offenders released from the AYC (treatment group) will have fewer new charges than other discharges (comparison group).
- Offenders released from the AYC (treatment group) will have fewer new convictions than other discharges (comparison group).
- Offenders released from the AYC (treatment group) will have shorter subsequent incarcerations than other discharges (comparison group).
- Offenders released from the AYC (treatment group) will have fewer incarcerations than other discharges (comparison group).
- Offenders released from the AYC (treatment group) will remain without a

subsequent charge longer than other discharges (comparison group).

- Offenders released from the AYC (treatment group) will remain without a subsequent incarceration longer than other discharges (comparison group).
- Offenders released from the AYC (treatment group) will have less serious subsequent convictions than other discharges (comparison group).

The following hypotheses will be used to assess whether personal offender characteristics differentially influence the effectiveness of PPC (treatment group) compared to other correctional treatment (comparison group). This enables researchers to determine if offenders with certain characteristics respond better to PPC treatment (treatment group) than correctional treatment without PPC (comparison group).

- PPC, as compared to treatment without PPC, will be less effective at decreasing the subsequent recidivism rates (new charges, new convictions and new incarcerations) of young offenders who have had a past risk of suicide risk.
- PPC, as compared to treatment without PPC, will be less effective at decreasing the subsequent recidivism rates (new charges, new convictions and new incarcerations) of young offenders who have been involved with CFS.
- PPC, as compared to treatment without PPC, will be less effective at decreasing the subsequent recidivism rates (new charges, new convictions and new incarcerations) of young offenders who are Aboriginal than those who are not Aboriginal.
- PPC, as compared to treatment without PPC, will be more effective at decreasing the subsequent recidivism rates (new charges, new convictions and new incarcerations) of young offenders who have a gang affiliation than those who are

not gang affiliates.

- PPC, as compared to treatment without PPC, will be more effective at decreasing the subsequent recidivism rates (new charges, new convictions and new incarcerations) of young offenders who are a high risk to reoffend than those who are a low risk to reoffend.
- PPC, as compared to treatment without PPC, will be more effective at decreasing the subsequent recidivism rates (new charges, new convictions and new incarcerations) of young offenders whose parents do not reside together with the offender.
- PPC, as compared to treatment without PPC, will be more effective at decreasing the subsequent recidivism rates (new charges, new convictions and new incarcerations) of young offenders who have person crimes than those with property, or other crimes.
- PPC, as compared to treatment without PPC, will be more effective at decreasing the subsequent recidivism rates (new charges, new convictions and new incarcerations) of young offenders who have a more serious primary offence.

For the sake of clarity, the risk instrument identified above (PRAs) will be examined more specifically. PRAs are completed either as a youth is admitted to a youth correctional facility or in preparation for a court appearance. PRAs “predict the young offender’s risk to reoffend in any type of offence” (Manitoba Justice, 1997, section. 7.4). PRAs include a variety of different subscales that measure specific risk factors, these include: criminal history, substance abuse, education/employment problems, family problems, peer relation problems, accommodation problems and psychological factors.

According to Manitoba Justice (1997), Manitoba's PRA instrument is a modified version of the Young Offender – Level of Service Inventory (YO-LSI) (see Hoge & Andrews, 1996).

Design

Method

This evaluation utilized the quasi-experimental method known as the “nonequivalent-groups design” (Maxfield & Babbie, 1998, p. 162). Since random assignment is not used to place offenders in either the treatment group or comparison group, the research is referred to as quasi-experimental (Maxfield & Babbie, 1998). The treatment group included a sample of male youth discharged from the Agassiz Youth Centre (AYC) in Portage la Prairie from January 1, 2000 to December 31, 2000, excluding remands. The comparison group included a sample of all male youths discharged within the same time period from all other Manitoba youth institutions, excluding Ridge Point discharges and all remands. Discharges from the Ridge Point Work Camp (RPWC) will not be included in the analysis for three reasons. First, Ridge Point discharges cannot be placed in the comparison group since they run a PPC program. Some of the effects of the treatment may therefore compromise the exclusivity of the comparison group. Secondly, Ridge Point cannot be included in the treatment group since there may be significant treatment effect differences between AYC's implementation of PPC and RPWC's implementation of PPC. It is unclear from research if different PPC programs have a comparable therapeutic effect (Robinson, 1980). Until this is more clearly determined, any type of program variation may compromise the effect of the independent variable. Thirdly, youth at RPWC are understood to have a

substantially lower risk to reoffend than youth held at Manitoba's other institutions, thereby making RPWC a poor comparison group. All other youth discharged from within the province of Manitoba were eligible for sampling.

The term non-equivalent groups design is used because researchers cannot assume that the treatment group and the comparison group are equivalent since they were not randomly assigned. Preliminary analysis, discussed later, identified and controlled these differences between the groups.

Since the groups may not be mutually exclusive, careful consideration was needed to control for the residual effects of past correctional treatment. While the groups were identified by whether or not the offender had most recently been released from AYC or another institution, contamination issues must be addressed. It was quite likely that some offenders in the comparison group may have served a past sentence at AYC. It was equally possible that some offenders most recently released from AYC also had served some time in another institution. This compromises the integrity of the groups' independence as well as jeopardizes the results. For this reason, the analysis considered residents who had only been released from AYC and compared them to a sample of offenders that had never attended or had been released from AYC; this is the ideal circumstance for purposes of analysis. This ideal circumstance will be achieved two different ways. First, the young offender's history of incarceration was tracked back to his first place of incarceration. Analysis was able to measure the effect of a youth's first place of incarceration on subsequent recidivism without the possibility of contamination. Secondly, young offenders who had served multiple incarcerations without contamination were also selected for a later section of the analysis. In other words, offenders who had

served more than one sentence at AYC and who had not been discharged elsewhere were compared to offenders who had served more than one sentence elsewhere and had not been discharged from AYC.

Variables

The following control variables (with their level of measurement in brackets) were used to ensure that the groups are comparable. Many of these variables were also used to assess whether offender characteristics differentially influenced the efficacy of PPC.

- Age (ratio)
- Education (ordinal)
- Race (nominal)
- Gang affiliation (nominal)
- CFS involvement (nominal)
- Place of residence (nominal)
- History of suicide risk (nominal)
- Parental Living Arrangement (nominal)
- Age of first incarceration (ratio)
- Seriousness of offence (ordinal)
- Type of offence (nominal)
- PRA (ordinal)
- Style of reintegration (nominal)

The "seriousness of offence" variable classifies each offence as high, medium and low as determined in the Offender Risk Assessment and Management System (Manitoba Justice, 1997) (see Appendix A.1). The type of offence variable classifies each offence as crimes against a person, against property and other crimes (see Appendix A.2). A history of suicide risk is confirmed if the youth has a suicide "caution" under his profile. A suicide caution is generally identified if the youth has been assessed as suicidal at intake, using the Secondary Risk Assessment for assessing suicide risk, or if while

incarcerated the youth has made a suicide attempt, or has declared an intent and/or plan to harm himself.

The major independent variable is the location of the youth's correctional incarceration; specifically, either AYC, thereby placing the youth in the treatment group, or another correctional facility, thereby placing the youth in the comparison group.

The following dependant variables (with their level of measurement in brackets) will be used to measure recidivism from each group over a 24-month period. All criminal code violations will be included with one qualification. Due to the controversy regarding the exclusion of breaches as a legitimate offence (Cavadino & Dignan, 2002), the analysis will exclude breaches for the purposes of the recidivism analysis. It should also be mentioned that since 2000 the justice system's response to breaches has also changed within Manitoba Justice with the "phasing in" of the Youth Criminal Justice Act. Controlling for this change will ensure that the most accurate conclusions are reached. Multiple measures were used to measure recidivism to ensure that a comprehensive understanding was attained. The dependant variables are:

- Subsequent charges (nominal) and the number of subsequent charges (ratio)
- Subsequent convictions (nominal) and the number of subsequent convictions (ratio)
- Subsequent incarceration (nominal) and the length of subsequent incarceration (ratio)
- Length of time (ratio) before a subsequent charge and before a subsequent incarceration
- Seriousness of most serious conviction (ordinal)

While each of these dependant variables are important, priority was given to analyzing the length of time before reinvolvement. This analysis specifically focused on determining if discharges from AYC (treatment group) remain “crime free” (measured by new charges) longer than other discharges (comparison group). In spite of this prioritization, each variable contributed an important part to the efficacy evaluation of PPC.

Sampling

Aggregate matched sampling was used to ensure that those discharged from other facilities (comparison group) did not significantly differ from the treatment group across several control variables.

Aggregate matched sampling was used to ensure that the two groups did not differ significantly across several known correlates to crime (Batton, Hill, Catalano & Hawkins, 1998; Hartnagel, 1996; Katsiyannis & Archwamety, 1997); these correlates are identified in the previous section as control variables. Each control variable was statistically analyzed and controlled through sampling to ensure that pretest differences do not sway posttest findings. An alpha level of .05 was used for all statistical tests in the sampling section and results section, unless otherwise noted. Tables 1, 2 and 3 display the characteristics of youth discharges in the year 2000. Keep in mind that many discharges were ineligible for sampling. These included youth serving time for only breaches and youth discharged from remand. Youth with multiple discharges within a given year were only counted once.

Table 1

Nominal Level Population Characteristics by Place of Discharge

Characteristic	AYC <i>f</i> (%)	OTHER <i>f</i> (%)	χ^2	<i>p</i>
Race	N=98	N=135		
Aboriginal	76 (77.6)	106 (78.5)		
Other	22 (22.4)	29 (21.5)	0.031	.874
Place of Residence	N=96	N=133		
Rural	52 (54.2)	24 (18.0)		
Urban	44 (45.8)	109 (82.0)	32.808	.000***
Gang Association	N=97	N=135		
Yes	51 (52.6)	109 (80.7)		
No	46 (47.4)	26 (19.3)	20.918	.000***
Parent Living Arrangement	N=76	N=98		
Lives with both parents	18 (23.7)	10 (10.2)		
Lives with one parent	45 (59.2)	68 (69.4)		
Lives with neither parent	13 (17.1)	20 (20.4)	5.76	.056
Type of primary offence	N=98	N=135		
Property	47 (48.0)	72 (53.3)		
Person	45 (45.9)	52 (38.5)		
Other	6 (6.1)	11 (8.1)	1.387	.500
CFS involvement	N=98	N=133		
Yes	17 (17.3)	25 (18.8)		
No	81 (82.7)	108 (81.2)	0.080	.864
History of suicide risk	N=98	N=135		
Yes	46 (46.9)	66 (48.9)		
No	52 (53.1)	69 (51.1)	0.087	.792
Style of Reintegration	N=98	N=135		
Nothing/probation	97 (99.0)	134 (99.3)		
ISSP	1 (1.0)	1 (0.7)	1.079	.583

* *p* <.05; ** *p* <.01; *** *p* <.001

Table 2

Ordinal Level Population Characteristics by Place of Discharge

Characteristic	AYC		OTHER		<u>U</u>	p
	n	M	n	M		
Education	N=98		N=134			
Grade 5-8	54	(55.1)	63	(47.0)		
Grade 9-10	39	(39.8)	61	(45.5)		
Grade 11-12	5	(5.1)	10	(7.5)	-1.277	.202
Seriousness of most serious offence	N=98		N=135			
Low	43	(43.9)	68	(50.4)		
Medium	36	(36.7)	54	(40.0)		
High	19	(19.4)	13	(9.6)	-1.530	.126
Primary Risk Assessment	N=94		N=112			
Low	15	(16.0)	9	(8.0)		
Medium	27	(28.7)	32	(28.6)		
High	36	(38.3)	45	(40.2)		
Very High	16	(17.0)	26	(23.2)	-1.606	.108

* p <.05; ** p <.01; *** p <.001

Table 3

Ratio Level Population Characteristics by Place of Discharge

Characteristic	AYC		OTHER		<u>t</u>	p
	n	M	n	M		
Number of charges	98	5.23	135	5.15	0.152	.879
Number of convictions	98	3.39	135	2.75	1.808	.073
Age of first incarceration (years)	98	16.16	135	15.19	5.219	.000***

* p <.05; ** p <.01; *** p <.001

While 82% of discharges from the comparison group were from urban areas, only 45.8% of those discharged from the treatment group were (see Table 1). Chi square analysis found that this difference was statistically significant, $\chi^2 (1) = 32.80, p < .000$. Youth discharged from the comparison group were also more likely to be associated with a street gang, $\chi^2 (1) = 20.91, p < .000$. While only 52.6% of the discharged from the treatment group had a gang affiliation, over 80% of the youth discharged from the comparison group were gang affiliates. An independent sample t-test found that youth in the comparison group were also significantly younger during their first incarceration than was the treatment group, $t (231) = 5.21, p < .000$ (see Table 3). On average, discharges from AYC were 16.16 years old, while discharges from the comparison group were 15.19 years old. Each of these significant differences was removed through sampling. For example, analysis indicated that there was significantly more youth from rural areas in the treatment group than in the comparison group, therefore urban youth from the comparison group were randomly removed until this difference was no longer significant. Likewise, analysis found that the treatment group has a significantly older at first incarceration than the comparison group; therefore the youngest young offenders from the comparison group were randomly removed until the difference was no longer significant.

After the aggregate matched sampling procedure was completed the treatment group (N=75) and the comparison group (N=75) did not differ significantly across any of the control variables (see Tables 4, 5 and 6). Although the normality assumption was violated on a number of the ratio level variables, the non-parametric Mann-Whitney U

test confirmed each of the results listed below.

Table 4

Nominal Sample Characteristics by Place of Discharge

Characteristic	AYC <i>f</i> (%)	OTHER <i>f</i> (%)	X^2	<i>p</i>
Race	N=75	N=75		
Aboriginal	57 (76.0)	55 (73.3)		
Other	18 (24.0)	20 (26.7)	0.141	.851
Place of Residence	N=75	N=75		
Rural	34 (45.3)	23 (30.7)		
Urban	41 (54.7)	52 (69.3)	3.424	.092
Gang Association	N=75	N=75		
Yes	41 (54.7)	52 (69.3)		
No	34 (45.3)	23 (30.7)	3.424	.064
Parent Living Arrangement	N=55	N=54		
Lives with both parents	12 (21.8)	7 (13.0)		
Lives with one parent	33 (60.0)	37 (68.5)		
Lives with neither parent	10 (18.2)	10 (18.5)	1.535	.464
Type of primary offence	N=75	N=75		
Property	34 (45.3)	43 (57.3)		
Person	35 (46.7)	26 (34.7)		
Other	6 (8.0)	6 (8.0)	2.380	.304
CFS involvement	N=75	N=75		
Yes	14 (18.7)	13 (17.8)		
No	61 (81.3)	60 (82.2)	0.018	.892
History of suicide risk	N=75	N=75		
Yes	37 (49.3)	33 (44.0)		
No	37 (50.7)	42 (56.0)	0.429	.513
Style of Reintegration	N=75	N=75		
Nothing/probation	74 (98.7)	74 (98.7)		
ISSP	1 (1.3)	1 (1.3)	0.000	1.000

* *p* <.05; ** *p* <.01; *** *p* <.001

Table 5

Ordinal Sample Characteristics by Place of Discharge

Characteristic	AYC		OTHER		<u>U</u>	p
	f(%)		f(%)			
Education	N=75		N=75			
Grade 5-8	40 (53.3)		29 (39.2)			
Grade 9-10	31 (41.3)		39 (52.7)			
Grade 11-12	4 (5.3)		6 (8.1)		-1.733	.083
Seriousness of most serious offence	N=75		N=75			
Low	31 (41.3)		40 (53.3)			
Medium	30 (40.0)		29 (38.7)			
High	14 (18.7)		6 (8.0)		-1.858	.063
Primary Risk Assessment	N=72		N=60			
Low	9 (12.5)		6 (10.0)			
Medium	21 (29.2)		19 (31.7)			
High	29 (40.3)		25 (41.7)			
Very High	13 (18.1)		10 (16.7)		-0.024	.981

* p <.05; ** p <.01; *** p <.001

Table 6

Ratio Sample Characteristics by Place of Discharge

Characteristic	AYC		OTHER		t	p
	n	<u>M</u>	n	<u>M</u>		
Number of charges	75	5.19	75	4.93	0.381	.704
Number of convictions	75	3.05	75	2.67	1.151	.252
Age of first incarceration (years)	75	15.96	75	15.58	1.782	.077

* p <.05; ** p <.01; *** p <.001

Although this sampling method helped to ensure that the groups were equivalent across several known correlates to crime, there are also weaknesses of matched sampling. First, the representativeness of the sample was limited due to this sampling method. The recidivism rates reported in this report therefore were not the actual recidivism rates from AYC; they were the recidivism rates of a subgroup of AYC discharges that was demographically equivalent to a subgroup of the comparison group. While representativeness was potentially a concern, it seems more important that equivalent groups were used for recidivism analysis. Secondly, it was possible that while the samples were being matched across a number of identified variables, that unknown to the researcher, a number of unidentified variables also changed. This relates to a selection bias issue that is common criticism of quasi-experimental designs (Miller & Salkind, 2002).

Sources of Data

The data was collected from COMS (Criminal Offender Management System). This computerized system, maintained by Manitoba Justice, gathers information on all Manitoba offenders. This secondary information source included demographic data including age, race, and gender; offence data including charges, convictions, and dispositions; and risk data including PRAs. COMS was developed to enhance communication between departments, standardize case management practices across the province and enable this type of evaluation to be completed.

Results

Effects of Place of First Incarceration

Effect at next incarceration. Analysis was able to retrospectively examine youths' first place of incarceration to help determine if the place of first incarceration affected their recidivism at their next time of incarceration (see Table 7). Using an Independent Samples t-test, it appears that those first incarcerated at AYC did not have significantly fewer charges, $t(147) = -1.069$, $p < .28$, or significantly fewer convictions, $t(147) = -0.82$, $p < .408$. The youth's place of first incarceration also does not seem to affect the length of the youth's next incarceration, $t(134) = -1.059$, $p < .29$.

Table 7

The Difference Between the Recidivism Rates at AYC and Other at Next Incarceration

Characteristic	AYC		OTHER		t	p
	n	M	n	M		
Number of charges during next involvement	75	6.00	74	7.12	-1.069	.287
Number of convictions during next involvement	75	2.88	74	3.30	-0.829	.408
Length of sentence at next involvement (in months) a	75	5.70	75	6.59	-1.059	.292

a Due to significantly unequal variances, the "equal variances not assumed" statistic was used.

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

Analysis is also able to measure if the place of their first incarceration differentially affected offenders with certain demographic characteristics. For each independent variable listed below (see Table 8), two-way ANOVA analysed the effects of several dependent variables at the youth's next incarceration. These variables include

number of charges, number of convictions and length of next incarceration. It should be mentioned that extraneous variables that could affect these dependant variables, particularly length of incarceration, have largely been addressed through the matched sampling procedure. Involvement with CFS, place of residence, parental status, gang affiliation, past risk of suicide, type of primary offence and seriousness of primary offence did not significantly affect the success of PPC across any of the dependent variables. Interestingly, aboriginal youth in the treatment group tended to have a significantly shorter subsequent incarceration than did aboriginal youth in the comparison group, $F(1) = 5.87, p < .05$ (see Figure 1).

The youth's risk to reoffend significantly affected the subsequent number of charges of PPC discharges, $F(3) = 3.61, p < .05$ (see Figure 2). Specifically, youth discharged from AYC who are assessed as a low risk to reoffend have significantly fewer charges than low risk youth discharged from the comparison group, $U(1) = 2.5, p < .01$.

The risk to reoffend of AYC discharges also significantly affected the length of their next incarceration, $F(3) = 3.34, p < .05$ (see Figure 3). Specifically, very high risk youth who spend their first incarceration at AYC have a significantly shorter subsequent incarceration than do very high risk youth who spend their first incarceration in the comparison group, $U(1) = 2.4, p < .05$. Although not significant, rural youth discharged from AYC tended to have a shorter subsequent incarceration than did rural youth discharged from the comparison group, $F(1) = 3.35, p = .06$.

Table 8

The Difference Between the Recidivism Rates at AYC and Other at Next Incarceration
Across the Individual Characteristics of the Youth

Individual Characteristic	Dependant Variables a	Mean Square	df	F	p
CFS involvement	Number of charges	6.486	1	.16	.688
	Number of convictions	12.318	1	1.40	.238
	Length of incarceration	6.152 <i>b</i>	1	0.20	.651
Race	Number of charges	35.533	1	0.891	.347
	Number of convictions	15.377	1	1.806	.182
	Length of incarceration	162.208 <i>b</i>	1	5.873	.017*
Place of Residence	Number of charges	20.594 <i>b</i>	1	.534	.466
	Number of convictions	7.783 <i>b</i>	1	.894	.347
	Length of incarceration	90.870	1	3.359	.069
Parental Status	Number of charges	25.039	2	0.645	.528
	Number of convictions	7.597	2	0.936	.397
	Length of incarceration	70.427 <i>b</i>	2	2.143	.125
Gang Affiliation	Number of charges	12.691	1	0.329	.567
	Number of convictions	27.482	1	3.286	.073
	Length of incarceration	1.745 <i>b</i>	1	0.059	.809
Risk of Suicide	Number of charges	40.031	1	1.017	.316
	Number of convictions	3.856	1	0.445	.506
	Length of incarceration	3.895	1	0.132	.718
Primary Risk Assessment	Number of charges	110.279 <i>b</i>	3	3.616	.016*
	Number of convictions	21.275	3	2.511	.063
	Length of incarceration	79.314 <i>b</i>	3	3.345	.022*
Type of primary offence (property, person, other)	Number of charges	43.366	2	1.102	.336
	Number of convictions	4.228	2	0.494	.612
	Length of incarceration	0.976 <i>b</i>	2	0.035	.966
Seriousness of primary offence	Number of charges	13.005	2	0.321	.726
	Number of convictions	1.331	2	0.150	.861
	Length of incarceration	16.123 <i>b</i>	2	0.550	.579

a Refers to the recidivism at next incarceration only

b Levene's Test found significantly unequal variances ($p < .05$).

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

Figure 1

The Difference Between the Length of Next Incarceration at AYC and Other Across Race Using the Matched Sample

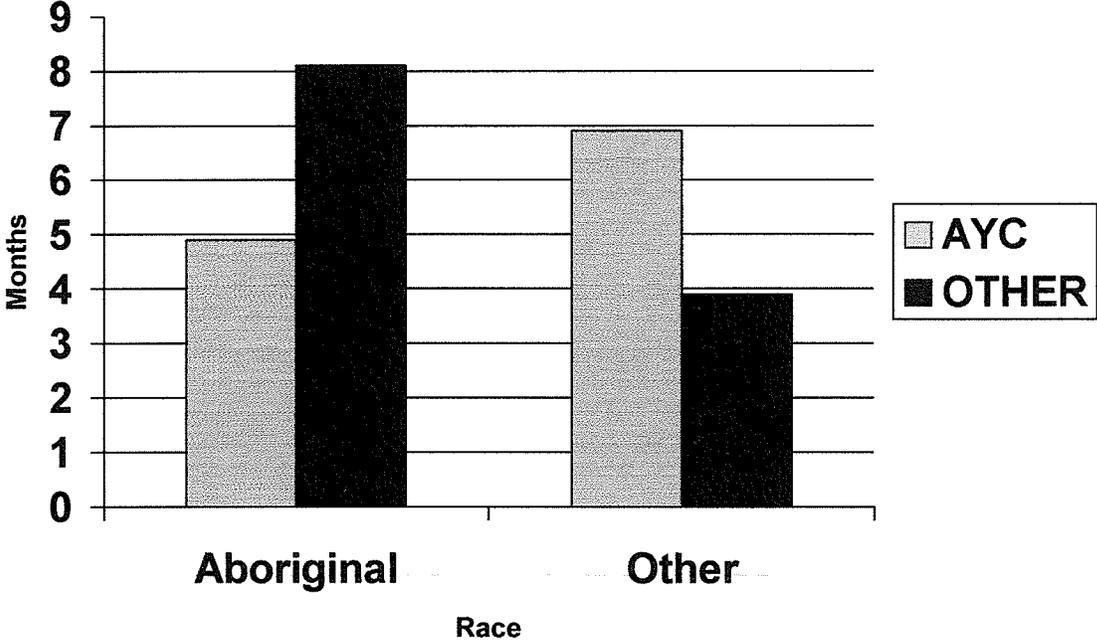


Figure 2

The Difference Between the Number of Charges at Next Incarceration at AYC and Other Across PRA Risk Score Using the Matched Sample

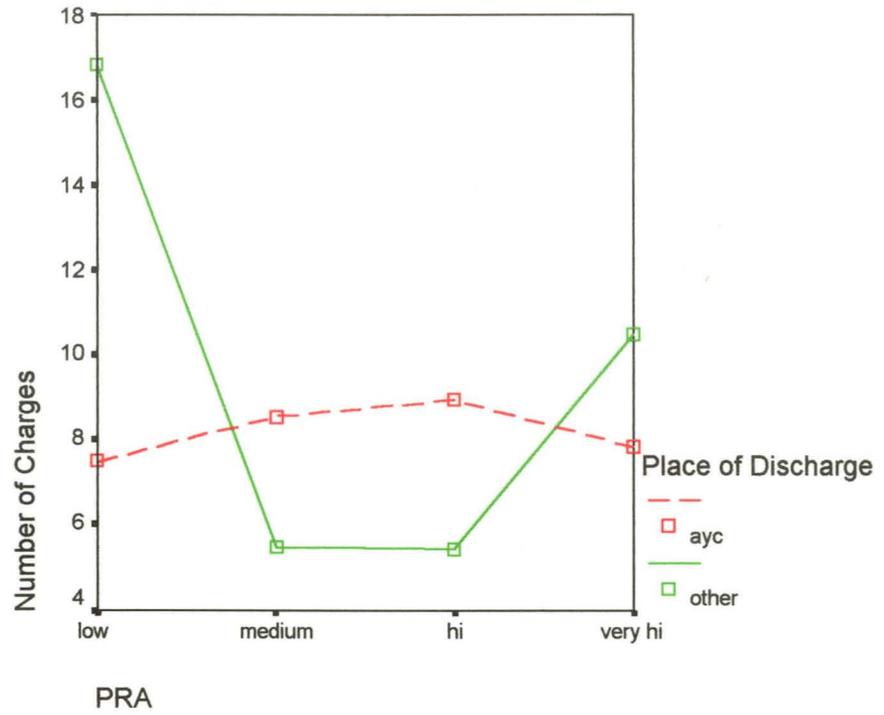
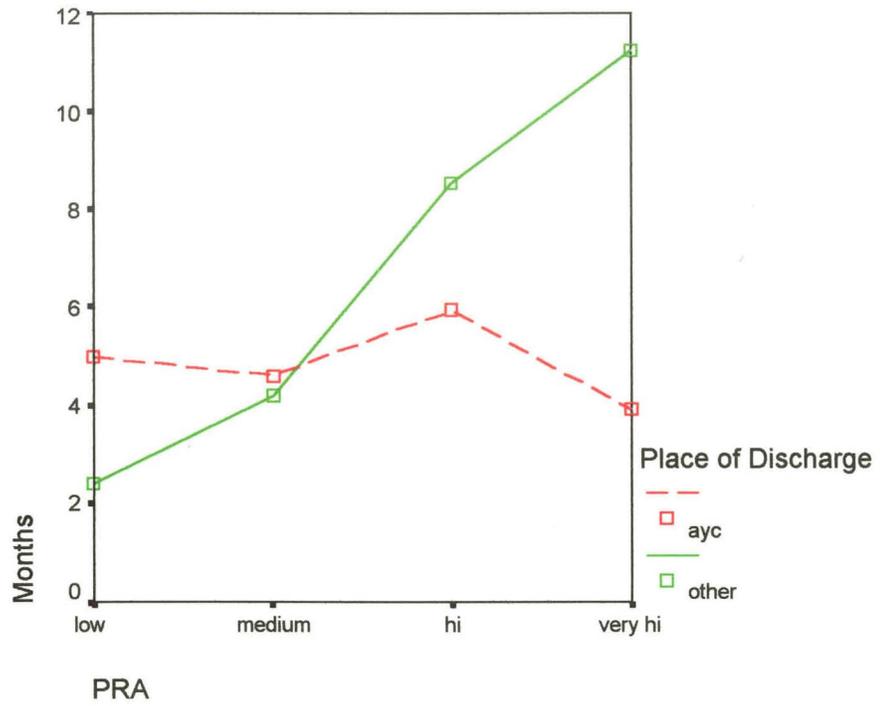


Figure 3

The Difference Between the Length of Next Incarceration at AYC and Other Across PRA Risk Score Using the Matched Sample



Analysis also tracked the length of time before youth were recharged and before youth were reincarcerated after being released from their incarceration. Recidivism rates were assessed at three-month intervals for a two-year period. Differences at each interval suggest the effect that PPC has on the length of time before reinvolvement, an important measure of recidivism. First, once the youth was release from his first incarceration, the length of time before his next charge was calculated (see Figure 4). Chi square analysis was used to determine if the different rates of recharge at each time interval were statistically significant. Inferential analysis found that the rates of recidivism were not statistically significant at three months, $\chi^2(1) = 0.498$, $p = .480$, six months, $\chi^2(1) = 0.775$, $p = .379$, nine months, $\chi^2(1) = 1.32$, $p = .250$ or 12 months, $\chi^2(1) = 2.67$, $p = .102$. After the one year interval AYC recidivism rates are significantly lower at 15 months, $\chi^2(1) = 4.16$, $p < .05$, 18 months, $\chi^2(1) = 8.23$, $p < .01$, 21 months, $\chi^2(1) = 4.90$, $p < .05$ and 24 months, $\chi^2(1) = 5.07$, $p < .05$, than the comparison group. AYC recidivism rates seem to be lowest, by comparison, at the 18-month interval as AYC's rate of recharge is 60%, while the comparison group's rate of recharge is 81.3%.

Once the youth was released from their first incarceration, the length of time before their next incarceration was also calculated (see Figure 5). Chi square analysis determined if the rate of reincarceration at each time interval was statistically significant. At the three month time interval AYC had a significantly higher reincarceration rate than the comparison group (16% versus 5.3%), $\chi^2(1) = 4.47$, $p < .05$. After the abnormality at the three-month time interval, the rest of the reincarceration rates match closely with the recharge rates seen in Figure 1. No significant differences were found at the six month,

Figure 4

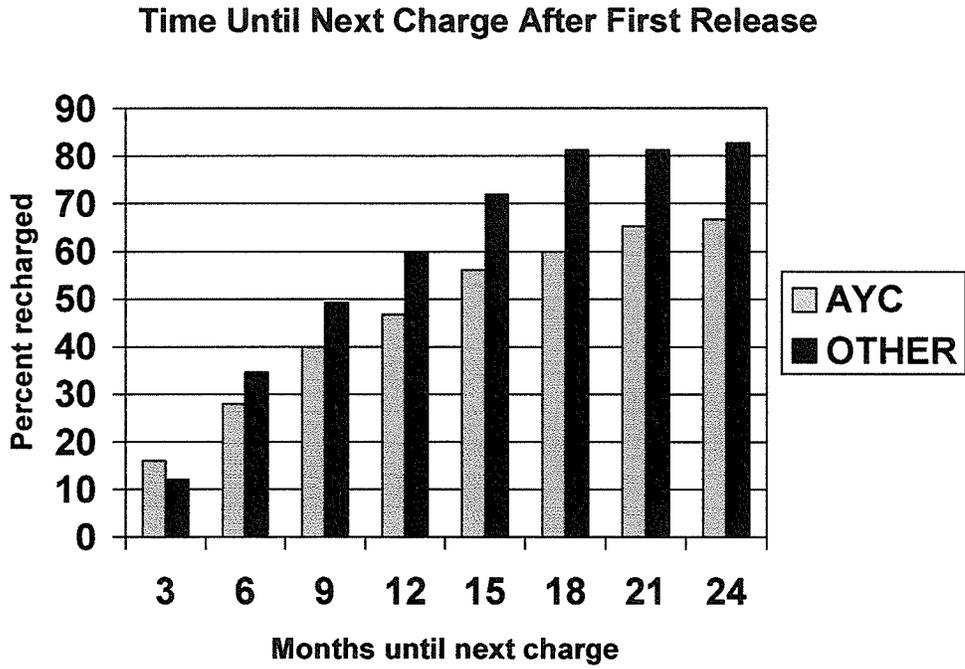
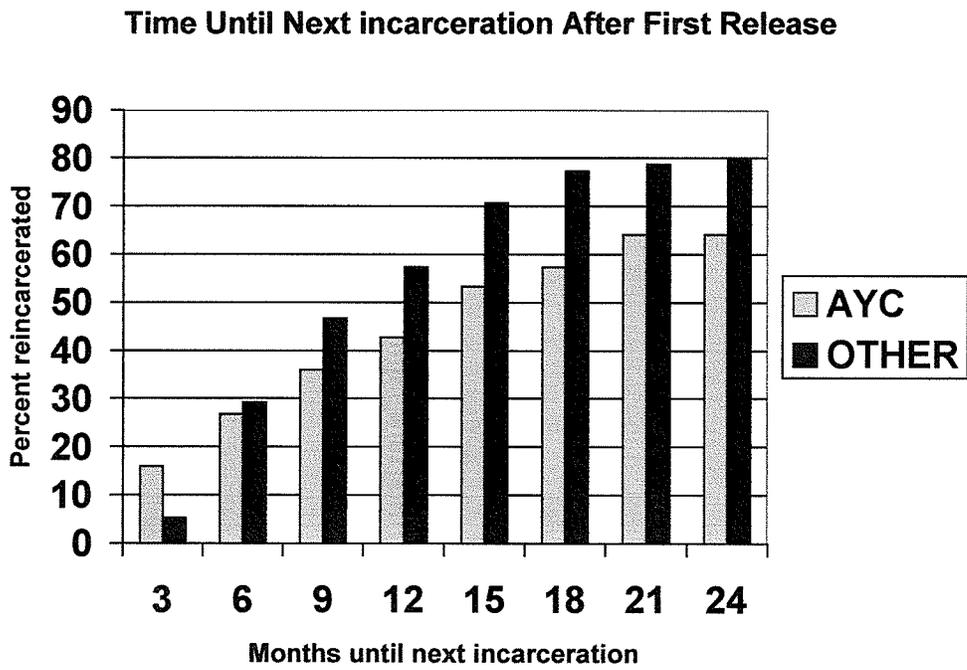


Figure 5



$\chi^2(1) = 0.13, p = .716$, nine month, $\chi^2(1) = 1.76, p = .185$, or 12 month intervals, $\chi^2(1) = 3.22, p = .072$. AYC discharges have significantly lower reincarceration rates at the 15 month, $\chi^2(1) = 4.78, p < .05$, 18 month, $\chi^2(1) = 6.82, p < .01$, 21 month, $\chi^2(1) = 3.94, p < .05$, and 24 month intervals, $\chi^2(1) = 4.76, p < .05$. AYC has the lowest relative reincarceration rates at the 18-month time interval (57.3% versus 77.3%).

Effect on longer-term recidivism. It is also important to assess the impact of the place of first incarceration on longer-term recidivism. The database was able to track individuals for two years after release from their first term of incarceration (see Table 9). While there was no statistically significant differences, t-tests found that the youth's total number of charges, $t(1) = -1.89, p = .060$, and total number of convictions, $t(1) = -1.37, p = .173$, were somewhat less in the treatment group than in the comparison group. AYC discharges tended to have fewer total charges (11.57 versus 15.04). AYC discharges did have significantly fewer incarcerations, $t(1) = -3.00, p < .01$ and therefore were sentenced to fewer months of incarceration, $t(1) = -2.95, p < .01$ over the two years period.

Table 9

The Difference Between the Recidivism Rates at AYC and Other After Two Years

Dependant Variable	AYC		OTHER		t	p
	n	M	n	M		
Total number of incarcerations	75	2.13	75	2.70	-3.004	.003**
Total number of months incarcerated	75	9.70	74	15.71	-2.957	.004**
Total number of charges	75	11.57	75	15.04	-1.892	.060
Total number of convictions	75	6.13	75	7.24	-1.370	.173

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

Two-way ANOVA was also used to analyse whether the place of their first incarceration differentially affected offenders with certain demographic characteristics over the same two-year period (see Table 10). Interestingly, youth discharged from AYC to rural areas had significantly shorter subsequent incarcerations than did youth discharged from the comparison group to rural areas, $F(1) = 15.32, p < .000$ (see Figure 6).

The state of the parental relationship also significantly affected the total number of months that a youth discharged from AYC would be incarcerated, $F(2) = 3.76, p < .05$ (see Figure 7). Specifically, AYC seemed more successful at shortening the total length of incarceration for youth who reside with either both parents, $U(1) = 1.9, p < .05$, or one parent, $U(1) = 2.2, p < .05$, as compared to youth discharged from the comparison group who reside with either both parents or one parent. Interestingly, youth who reside with neither parent and were discharged from the comparison group had significantly fewer months incarcerated than similar youth discharged from AYC, $U(1) = 2.1, p < .05$.

Finally, a youth's total number of charges was significantly impacted by the place of discharge and risk to reoffend, $F(3) = 3.71, p < .05$ (see Figure 8). Specifically, low risk youth discharged from AYC tended to have significantly fewer charges than did low risk youth discharged from the comparison group, $U(1) = 3.0, p < .01$. Although not significant, low risk youth discharged from AYC also tended to have fewer convictions than youth discharged from other institutions after 2 years, $F(3) = 2.42, p = .07$. The number of charges, convictions and the length of incarceration for all other risk levels were virtually identical between the two groups. Although not significant, youth with a history of suicide risk tended to have more subsequent charges when they were

discharged from AYC versus the comparison group, $F(3) = 3.26$, $p = .073$. No other individual characteristics of the youth seemed to interact with the PPC treatment compared to the comparison group over the two-year period.

Table 10

The Difference Between the Recidivism Rates at AYC and Other After Two Years
Across the Individual Characteristics of the Youth

Individual Characteristic	Dependant Variables <i>a</i>	Mean Square	df	F	p
CFS involvement	Number of charges	92.470	1	0.725	.396
	Number of convictions	1.646	1	0.067	.796
	Length of incarceration	74.100 <i>b</i>	1	0.475	.492
Race	Number of charges	35.174	1	0.279	.598
	Number of convictions	0.211	1	0.009	.926
	Length of incarceration	247.34 <i>b</i>	1	1.714	.193
Place of Residence	Number of charges	22.982 <i>b</i>	1	0.188	.665
	Number of convictions	16.528	1	0.683	.410
	Length of incarceration	2105.0 <i>b</i>	1	15.325	.000***
Parental Status	Number of charges	191.27 <i>b</i>	2	1.530	.221
	Number of convictions	43.702 <i>b</i>	2	1.898	.155
	Length of incarceration	575.09 <i>b</i>	2	3.761	.027*
Gang Affiliation	Number of charges	40.090 <i>b</i>	1	0.343	.559
	Number of convictions	2.069 <i>b</i>	1	0.091	.764
	Length of incarceration	11.357 <i>b</i>	1	0.076	.784
Risk of Suicide	Number of charges	407.07 <i>b</i>	1	3.266	.073
	Number of convictions	50.365	1	2.076	.152
	Length of incarceration	68.644 <i>b</i>	1	0.442	.507
Primary Risk Assessment	Number of charges	418.09	3	3.710	.013*
	Number of convictions	54.89	3	2.418	.070
	Length of incarceration	127.81 <i>b</i>	3	1.042	.377
Type of primary offence (property, person, other)	Number of charges	129.82 <i>b</i>	2	1.019	.364
	Number of convictions	47.645	2	1.958	.145
	Length of incarceration	122.06 <i>b</i>	2	0.786	.458
Seriousness of primary offence	Number of charges	45.853	2	0.360	.699
	Number of convictions	13.860	2	0.574	.564
	Length of incarceration	1.093 <i>b</i>	2	0.007	.993

a Refers to characteristics of the reoffence within 2 years of first discharge

b Levene's Test found significantly unequal variances ($p < .05$).

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

Figure 6

The Difference Between the Total Number of Months Incarcerated After Two Years at AYC and Other Across Place of Residence Using the Matched Sample

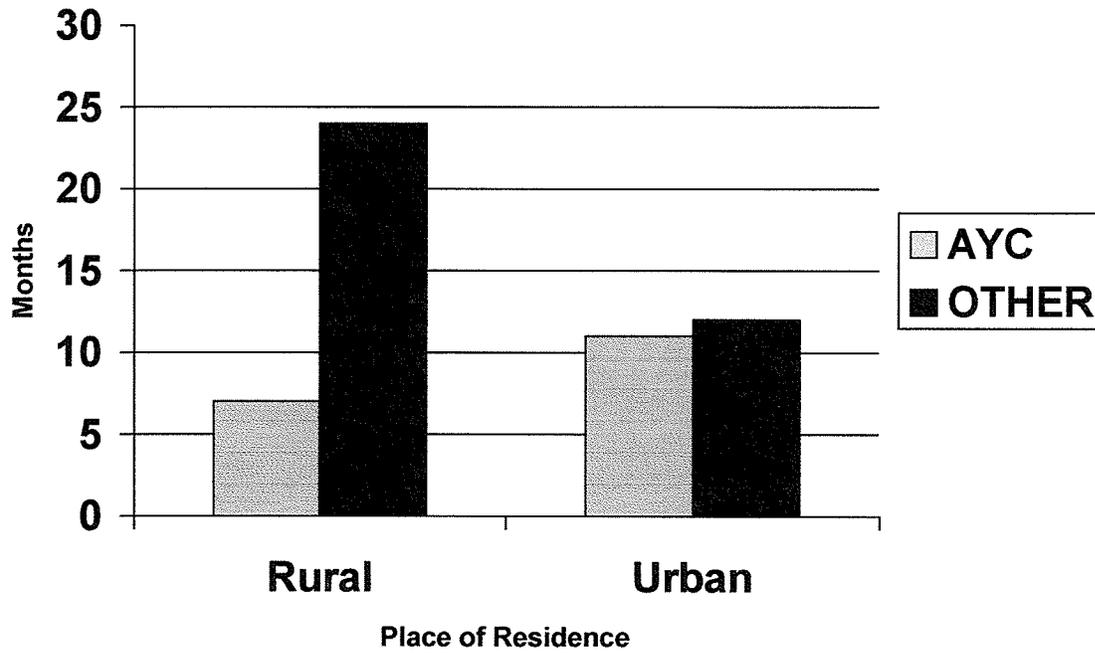


Figure 7

The Difference Between the Total Number of Months Incarcerated After Two Years at AYC and Other Across Family Status Using the Matched Sample

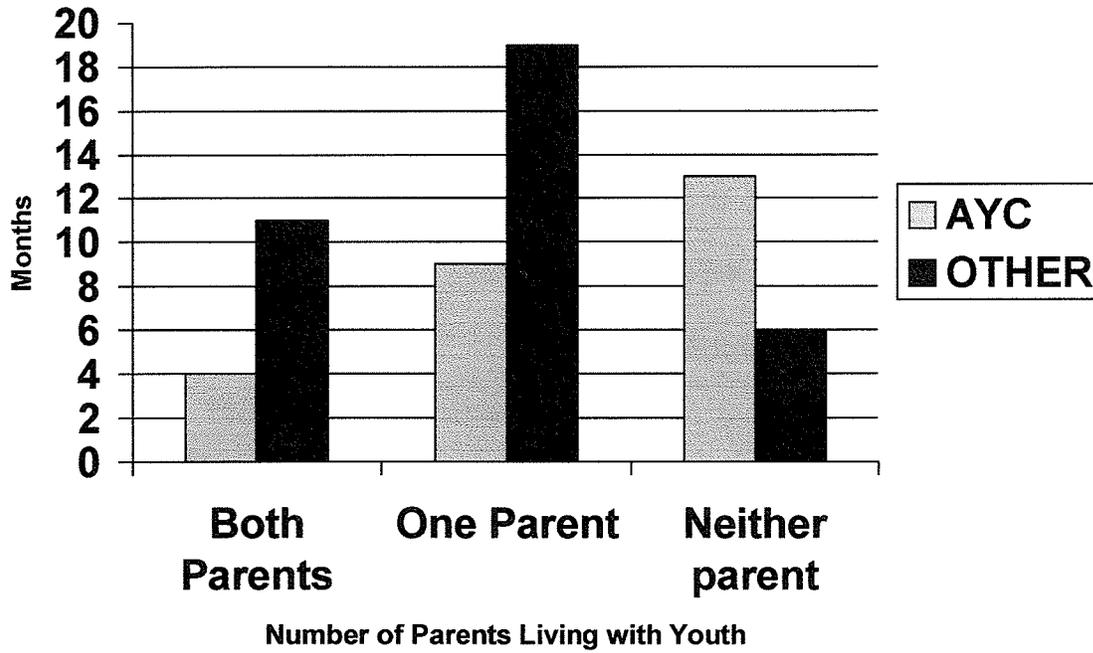
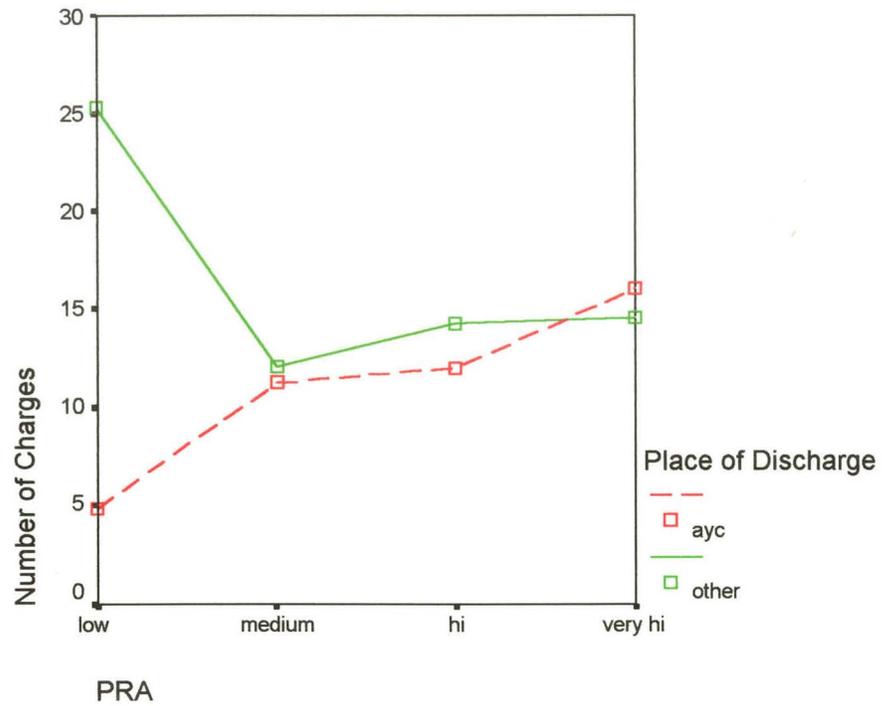


Figure 8

The Difference Between the Total Number of Charges After Two Years at AYC and Other Across PRA Risk Score Using the Matched Sample



Effects of Place of Multiple Incarcerations on Longer-Term Recidivism

Until this point, analysis has focused on the effects of the place of first incarceration. The remaining analysis will help determine the effect of multiple incarcerations from the same place of incarceration - the treatment group (N=44) or the comparison group (N=40). This will assess if multiple contacts with PPC at AYC are relatively more effective than multiple incarcerations at other facilities. Before the results are presented, it is important to mention two important sampling issues. First, youth are included in this analysis if they had more than one discharge at AYC and none elsewhere, or if they had more than one discharge elsewhere and none at AYC. The second issue relates to the loss of the demographically equivalent groups. All the previous analysis controlled for many potential differences within the population (see Table 1, 2 and 3). Due to the relatively low sample size (N=84), it was impossible to remove the differences through sampling. Demographic differences will be identified and the results will need to be qualified in light of these differences. Later regression analysis was used to control for these personal characteristics. While only 10% (N=4) of the youth with multiple discharges from the comparison group were from rural areas, 55% (N=24) of youth with multiple discharges from AYC were from rural areas, $\chi^2 (1) = 18.70, p < .000$. Youth from the AYC group were also less likely to be associated with a youth gang, $\chi^2 (1) = 5.33, p < .05$, than were youth from the comparison group.

In spite of these differences many similar results were found. AYC multiple discharges continue to have significantly fewer incarcerations (1.69 versus 2.20), $t (1) = 2.35, p < .05$ (see Table 11). AYC multiple discharges were also incarcerated for

significantly fewer months (5.91 months versus 10.71 months), $t(1) = 2.08, p < .05$.

Interestingly, while previous results showed that one incarceration at AYC did not seem to significantly affect number of charges or number of convictions, multiple incarcerations at AYC did. Those who had multiple involvements with PPC had significantly fewer charges (8.16 versus 16.47), $t(1) = 3.15, p < .01$, and fewer convictions (4.54 versus 7.32), $t(1) = 2.41, p < .05$. Later regression analysis will isolate the effect of the treatment from the effect of these demographic differences (i.e. place of residence and gang affiliation).

Table 11

The Difference Between the Recidivism Rates of Those with Multiple Discharges from AYC and Other After Two Years

Dependant Variable	AYC		OTHER		t	p
	n	M	n	M		
Total number of incarcerations	44	1.68	40	2.20	2.358	.020*
Total number of months incarcerated	44	5.91	39	10.71	2.084 <i>a</i>	.041*
Total number of charges	44	8.16	39	16.47	3.155 <i>a</i>	.003**
Total number of convictions	44	4.54	39	7.32	2.413 <i>a</i>	.019*

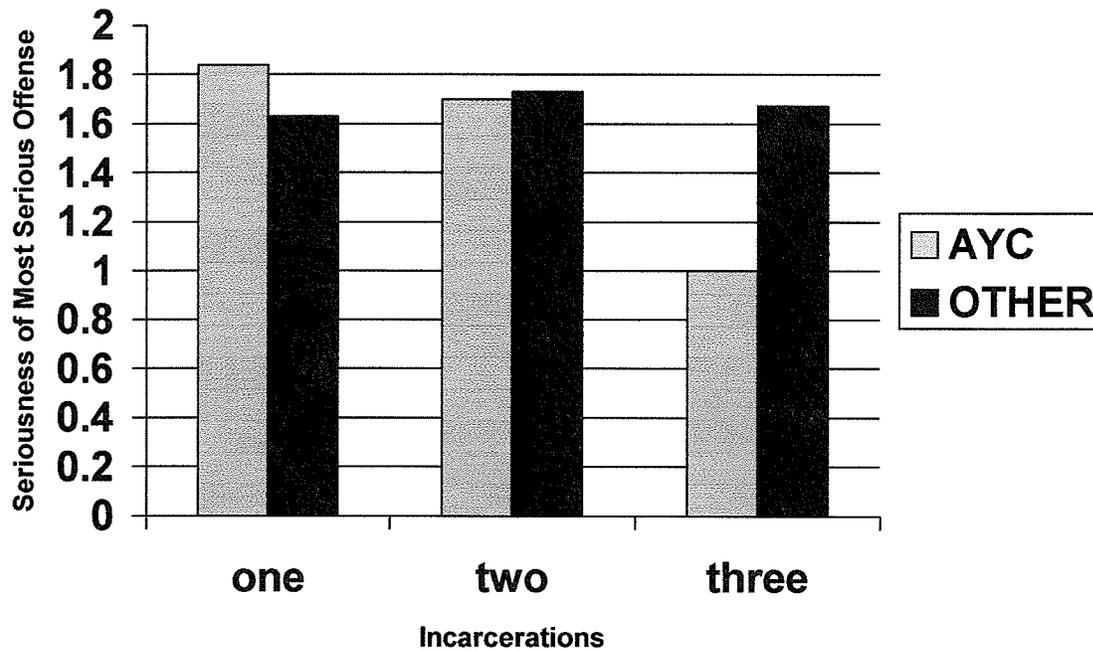
a Due to significantly unequal variances, the “equal variances not assumed” statistic was used.

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

Analysis identifies that PPC also seems to have an effect on the seriousness of the youths' most serious offence after multiple incarcerations. Repeated-measures MANOVA identified that youth with multiple discharges from a PPC program have somewhat less serious convictions than youth with multiple incarcerations in the comparison group, $F(2) = 3.21, p = .08$ (see Figure 9).

Figure 9

The Difference Between the Seriousness of the Youth's Most Serious Offence after Multiple Discharges from the Same Group



MANOVA analysis was used to help determine if the place of multiple incarcerations differentially affected offenders with certain demographic characteristics over a two-year period (see Table 12). Similar to earlier results, youth with a history of suicide risk tend to have significantly fewer charges, $F(1) = 4.62, p < .05$ (see Figure 10), and fewer convictions, $F(1) = 5.91, p < .05$ (see Figure 12), in the comparison group than in the PPC group. Although not significant, youth from rural areas tended to have a shorter subsequent incarcerations after being released from AYC compared to those discharges from the comparison group, $F(1) = 3.89, p = .052$. AYC discharges who lived with at least one parent tended to have fewer charges, $F(2) = 2.90, p = .064$, and fewer convictions, $F(2) = 2.51, p = .090$, than youth living with at least one parent released from other facilities. Finally, low risk youth with multiple releases from AYC tend to have fewer charges than low risk youth with multiple releases from elsewhere, $F(3) = 2.80, p = .068$.

Multiple Regression

Hierarchical regression analysis was used to help determine if being placed in a PPC placement could predict various measures of recidivism while controlling for the effect of other known contaminating variables. Each model includes different samples of discharges as well as measures different recidivism indicators. The first set of models considers variables that predict total number of charges. The second set of models considers variables that predict total number of convictions. The third set of models considers variables that predict total number of months incarcerated. The fourth set of models considers variables that predict the total number of times incarcerated. Within each set of models, analysis includes the whole sample of discharges in the year 2000 (N

Table 12

The Difference Between the Recidivism Rates for Those with Multiple Discharges from AYC and Other After Two Years Across the Individual Characteristics of the Youth

Individual Characteristic	Dependant Variables <i>a</i>	Mean Square	df	F	p
CFS involvement	Number of charges	395.43 <i>b</i>	1	2.661	.107
	Number of convictions	49.144 <i>b</i>	1	1.904	.172
	Length of incarceration	30.194	1	0.282	.597
Race	Number of charges	1.017 <i>b</i>	1	0.007	.932
	Number of convictions	3.564 <i>b</i>	1	0.135	.714
	Length of incarceration	1.345 <i>b</i>	1	0.013	.910
Place of Residence	Number of charges	144.16 <i>b</i>	1	1.049	.309
	Number of convictions	0.358 <i>b</i>	1	0.014	.907
	Length of incarceration	399.58	1	3.889	.052
Parental Status	Number of charges	416.86 <i>b</i>	2	2.900	.064
	Number of convictions	58.528 <i>b</i>	2	2.517	.090
	Length of incarceration	248.87 <i>b</i>	2	2.543	.088
Gang Affiliation	Number of charges	43.32 <i>b</i>	1	0.326	.570
	Number of convictions	6.132 <i>b</i>	1	0.241	.625
	Length of incarceration	8.981 <i>b</i>	1	0.085	.771
Risk of Suicide	Number of charges	613.13 <i>b</i>	1	4.625	.035*
	Number of convictions	145.63 <i>b</i>	1	5.919	.017*
	Length of incarceration	130.82 <i>b</i>	1	1.234	.270
Primary Risk Assessment	Number of charges	311.75 <i>b</i>	3	2.800	.068
	Number of convictions	37.775 <i>b</i>	3	1.553	.220
	Length of incarceration	1.786 <i>b</i>	3	0.023	.977
Type of primary offence (property, person, other)	Number of charges	79.943 <i>b</i>	2	0.571	.567
	Number of convictions	6.926 <i>b</i>	2	0.260	.772
	Length of incarceration	4.865	2	0.045	.956
Seriousness of primary offence	Number of charges	68.455 <i>b</i>	2	0.483	.619
	Number of convictions	9.661 <i>b</i>	2	0.368	.694
	Length of incarceration	6.048 <i>b</i>	2	0.056	.945

a Refers to characteristics of the reoffence within 2 years of first discharge

b Levene's Test found significantly unequal variances ($p < .05$).

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

Figure 10

The Difference Between the Total Number of Charges for Those with Multiple Releases from AYC and Other Across History of Suicide Risk

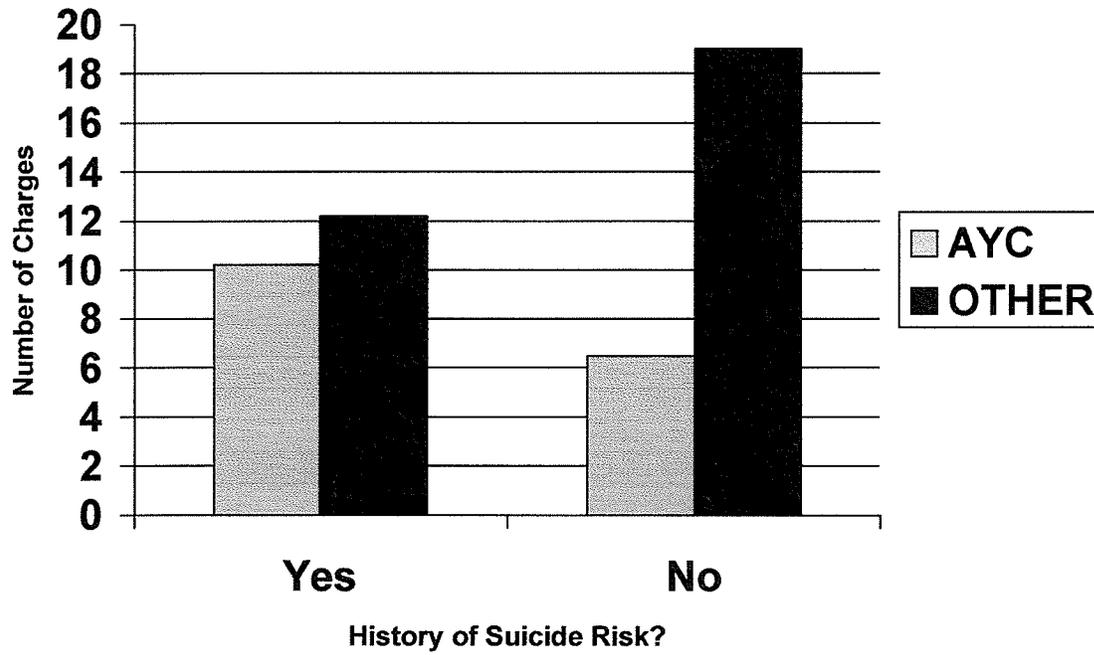
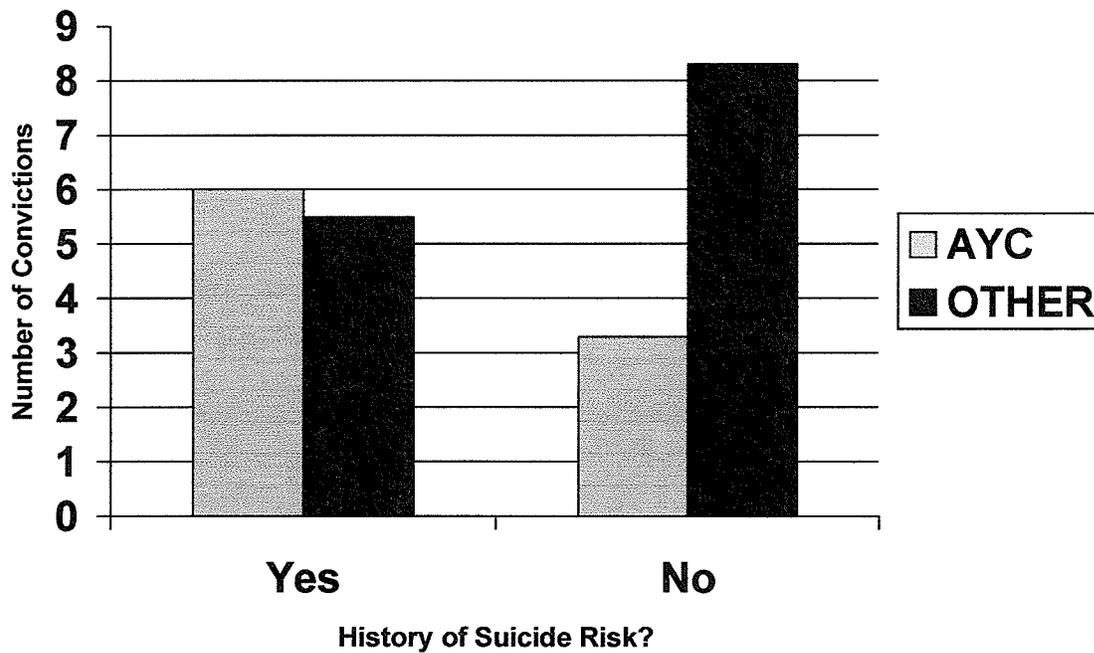


Figure 11

The Difference Between the Total Number of Convictions for Those with Multiple Discharges from the Same Group Across History of Suicide Risk



= 281), the matched sample (N = 150), and those who had multiple discharges from the same group (N =84), either AYC or other. Analysis is presented in the format recommended by Tabachnick and Fidell (2001).

Factors that predict total number of charges. Hierarchical regression analysis assessed whether being placed in a PPC placement could predict the total number of subsequent charges while controlling for the effect of other known correlates. Each model includes two steps. Step one assesses the ability of a number of independent variables, not including place of discharge, to predict the variance in a dependent variable. In step two, the place of discharge, the independent variable of greatest interest, is added to the regression model to determine if the place of discharge significantly improved the model's ability to predict the variation in the dependant variable.

Preliminary analysis on the following three models led to the transformation of variables to improve normality and reduce outliers. Logarithmic transformations were used on number of charges at first incarceration, PRA, and total number of charges. Using a $p < .001$ criterion for Mahalanobis distance, no outliers are found. As recommended by Tabachnick and Fidell (2001), none of the variables are inter-correlated beyond 0.7. Each regression table displays the unstandardized Beta coefficient (**B**), the unstandardized error coefficient (SE B), the standardized Beta coefficient (β), the t value, R^2 change, the F change as well as the R, R^2 and adjusted R^2 . Using the whole sample, after step two, the model could conservatively explain 35.7% of the variation in the (log of) total number of charges (see Table 13). Using the whole sample, after step one, race, place of residence, gang affiliation, (log of) PRA, (log of) number of charges at first incarceration, and age at first incarceration could liberally explain 36% of the variation in

(the log of) total number of charges, $F(6, 199) = 18.68, p < .000$. After step two, the model did significantly improved with the addition of the place of first incarceration, $F(1, 198) = 6.02, p < .05$. The place of first incarceration can liberally explain 2% of the variation in the (log of) total number of charges while accounting for the effect of the variables in step one. While the addition of step two did significantly improve the overall model, the additional amount of the variance explained is small.

Using the matched sample, after step two, the model could conservatively explain 30.5% of the variation in the (log of) total number of charges (see Table 14). Using the matched sample, after step one, race, place of residence, gang affiliation, (log of) PRA, (log of) number of charges at first incarceration, and age at first incarceration could liberally explain 33% of the variation in the (log of) total number of charges, $F(6, 125) = 10.13, p < .000$. After step two, the model did not significantly improve with the addition of the place of first incarceration, $F(1, 124) = 2.89, p = .091$.

Table 13

Hierarchical Regression Analysis for variables predicting Total Number of Charges using the Whole Sample

	B	SE B	β	T	R ² change	F change
Race	-0.07	.13	-.03	-.56		
Place of residence	0.03	.12	.02	.36		
Gang affiliation	-0.27	.12	-.14	-2.18*		
Primary Risk Assessment	.004	.01	.06	1.01		
Number of charges at first incarceration	0.58	.07	.50	8.50***		
Age of first incarceration	-0.08	.04	-.13	-2.00*		
					.36	18.68***
First discharged from AYC or other	0.28	.12	.16	2.45*		
					.02	6.02*

* $p < .05$; ** $p < .01$; *** $p < .001$
 $R^2 = 0.379$, adjusted $R^2 = 0.357$

Table 14

Hierarchical Regression Analysis for variables predicting Total Number of Charges using the Matched Sample

	<u>B</u>	SE B	β	T	R ² change	F change
Race	-0.18	.15	-.09	-1.22		
Place of residence	0.05	.14	.03	0.37		
Gang affiliation	-0.3	.14	-.16	-1.98*		
Primary Risk Assessment	0.01	.01	.08	0.99		
Number of charges at first incarceration	0.53	.09	.48	6.09***		
Age of first incarceration	-0.06	.05	-.08	-1.09	.33	10.13***
First discharged from AYC or other	0.22	.13	.13	1.70	.02	2.89

* $p < .05$; ** $p < .01$; *** $p < .001$
 $R^2 = 0.342$, adjusted $R^2 = 0.305$

The following regression analysis is an important indicator of the effect of PPC after multiple incarcerations; it also enables researchers to control the effects of the non-equivalent groups discussed in an earlier section. Using only youth who had multiple discharges from the same group, the model controls for the effects of place of residence and gang affiliation as well as measures the ability of PRAs to predict the (log of) total number of charges (see Table 15). Using only those with multiple discharges, after step one, place of residence, gang affiliation and (log of) PRA could liberally explain only 10% of the variation in the (log of) total number of charges, $F(3, 66) = 2.43$, $p = .072$. This model is not significant. After step two, the model did significantly improve its ability to predict the (log of) total number of charges, $F(1, 66) = 4.03$, $p < .05$. The place of multiple incarcerations can liberally explain 5% of the variation in the (log of) total number of charges while accounting for the effect of the non-equivalent variables within

this restricted sample.

Table 15

Hierarchical Regression Analysis for variables predicting Total Number of Charges using Multiple Discharges from the Same Group

	<u>B</u>	SE B	β	T	R ² change	F change
Place of residence	0.03	.27	.02	0.11		
Gang affiliation	-0.35	.23	-.19	-1.52		
Primary Risk Assessment	0.01	.01	.13	1.07	.10	2.43
First discharged from AYC or other	0.50	.25	.27	2.01*	.05	4.03*

* $p < .05$; ** $p < .01$; *** $p < .001$
 $R^2 = 0.150$, adjusted $R^2 = 0.100$

Factors that predict total number of convictions. Hierarchical regression analysis assessed whether being placed in a PPC placement predicts the total number of convictions while controlling for the effect of known correlates.

Logarithmic transformations are used on number of charges at first incarceration, Primary Risk Assessment and total number of convictions. Using a $p < .001$ criterion for Mahalabobis distance, no outliers are found. None of the variables are inter-correlated beyond 0.7, as recommended by Tabachnick and Fidell (2001). Using the whole sample, after step two, the model could conservatively explain 24.4% of the variation in the (log of) total number of convictions (see Table 16). After step one, race, place of residence, gang affiliation, the (log of) Primary Risk Assessment, the (log of) number of charges at first incarceration, and the age of first incarceration could liberally explain 26% of the variation in the (log of) total number of convictions, $F(6, 199) = 11.73$, $p < .000$. After step two, the model did not significantly improve with the addition of the place of first incarceration, $F(1, 198) = 2.31$, $p = .130$. The addition of the place of first incarceration

to the model does not significantly increase its ability to predict the variation in the (log of) total number of convictions while accounting for the effect of the variables in step one.

Table 16

Hierarchical Regression Analysis for variables predicting Total Number of Convictions using the Whole Sample

	<u>B</u>	SE B	β	T	R ² change	F change
Race	-0.10	.13	-.05	-.76		
Place of residence	-0.09	.13	-.51	-.71		
Gang affiliation	-0.20	.13	-.11	-1.58		
Primary Risk Assessment	0.01	.01	.16	2.36*		
Number of charges at first incarceration	0.42	.07	.39	6.13***		
Age of first incarceration	-0.08	.04	-.15	-2.06*		
					.26	11.73***
First discharged from AYC or other	.18	.12	.11	1.51		
					.01	2.31

* $p < .05$; ** $p < .01$; *** $p < .001$
 $R^2 = 0.270$, adjusted $R^2 = 0.244$

Using the matched sample, after step two, the model could conservatively explain 20.8% of the variation in the (log of) total number of convictions (see Table 17). Using the matched sample, after step one, race, place of residence, gang affiliation, (log of) PRA, (log of) number of charges at first incarceration, and age at first incarceration could liberally explain 25% of the variation in the (log of) total number of convictions, $F(6, 125) = 6.75$, $p < .000$. After step two, the model did not significantly improve with the addition of the place of first incarceration, $F(1, 124) = 0.84$, $p = 0.64$.

Table 17

Hierarchical Regression Analysis for variables predicting Total Number of Convictions using the Matched Sample

	<u>B</u>	SE B	β	T	R ² change	F change
Race	-0.15	.15	-.08	-1.01		
Place of residence	-0.10	.13	-.06	-0.75		
Gang Affiliation	-0.26	.14	-.16	-1.92		
Primary Risk Assessment	0.01	.01	.19	2.33*		
Number of charges at first incarceration	0.36	.08	.35	4.24***		
Age of first incarceration	-0.05	.05	-.10	-1.16		
					.25	6.75***
First discharged from AYC or other	0.11	.13	.07	0.92		
					.01	0.84

* $p < .05$; ** $p < .01$; *** $p < .001$
 $R^2 = 0.250$, adjusted $R^2 = 0.208$

The following hierarchical regression model enables researchers to assess the effect of multiple incarcerations on recidivism while controlling for the effects of the non-equivalent groups discussed earlier. Using only those who had multiple discharges from AYC or elsewhere, the model controls for the effects of place of residence and gang affiliation as well as measures the ability of PRAs to predict the (log of) total number of convictions (see Table 18). Using only those with multiple discharges, after step one, place of residence, gang affiliation and the (log of) PRA could liberally explain 10% of the variation on the (log of) the total number of convictions, $F(3, 67) = 2.56$, $p = .062$. This model is not significant. After step two, the model did not significantly improve its ability to predict the (log of) total number of convictions, $F(1, 66) = 1.89$, $p = .174$.

Table 18

Hierarchical Regression Analysis for variables predicting Total Number of Convictions using Multiple Discharges from the Same Group

	B	SE B	β	T	R ² change	F change
Place of residence	0.02	.24	.01	.10		
Gang Affiliation	-0.27	.21	-.16	-1.28		
Primary Risk Assessment	0.01	.01	.22	1.88		
					.10	2.56
First discharged from AYC or other	0.31	.22	.18	1.37		
					.03	1.89

* $p < .05$; ** $p < .01$; *** $p < .001$
 $R^2 = 0.128$, adjusted $R^2 = 0.075$

Factors that predict total number of months incarcerated. Preliminary analysis on the following three models led to the transformation of variables to improve normality and reduce outliers. Logarithmic transformations were used on number of charges at first incarceration, Primary Risk Assessment, and the total number of months incarcerated. Using a $p < .001$ criterion for Mahalabobis distance, no outliers are found. As recommended by Tabachnick and Fidell (2001), none of the variables are inter-correlated beyond 0.7.

Using the whole sample, after step two, the model could conservatively explain 17% of the variation in the total number of months incarcerated (see Table 19). Using the whole sample, after step one, race, place of residence, gang affiliation, (log of) PRA, (log of) number of charges at first incarceration, and age at first incarceration could liberally explain 20% of the variation in the total number of months incarcerated, $F(6, 172) = 7.18$, $p < .000$. After step two, the model did not significantly improve with the addition of the place of first incarceration, $F(1, 171) = 0.43$, $p = .514$.

Table 19

Hierarchical Regression Analysis for variables predicting Total Number of Months Incarcerated using the Whole Sample

	<u>B</u>	SE B	β	T	R^2 change	F change
Race	-0.12	.14	-.06	0.86		
Place of residence	-0.12	.13	-.08	-1.06		
Gang Affiliation	-0.24	.13	-.14	-1.79		
Primary Risk Assessment	0.01	.01	.25	3.22**		
Number of charges at first incarceration	0.06	.07	.06	0.90		
Age of first incarceration	-0.10	.04	-.18	-2.30*		
					.20	7.18***
First discharged from AYC or other	0.08	.12	.05	0.65		
					.00	0.43

* $p < .05$; ** $p < .01$; *** $p < .001$
 $R^2 = 0.202$, adjusted $R^2 = 0.170$

Using a matched sample, after step two, the model could conservatively explain 17% of the variation in the (log of) total number of months incarcerated (see Table 20). Using the matched sample, race, place of residence, gang affiliation, (log of) PRA, (log of) number of charges at first incarceration, and age at first incarceration could liberally explain 23% of the variation in the (log of) total number of months incarcerated, $F(6, 95) = 4.68$, $p < .000$. After step two, the model did not significantly improve with the addition of the place of first incarceration, $F(1, 94) = 0.09$, $p = .765$.

Table 20

Hierarchical Regression Analysis for variables predicting Total Number of Months Incarcerated using the Matched Sample

	B	SE B	β	T	R ² change	F change
Race	-0.34	.17	-.19	-1.95		
Place of residence	-0.35	.15	-.22	-2.27*		
Gang Affiliation	-0.06	.16	-.04	-0.39		
Primary Risk Assessment	0.02	.01	.36	3.68***		
Number of charges at first incarceration	0.07	.10	.07	0.71		
Age of first incarceration	-0.04	.06	-.06	0.61		
					.23	4.68***
First discharged from AYC or other	0.04	.15	.03	.30		
					.00	0.09

* $p < .05$; ** $p < .01$; *** $p < .001$
 $R^2 = 0.229$, adjusted $R^2 = 0.172$

The following regression model allows researchers to determine the effect of PPC after multiple incarcerations while controlling for the effects of the non-equivalent groups discussed earlier. Using only those who had multiple discharges from AYC or elsewhere, the model controls for the effects of place of residence and gang affiliation as well as measures the ability of PRAs to predict the (log of) total number of months incarcerated (see Table 21). Using only those with multiple discharges, after step one, place of residence, gang affiliation and (log of) PRA could liberally explain 15% of the variation in the (log of) total number of months incarcerated, $F(3, 37) = 2.10$, $p = .117$. This model is not significant. After step two, the model did not significantly improve its ability to predict the (log of) total number of months incarcerated $F(1, 36) = 0.01$, $p = .912$.

Table 21

Hierarchical Regression Analysis for variables predicting Total Number of Months Incarcerated using Multiple Discharges from the Same Group

	<u>B</u>	SE B	β	T	R ² change	F change
Place of residence	-0.32	.32	-.18	-0.97		
Gang Affiliation	-0.10	.28	-.06	-0.37		
Primary Risk Assessment	0.02	.01	.37	2.28*	.15	2.10
First discharged from AYC or other	0.03	.30	.02	.11	.00	0.01

* $p < .05$; ** $p < .01$; *** $p < .001$
 $R^2 = 0.146$, adjusted $R^2 = 0.051$

Factors that predict total number of times incarcerated. Preliminary analysis on the following three models led to the transformation of variables to improve normality and reduce outliers. Logarithmic transformations are used on number of charges at first incarceration, Primary Risk Assessment, and the total number of times incarcerated. Using a $p < .001$ criterion for Mahalabobis distance, no outliers are found. None of the variables are inter-correlated beyond 0.7.

Using the whole sample, after step two, the model could conservatively explain 30% of the variation in the total number of times incarcerated (see Table 22). Using the whole sample, after step one, race, place of residence, gang affiliation, (log of) PRA, (log of) number of charges at first incarceration, and age at first incarceration could liberally explain 30% of the variation in the total number of months incarcerated, $F(6, 199) = 14.31$, $p < .000$. After step two, the model significantly improves with the addition of the place of first incarceration, $F(1, 198) = 6.35$, $p < .05$. Place of first incarceration explains an additional 2.2% of the variance of total number of times incarcerated. While

adding place of discharge did significantly improve the model, the amount of the variance explained by the place of discharge is small.

Table 22

Hierarchical Regression Analysis for variables predicting Total Number of Times Incarcerated using Whole Sample

	<u>B</u>	SE B	β	T	R ² change	F change
Race	-0.03	.08	-.02	-0.44		
Place of residence	0.03	.08	.03	0.43		
Gang Affiliation	-0.15	.08	-.13	-1.85		
Primary Risk Assessment	0.01	.01	.18	2.83**		
Number of charges at first incarceration	-0.05	.04	-.08	-1.30		
Age of first incarceration	-0.11	.03	-.29	-4.23***		
					.301	14.31***
First discharged from AYC or other	-0.19	.07	.17	2.52*		
					.022	6.35*

* $p < .05$; ** $p < .01$; *** $p < .001$
 $R^2 = 0.323$, adjusted $R^2 = 0.299$

Using a matched sample, after step two, the model could conservatively explain 17% of the variation in the (log of) total number of times incarcerated (see Table 23). Using the matched sample, race, place of residence, gang affiliation, (log of) PRA, (log of) number of charges at first incarceration, and age at first incarceration could liberally explain 17% of the variation in the (log of) total number of times incarcerated, $F(6, 124) = 4.45$, $p < .000$. After step two, the model significantly improves with the addition of the place of first incarceration, $F(1, 124) = 6.32$, $p < .05$. The place of first incarceration explains an additional 4% of the dependant variable's variance. While adding place of discharge did significantly improve the model, the place of discharge only predicted a small amount of the total variation.

Table 23

Hierarchical Regression Analysis for variables predicting Total Number of Times Incarcerated using Matched Sample

	<u>B</u>	SE B	β	T	R^2 change	F change
Race	-0.21	.10	-.17	-2.01*		
Place of residence	-0.01	.09	-.01	-0.14		
Gang Affiliation	-0.02	.09	-.02	-0.29		
Primary Risk Assessment	0.01	.01	.23	2.67**		
Number of charges at first incarceration	-0.08	.05	-.12	-1.39		
Age of first incarceration	-0.06	.03	-.15	-1.71	.17	4.45***
First discharged from AYC or other	0.22	.08	.21	2.51*	.04	6.32*

* $p < .05$; ** $p < .01$; *** $p < .001$
 $R^2 = 0.216$, adjusted $R^2 = 0.172$

Using only those who had multiple discharges from AYC or elsewhere, the model controls for the effects of place of residence and gang affiliation as well as measures the ability of PRAs to predict the (log of) total number of times incarcerated (see Table 24). Using only those with multiple discharges, after step one, place of residence, gang affiliation and (log of) PRA could liberally explain only 4% of the variation in the (log of) total number of times incarcerated, $F(3, 67) = 0.89$, $p = .448$. This model is not significant. After step two, the model significantly improves its ability to predict the (log of) total number of times incarcerated $F(1, 66) = 5.28$, $p < .05$. The place of multiple incarcerations explains an additional 7% of the variance of total number of times incarcerated. While adding place of discharged did significantly improve the model, it only explained a small amount of the total variation.

Table 24

Hierarchical Regression Analysis for variables predicting Total Number of Times Incarcerated using Multiple Discharges from the Same Group

	<u>B</u>	SE B	β	T	R ² change	F change
Place of residence	-0.09	.15	-.08	-0.61		
Gang Affiliation	-0.07	.13	-.06	-0.53		
Primary Risk Assessment	0.01	.01	.19	1.57		
					.04	0.89
First discharged from AYC or other	0.32	.14	.31	2.29*		
					.07	5.28*

* $p < .05$; ** $p < .01$; *** $p < .001$
 $R^2 = 0.110$, adjusted $R^2 = 0.056$

Discussion

PPC's Effect on Recidivism

Many authors have measured the effect of PPC type programs on subsequent criminal charges (McCorkle, Eilas & Bixby, 1958; Miller, 1970; Minnesota Department of Corrections, 1974; Stephenson & Scarpitti, 1974; Tannehill, 1987; Weeks, 1958); these results are largely inconclusive (Gottfredson, 1987). While past research has focused on subsequent charges, this research has assessed a more comprehensive definition of recidivism including number of charges, convictions, times incarcerated, months incarcerated and seriousness of reoffence. These other measures of recidivism have generally been overlooked in the literature. Consequently, this research found that PPC had a significant effect on certain measures of recidivism, while other measures of reinvolvement appear unaffected by the treatment.

PPC did not generally have a significant short-term effect on recidivism. Discharges from AYC did not have significantly fewer charges, convictions, or a shorter length of incarceration at the time of their next incarceration. Therefore, these research hypotheses must be rejected. Analysis found that AYC consistently had a lower recharge and reincarceration rate than the comparison group over a 24-month follow-up period; these differences reach statistical significance after the 12-month interval. The null hypothesis must be accepted through the 12-month interval, while the research hypothesis is adopted at subsequent time intervals. These statistics suggest that PPC has a longer-term effect on recidivism.

Once the total number of charges, convictions, months incarcerated and times incarcerated were tracked for a 24 month period, significant differences do emerge.

Analysis consistently found that discharges from AYC have fewer incarcerations than the comparison group. This research hypothesis is accepted. While t-tests found that PPC discharges were subsequently incarcerated for fewer months, regression analysis was unable to confirm its significance. Similarly, regression analysis found that the youths' place of incarceration significantly explained their total number of charges, while a t-test was unable to confirm this significant relationship. Discharges from AYC had a similar number of convictions as the comparison group. This research hypothesis must also be rejected. While it appears contradictory that PPC decreases the number of incarcerations but does not affect number of convictions, this can at least partially be explained by considering the seriousness of the reoffence. PPC discharges tended to have less serious offences than discharges from the comparison group.

Comparing youth who had multiple discharges from AYC with youth who had multiple discharges from another institution demonstrates the effect of multiple experiences with PPC. Regression analysis, which controlled for demographic differences, found that the place of incarceration significantly predicted the youth's total number of charges and number of times incarcerated. Place of incarceration could not significantly predict subsequent convictions or total months of incarceration.

In a general sense, it appears that PPC is successful at reducing longer-term recidivism rates, while shorter term rates are relatively unaffected. Similarly, analysis not only found that multiple experiences with PPC continued to significantly affect the number of times incarcerated, but it also has a significant effect on the total number of charges as well. This suggests that multiple experiences with PPC may have more of an effect on recidivism than a single experience. It should not be overlooked that PPC's

effect on recidivism does not affect every measure of reinvolverment. For example, a youth's total number of convictions appears to be unaffected by the place of incarceration. While it is clear that PPC does have an effect on the recidivism rates of young offenders, questions remain regarding the differential response of individual indicators of reinvolverment.

Regression analysis was used to measure how well place of discharge predicted recidivism compared to other known correlates to crime. Regression models found that gang affiliation could predict a significant amount of the variance of total number of charges. PRAs could significantly predict youths' total number of convictions, total number of months incarcerated and total number of incarcerations. PRAs were unable to significantly predict youth's total number of charges. Number of charges at first incarceration significantly predicted total number of charges and total number of convictions. Compared to the above predictors of recidivism, the place of discharge explained a small but significant amount of the variance of total number of changes and total number of times incarcerated. The place of discharge did not significantly predict total number of convictions or total number of months incarcerated within a similar regression model.

The Effect of Individual Characteristics on PPC's Success

While few recent studies have attempted to assess the effect of PPC while controlling for the individual characteristics of youth (Gibbs, 1993; Lee, 1995), earlier research in GGI focused on the relative appropriateness of GGI (McCorkle, Elias & Bixby, 1958; Minnesota Department of Corrections, 1974; Stephenson & Scarpitti, 1974). For this reason, these results should be considered an exploratory guide to future

research and not as policy guiding results. In a general sense, PPC did have a differential effect across several of the demographic variables; this suggests that PPC may be more appropriate for certain types of young offenders.

Analysis found that youth with a history of suicidal risk tend to have more charges when they were released from AYC after their first incarceration than youth released from other institutions over a two-year follow up. This relationship became significant once analysis included only youth who had multiple discharges from AYC and compared them to youth with multiple discharges from other institutions. These results tend to support the original research hypothesis and past research that found youth who tend to be isolates, mentally ill or depressed are not appropriate candidates for PPC type group treatment (Larsen, 1972). It is my speculation that the reason that youth with a history of suicidal risk do not do well in PPC type setting is at least partially explained by Dishion, McCord and Poulin (1999). They claim that implementing group interventions should be seen as a calculated risk that is affected by the stage of the group. While vulnerable youth may respond positively to a beneficial group experience, they are severely more damaged by negative experiences. It is common within the stages of a group's evolution for the group to experience aggressive or violent behaviour, primarily in the polarization of values stage. These somewhat traumatic incidences may leave a lasting effect on the more vulnerable members of the group.

Similar research found that PPC is not appropriate for troubled or abused youth (Lee, 1995). Lee (1995) argues that these youth need to address issues of abuse prior to group treatment. Therefore, it was hypothesized that youth involved with CFS would have a higher recidivism rate from AYC than from other institutions. This research

hypothesis was rejected as none of the analysis found any significant differences in the recidivism rates between the two groups of discharges.

This current research found some evidence that, in the short term, PPC was more successful at decreasing the subsequent length of incarceration for Aboriginal youth than the correctional treatment offered in other institutions. This difference seems to diminish over time. These results are contrary to the research hypothesis and past research (Minnesota Department of Corrections, 1974; Stephenson & Scarpitti, 1974) that found GGI was less successful for minorities. It should be mentioned that race was did not significant predictor affecting the number of subsequent charges or convictions. These results are inconclusive.

Past research found that GGI was more successful at decreasing the recidivism rates of serious offenders than more minor offenders (Gibbs, 1993; McCorkle, Elias & Bixby, 1958; Stephenson & Scarpitti, 1974). Therefore, it was hypothesised that PPC would significantly decrease the recidivism rates of gang members, those with more serious charges and those with a higher Primary Risk Assessments. None of these hypotheses were supported. None of the analysis was able to support PPC's differential effect on gang member's recidivism rates as compared to other treatment. Similarly, the seriousness of the youth's most serious offence at first incarceration did not affect short-term or longer-term recidivism of PPC discharges. Interestingly, analysis found that those assessed as a low risk to reoffend on the PRA did substantially better in a PPC program than in other correctional treatment. Within the short-tem recidivism analysis, low risk youth from AYC had significantly fewer charges and a shorter length of incarceration than low risk youth discharged elsewhere. After two years of recidivism

data, low risk youth from AYC continued to have significantly fewer charges and somewhat fewer convictions than the low risk youth discharged elsewhere. This relationship tended to continue after multiple discharges from the same institution. It is my speculation that PPC may be more effective, relatively speaking, for low risk youth since these youth tend to be younger and less entrenched in a criminal lifestyle. For this reason, they may be more receptive to the supportive atmosphere of the PPC program than the more controlling atmosphere in other correctional facilities. It should also be mentioned that consistent with the research hypothesis, very high risk youth discharged from AYC after their first incarceration had a significantly shorter subsequent incarceration than very high risk youth discharged from elsewhere. Although this isolated statistic supports the research hypothesis, its deviation from the rest of the recidivism analysis tends to limit its conclusiveness.

Early research found that PPC type treatments were better for youth that came from broken homes than youth from two-parent families (McCorkle, Elias & Bixby, 1958). Contrary to the research hypothesis, the analysis did not find any significant difference in recidivism rates between those that live with both their parents compared to those that do not. This research did offer evidence that PPC is more effective at decreasing the length of time incarcerated over a two-year period for youth who live with at least one parent compared to those that live with neither parent. For those who had multiple discharges from the same institution, there was a tendency for youth who had been discharged from AYC with at least one parent living at home to have fewer charges and convictions over a two-year period. While this is speculation, youth who reside with at least one parent may experience more familial care and concern than youth who reside

with neither parent. If this is the case, youth who reside with neither parent may find the values and beliefs taught in PPC are not generalizable to their familial situation - the impact of the treatment was negligible. In contrast, youth who reside with a caring parent may find that the values of caring concern are practical within their family home - the treatment has been generalized into the "real world". These findings are consistent with research that found that youth delinquency is correlated with "the broken home factor" (Flowers, 1990, p. 137). While it is speculation that those families within this study that do not live together lack a caring familial connections, other research tends to support this position (Flowers, 1990).

PPC did not have any differential effect on the recidivism rates of offenders across the type of their most serious offence. Whether an offender's most serious offence was a crime against person, property or other, did not affect the efficacy of the PPC treatment. For this reason, the research hypothesis must be rejected. The literature is silent on the relative effect PPC has across this categorization of offences.

Limitations

Although many potentially contaminating variables are controlled for within this study, several limitations should be identified and addressed in future research. These limitations involve the methodology and the data source.

While the non-equivalent groups design utilized for this study was strengthened through matched sampling, a randomized sampling procedure would have been preferred. A randomized sampling procedure would help ensure that the groups were similar across all variables, not just the variables identified in the matched sampling procedure. Other correlates like drug and alcohol abuse and their family support network were not

controlled. Subsequent research should attempt to control for these issues through random assignment.

There were several methodological limitations to this study. Other than the two concerns discussed above regarding the general weaknesses of the non-equivalent groups design, four concerns remain to be discussed. First, this study was unable to clearly track offenders' participation in other treatment programs during their incarcerations. While it was clear the discharges from AYC participated in PPC and discharges from other institutions did not, it was unclear what other treatment programs the youth may have participated in while incarcerated in their respective institutions. Although this appears to be a potentially serious methodological flaw, its effect was lessened by the fact that Manitoba's youth facilities generally run similar programs. For this reason, this study assumed that participation in each program was equally distributed between the treatment group and the comparison group thereby controlling its effect. The programs that were offered at each institution include:

- Anger Management
- Victim Awareness
- Criminal Thinking Errors
- Substance Abuse
- Academics
- Aboriginal Cultural Programs
- Sports and Recreation

Second, COMS (Criminal Offender Management System) was used to gather all the information. While it is one of the most central case management tools within the Department of Justice, two limitations should be addressed regarding its use in this research. First, past research identified that COMS was prone to errors. Bacon and Bracken (2002) found, for example, that on a few occasions new convictions had not

been entered into the system even months after court decisions. Second, the sample selected male youth discharges from the year 2000; it was around this time that the database was being phased into use. This phasing in process involved integrating databases and adding certain options one at a time. For this reason, the data corresponding to the year 2000 is not as complete as data corresponding to youth discharged in the year 2003. Several Justice administrators have reviewed the demographic data within this study; each confirm that the results are logical and anecdotally accurate with one exception. The sample indicates that only one person discharged from Manitoba in the year 2000 participated in the Intensive Supervision and Support Program (ISSP) after release. Anecdotally, Justice administrators state that youth released to Winnipeg were regularly involved with ISSP during that time. It is logical that the database did not accurately track ISSP participants at that time. This limitation does not greatly compromise the results since place of discharge was controlled for through sampling or analysis. Since the database has become more complete and many of the "bugs are worked out", empirical replication could confirm this speculation.

Third, this research did not attempt to measure the program integrity of PPC at AYC. Research (Brendtro, 1994, Brendtro, Brockenleg & Van Bockern, 1990; Brendtro & Ness, 1991) suggests that proper implementation is an important part of PPC's success. Therefore, the results from this study cannot confidently be generalized to other PPC programs.

Fourth, it is possible that contamination could have occurred between the treatment group and the comparison group before sentencing. Since most remands are held at the Manitoba Youth Centre (comparison group), it is possible that previously

incarcerated offenders on remand discussed their "time" with the youth who were on remand for the first time (and therefore included in this study). During these interactions, newly incarcerated youth could have developed misconceptions about the PPC program, either positive or negative. These misconceptions could have influenced the success of the program.

Recommendations

The results of this research have contributed to the understanding of the effects of PPC on recidivism of young offenders in Manitoba. The following recommendations are based on the results of this research. Recommendations address the application and modification of PPC as well as the direction for future research.

1. Since PPC seems to have some positive effects on the recidivism rates of young offenders, and past research (Gold & Osgood, 1992; Mitchell & Cockrum, 1980) has established PPC's ability to create a safe institution, PPC should continue to be used as a foundational treatment program at the Agassiz Youth Centre.
2. In light of the questionable results from past recidivism studies (Gottfredson, 1987), PPC should not be implemented in other institutions before further research verifies the results of this study.

Analysis has found that PPC is not equally effective for all types of youth. While this analysis is exploratory in Manitoba other research supports this general position (Gold & Osgood, 1992; Lee, 1995, 1996; Lyman, Prentice-Dunn, Wilson & Taylor, 1989; Missouri General Assembly of Representatives, 1980).

3. Since PPC does not seem to be appropriate for all youth, it is important that other correctional institutions are available for treatment that does not run the PPC program.
4. Further research is needed to verify how PPC differentially affects youth with different demographic or personal characteristics. Particular emphasis should be placed on youth's intellectual abilities, social introversion, as well as risk to reoffend, history of suicide risk, abuse or neglect.

While this research assesses PPC's effect on recidivism rates, other measures of success should be integrated into subsequent outcome studies to add further insight. For example, tracking a youth's commitment to criminal values and beliefs in a pretest-posttest format as well as their subsequent recidivism rates would be valuable. This research would not only be able to assess PPC's effect on the youth's values and beliefs, but also identify the relationship between youths' values and subsequent recidivism.

5. More research is needed in Manitoba to determine PPC's effect on other measures of success. These should include changes in the youth's values/beliefs as well as the program's ability to control antisocial behaviour and create a safe, therapeutic environment.

References

- Abraham, J. & McCorkle, L. W. (1946). Group psychotherapy of military offenders. American Journal of Sociology, 51, 455-464.
- Abraham, J. & McCorkle, L. W. (1947). Group psychotherapy at a rehabilitation center. Diseases of the Nervous System, 8, 50-62.
- Agee, V. (1987). Treating the violent juvenile offender. In J. M. MacLatchie (Ed.), Insights into violence in contemporary Canadian society (pp. 291-297). Ottawa, ON: John Howard Society of Canada.
- Agee, V. L. & McWilliams, B. (1984). The role of group therapy and the therapeutic community in treating the violent juvenile offender. In R. A. Mathias (Ed.), Violent juvenile offenders (pp. 283-296). San Francisco: National Council on Crime and Delinquency.
- Alissi, A. S. (1987). Positive peer culture. Social Casework, 68, 440-441.
- Allen, R., Pilnick, S. & Silverzweig, S. (1969). The influence of the peer culture on delinquency and delinquency rehabilitation. Union, NJ: Scientific Resources.
- Ammons, P. W. (1979). Toward good community treatment for juveniles: Linking research and practice. Journal of Humanics, 7, 42-51.
- 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., Zinger, I., Hoge, R. D., Bonta, J., Gendreau, P. & Cullen, F. T. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. Criminology, 28, 369-404.

- Aseltine, R. H. (1995). A reconsideration of parental and peer influences on adolescent deviance. Journal of Health and Social Behavior, 36, 103-121.
- Atwood, R. O., & Osgood, D. W. (1987). Cooperation in group treatment programs for incarcerated adolescents. Journal of Applied Social Psychology, 17, 969-989.
- Bacon, B. & Bracken, D. (2002). Evaluation of the Partner Abuse Short-Term (PAST) Program. Child and Family Services Research Group, University of Manitoba, Winnipeg, MB.
- Bakan, D. (1966). The duality of human experience. Chicago: Rand McNally.
- Batsa, J. M. & Davidson, W. S. (1988). Treatment of juvenile offenders: Study since 1980. Behavioral Science and Law, 6, 355-384.
- Belau, D. P. (1980). An evaluation model for a positive peer culture program. Unpublished specialist's thesis, Kearney State College, Kearney, Nebraska.
- Berger, A. (1977). Peer group pressure. Child and Youth Services, 1, 2.
- Bernard, T. J. (1992). The cycle of juvenile justice. New York: Oxford University Press.
- Berenson, S. K. (1988). Peers pressuring peers. Middle School Journal, 20, 20.
- Boehm, R. G. (1976). Peer group counseling: A school based juvenile diversion program. St. Louis, MO: Gateway Information Systems.
- Bonta, J. (1997). Offender rehabilitation: From research to practice. Ottawa, ON: Solicitor General of Canada.
- Bottoms, A. E., & McWilliams, W. (1979). A non-treatment paradigm for probation practice. British Journal of Social Work, 9, 159-202.

Brabant, L. C. (1990). The realities of guided group interaction. Unpublished master's thesis, Bowling Green State University, Bowling Green, Ohio.

Brannon, J. M., Brannon, M. E., Craig, J. & Martray, C. (1988). Emotional stress: Investigating the restrictiveness of residential security and the pains of juvenile incarceration. Journal of Offender Counseling, 8, 57-63.

Brannon, J. M., Brannon, M. E., Craig, J. & Martray, C. (1989). Applied behavioral typologies: Implications for the residential treatment and community reintegration of juvenile offenders. Journal of Offender Counseling, Services and Rehabilitation, 14, 77-87.

Brannon, J. M. & Troyer, R. (1991). Peer group counseling: A normalized residential alternative to the specialized treatment of adolescent sex offenders. International Journal of Offender Therapy and Comparative Criminology, 35, 225-234.

Breen, J. (2000). Creating vocational success for adults with fetal alcohol syndrome: The Yukon experience. Edmonton, AB: The Muffart Foundation.

Brendtro, L. K. (1979). Establishing relationship beachheads. In A. E. Trieschman, J. K. Whittaker & L. K. Brendtro (Eds.), The other 23 hours: Child-care work with emotionally disturbed children in a therapeutic milieu (pp. 51-99). New York: Aldine Publishing Company.

Brendtro, L. K. (1985). Making caring fashionable: Philosophy and procedures for service learning. Child Care Quarterly, 14, 4-13.

Brendtro, L. K. (1988). Problems as opportunities: Developing positive theories about troubled youth. Journal of Child Care, 3, 15-24.

Brendtro, L. K. (1994). Positive peer synergy: Putting it all together. In G. A. Giacobbe, E. Traynelis-Yurek, L. M. Powell & E. Laursen (Eds.), Positive peer culture: A selected bibliography (pp. ii-xii). Richmond, VA: G & T Publishing.

Brendtro, L. K., Brockenleg, M. & Van Brockern, S. (1990). Reclaiming youth at risk: Our hope for the future. Bloomington, IN: National Educational Service.

Brendtro, L. K. & Lindgren, J. G. (1988). Two studies of positive peer culture: A response. Child and Youth Quarterly, 17, 156-157.

Brendtro, L. K., & Ness, A. E. (1991). Extreme interventions for extreme behavior: Peer-assisted behavior management in group treatment programs. Child and Youth Care Forum, 20, 171-181.

Brendtro, L. K., & Ness, A. E. (1982). Perspectives on peer group treatment: The use and misuse of guided group interaction/positive peer culture. Children and Youth Service Review, 4, 307-324.

Brendtro, L. K., & Ness, A. E. (1983). Re-educating troubled youth: Environments for teaching and treatments. New York: Aldine Publishing Company.

Brendtro, L. K., & Wasmund, W. (1989). The peer group model. In R. D. Lyman, S. Prentice-Dunn & S. Gabel (Eds.), Residential and inpatient treatment of children and adolescence (pp. 81-96). New York: Plenum Press.

Buros, O. K. (1978). Eighth mental measurement yearbook. Highland Park: NJ: Gryphon Press.

Calderwood, M. C. (1992). The effect of a positive peer culture model on self-concept and moral climate of young offenders in a secure custody facility. Unpublished master's thesis, University of Calgary, Calgary, Alberta.

- Carducci, D. J. (1980). Positive peer culture and assertiveness training: Complementing modalities for dealing with disturbed and disturbing adolescents in the classroom. Journal of Behavior Disorders, 5, 156-162.
- Cattell, R. B. & Cattell, M. D. L. (1975). Handbook for the Jr. - Sr. High School Personality Questionnaire. Champaign: Institute for Personality and Ability Testing.
- Cavadino, M. & Dignan, J. (2002). The penal system: An introduction (3rd ed.). London: Sage Publishers.
- Chistensen, L. (1976). Comment. Child Care Quarterly, 5, 121-122.
- Clemmer, D. (1940). The prison community. Boston: Christopher Publishing Company.
- Cohen, A. K. (1955). Delinquent boys: The culture of the gang. New York: The Free Press.
- Conrad, J. P. (1981). Where there's hope there's life. In D. Fogel & J. Hudson (Eds.), Justice as fairness: Perspectives on the justice model (pp. 3-21). Cincinnati, OH: Anderson Publishing Company.
- Conroy, J. (1996). Teaching students with fetal alcohol syndrome/effects: A resource guide for teachers. Victoria, BC: Queen's Printer for British Columbia.
- Corrado, R. R., & Turnbull, S. D. (1992). A comparative examination of the modified justice model in the united states and the united kingdom. In R. R. Corrado, N. Bala, R. Linden, & M. La Blanc (Eds.), Juvenile justice in Canada (pp. 75-136). Toronto, ON: Butterworths.
- Cragan, J. F. & Wright, D. W. (1995). Communication in small groups: Theory, process, skills (4th ed.). Minneapolis, MN: West Publishing Company.

Cronin, J. P. (1974). The effect of positive peer culture on special education high school girls. Unpublished master's thesis, St. Cloud State College, St. Cloud, Minnesota.

Cullen, T., & Gilbert, K. E. (1982). Reaffirming rehabilitation. Cincinnati, OH: Anderson Publishing Company.

Currie, E. (1989). Confronting crime: Looking toward the twenty-first century. Justice Quarterly, 6, 5-25.

Curtner-Smith, M. E., & MacKinnon-Lewis, C. E. (1994). Family process effects on adolescent males susceptibility to antisocial peer pressure. Family Relations, 43, 462-468.

Davis, G. L., Hoffman, R. G., & Quigley, R. (1988a). Rejoinder to Brendtro, Lindgren, and Weber. Child and Youth quarterly, 17, 65-166.

Davis, G. L., Hoffman, R. G., & Quigley, R. (1988b). Self-concept change and positive peer culture in adjudicated delinquents. Child and Youth Care Quarterly, 17, 137-145.

Dishion, T. J., McCord, J. & Poulin, F. (1999). When interventions harm: Peer groups and problem behavior. American Psychologist, 54, 755-764.

Duguid, S. (2000). Can prisons work? The prisoner as object and subject in modern corrections. Toronto: University of Toronto Press.

Elliott, D., Huizinga, D. & Ageton, S. (1985). Explaining delinquency and drug use. Beverley Hills, CA: Sage Publishers.

Empey, L. T. (1966). The provo experiment: A brief review. Los Angeles: Youth Studies Center, University of Southern California Press.

Empey, L. T. & Erickson, M. L. (1972). The provo experiment: Evaluating community control of delinquency. Lexington, MA: Lexington Books.

Empey, L. T. & Lubeck, S. G. (1971). The silverlake experiment: Testing delinquency theory and community intervention. Chicago: Aline.

Empey, L. T. & Rabow, J. (1961). The provo experiment in delinquency rehabilitation. American Sociological Review, 26, 679-696.

Erst, R. S. (1977). Positive peer culture: Social factors of change with an individual in a correctional institution. Unpublished master's thesis, Roosevelt University, Chicago, Illinois.

Feldman, R. (1983). The St. Louis conundrum: The effective treatment of antisocial youth. Englewood Cliffs, NJ: Prentice-Hall.

Ferrara, M. L. (1992). Group counseling with juvenile delinquents: The limit and lead approach. Newport Park, CA: Sage Publications.

Fitts, W. (1965). Tennessee self-concept scale. Los Angeles: Western Psychological Services.

Fitts, W. H. & Hamner, W. T. (1969). The self-concept and delinquency. (Research Monograph No.1). Nashville, TN: Nashville Health Centre.

Flackett, J. M., & Flackett, G. (1970). Criswell house: An alternative to institutional commitment for the juvenile offender. Federal Probation, 34, 30-37.

Flowers, R. B. (1990). The adolescent criminal: An examination of today's juvenile offender. Jefferson, NC: McFarland and Company.

Foldesi, T. & Soyring, M. (1993). Antisocial, chemically dependent youth in a peer group setting. Journal of Emotional and Behavioral Problems, 2, 22-24, 26.

Franklin, C. & Streeter, C. L. (1991). Evidence for the effectiveness of social work with high school dropout youths. Social Work in Education, 13, 307-327.

Freeman, H. E. & Weeks, H. A. (1956). Analysis of a program of treatment of delinquent boys. American Journal of Sociology, 62, 56-61.

Garland, J., Jones, H. & Kolodny, R. (1976). A model of stages of group development in social work groups. In S. Bernstein (Ed.), Explorations in group work (pp. 11-71. Boston: Charles River Books.

Garrett, C. J. (1985). Effects of residential treatment on adjudicated delinquents: A meta-analysis. Journal of Research in Crime and Delinquency, 22, 287-308.

Geismar, L. L. & Wood, K. M. (1985). Family and delinquency: Resocializing the young offender. New York: Human Sciences Press.

Gendreau, P. & Andrews, D. A. (1990). Tertiary prevention: What the meta-analyses of the offender treatment literature tell us about "what works". Canadian Journal of Criminology, 32, 173-184.

Gendreau, P. & Ross, R. R. (1980). Effective correctional treatment: Bibliotherapy for cynics. In R. R. Ross & P. Gendreau (Eds.), Effective correctional treatment (pp. 3-36). Toronto: Butterworth.

Gendreau, P. & Ross, R. R. (1987). Revivication of rehabilitation: Evidence from the 1980's. Justice Quarterly, 4, 349-407.

Gerrard, J. (1975). An evaluation of the positive peer culture program in the boy's correctional school. Unpublished master's thesis, University of Nebraska, Nebraska.

Giacobbe, G.A. & Traynelis-Yurek, E. (1992). Attitudinal changes as measured by the jesness behavior checklist in a residential peer group program. International Journal of Adolescence and Youth, 3, 345-351.

Giacobbe, G.A. & Traynelis-Yurek, E. (1993). Elk hill: A successful residential treatment program for young men. Richmond, VA: G & T Publishers.

Giacobbe, G.A., Traynelis-Yurek, E., Powell, L.M., & Laursen, E. (Eds.). (1994). Positive peer culture: A selected bibliography. Richmond, VA: G & T Publishing.

Gibbs, J. C. (1993). Moral-cognitive interventions. In A. P. Goldstein & C. R. Huff (Eds.), The gang intervention handbook (pp. 159-188). Champaign, Il: Research Press.

Gibbs, J. C., Basinger, A. Q. & Fuller, D. (1992). Moral maturity: Measuring the development of sociomoral reflection. Hillsdale, NJ: Erlbaum.

Gibbs, J. C., Potter, G. B., Barriga, A. Q., & Liau, A. K. (1996). Developing the helping skills and prosocial motivation of aggressive adolescents in peer group programs. Aggression and Violent Behavior, 1, 283-305.

Gibbs, J. C., Potter, G. B. & Goldstein, A. P. (1995). The equip program: Teaching youth to think and act responsibly through a peer-helping approach. Champaign, IL: Research Press.

Giles, J. R. (1975). Positive Peer Culture in the public school system. NASSP Bulletin, 59, 22-28.

Glasser, P. H. (1975). Positive peer culture. Social Casework, 56, 116-117.

Gold, M. (1974). A time for scepticism. Crime and Delinquency, 20, 20-24.

- Gold, M. & Osgood, D. W. (1992). Personality and peer influence in juvenile corrections. Westport, CT: Greenwood.
- Goldstein, A. P. & Huff, C. R. (Eds.). (1993). The gang intervention handbook. Champaign, Il: Research Press.
- Goldstein, A. P. & Glick, B. (1987). Aggression replacement training: A comprehensive intervention for aggressive youth. Champaign, Il: Research Press.
- Gordon, J. (1996). An evaluation of the paint creek center. Unpublished doctoral dissertation, University of Cincinnati, Ohio.
- Gottfredson, G. D. (1987). Peer group interventions to reduce the risk of delinquent behavior: A selected review and a new evaluation. Criminology, 25, 671-714.
- Grasso, A. J. & Hoel, J. L. (1982). The Iowa group work treatment model. Des Moines, IA: Iowa Crime Commission.
- Greenwood, P. & Zimring, F. (1985). One more chance: The pursuit of promising intervention strategies for chronic juvenile offenders. Santa Monica, CA: Rand.
- Grissom, G. R. (1981). Effects of cottage staff norms and peer group norms on the attitudes towards aggression and manipulation of institutionalised delinquent boys (Doctoral dissertation, Cornell University, 1981). Dissertation Abstracts International, 42, 2599B.
- Harry, J. L. (1999). Atausik cottage program: Believes in giving. Corrections Today, 61, 82.
- Harstad, C. D. (1976). Guided group interaction: Positive peer culture. Child Care Quarterly, 5, 109-120.

- Hartland, M. (1971). Groups in social work. New York: Columbia University Press.
- Hawkins, J. D., Catalano, R. F. & Miller, J. Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. Psychological Bulletin, 112, 64-105.
- Heinz, J. W., Gargaro, S. & Kelly, K. G. (1987). Model residential juvenile sex-offender treatment program – The hennepin county home school. Orwell, VT: Safer Society Press.
- Henggeler, S. W., Schoenwald, S. K., Borduin, C. M., Rowland, M. D. & Cunningham, P. B. (1998). Multisystemic treatment of antisocial behavior in children and adolescents. New York: Guildford Press.
- Herstein, N., & Simon, N. (1977). A group model for residential treatment. Child Welfare, 56, 601-611.
- Ho, M. K. (1974). Formation and techniques of peer group activities. Federal Probation, 38, 73.
- Hoge, R. D. & Andrews, D. A. (1996). Assessing the youthful offender: Issues and techniques. Plenum Press: New York.
- Hoover, T. (1984). Peer culture development: A focus on the behavioral problem student. Small Group Behavior, 15, 511-524.
- Izzo, R. L. & Ross, R. R. (1990). Meta-analysis of rehabilitation programs for juvenile delinquents. Criminal Justice and Behavior, 17, 134-142.
- James, H. (1971). Children in trouble: A national scandal. New York: Pocket Books.

- Jensen, G. F. (1972). Parents, peers, and delinquent action: A test of the differential association perspective. American Journal of Sociology, 78, 562-757.
- Jones, M. (1953). The therapeutic community. New York: Basic Books.
- Jones, M. (1956). The concept of a therapeutic community. American Journal of Psychiatry, 112, 647-650.
- Jones, M. (1968). Beyond the therapeutic community: Social learning and social psychiatry. New Haven: Yale University Press.
- Jussim, L. & Osgood, D. W. (1989). Influence and similarity among friends: An integrative model applied to incarcerated adolescents. Social Psychology Quarterly, 52, 98-112.
- Kapp, S. A. (2000). Positive peer culture: The viewpoint of former clients. Journal of Child and Adolescent Group Therapy, 10, 175-189.
- Katsiyannis, A., & Archwamety, T. (1997). Factors related to recidivism among delinquent youths in a state correctional facility. Journal of Child and Family Studies, 6, 43-55.
- Keller, O. J. & Alper, B. S. (1970). Halfway houses: Community centered correction and treatment. Lexington, MA: Health.
- King, A. & Coles, B. (1992). The health of Canada's youth. Ottawa: Minister of Supply and Services.
- King, A., Wold, B., Tudor-Smith, C., & Harel, Y. (1996). The health of youth: A cross-national survey. Denmark: World Health Organization (European Series No. 69).
- Kirst-Ashman, K. K. & Hull, G. H., Jr. (1999). Understanding generalist practice (2nd ed.). Chicago: Nelson-Hall Publishers.

- Klein, A. (1972). Effective group work. New York: Associated Press.
- Kodluboy, D. W., & Evenrud, L. A. (1993). School-based interventions: Best practices and critical issues. In A. P. Goldstein & C. R. Huff (Eds.), The gang intervention handbook (pp. 257-299). Champaign, IL: Research Press.
- Kohlberg, L. (1984). Essays on moral development: The psychology of moral development. San Francisco: Harper and Row.
- Korn, R., & McKorkle, L. (1959). Criminology and penology. New York: Holt, Rinehart and Winston.
- Kreisle, B. (2002). First experiences with positive peer culture in Germany. Strength Based Services International News, 20, 1-2.
- Larsen, C. (1972). Guided group interaction: Theory and method. Washington, DC: U.S. Department of Health, Education and Welfare.
- Laufenberg, R. (1987). Positive peer culture: A group approach to behavior change. Journal of Correctional Education, 28, 138-143.
- Lee, R. E. (1995). Availability to peer group treatment in residential care as a function of relational ethics. Contemporary Family Therapy, 17, 343-348.
- Lee, R. E. (1996). Firo-b scores and success in a positive peer culture residential treatment program. Psychological Reports, 78, 215-220.
- Leeman, L. W., Gibbs, J. C. & Fuller, D. (1993). Evaluation of a multi-component group treatment program for juvenile delinquents. Aggressive Behavior, 19, 281-292.
- Lefebver, J. A. (1965). The delinquent's self-concept. Unpublished doctoral dissertation, University of Southern California, Los Angeles.

Lipsey, M. W. (1989). The efficacy of intervention for juvenile delinquency: Results from 400 studies. Paper presented at the 41st annual meeting of the American Society of Criminology, Reno, Nevada.

Lipsey, M. W. (1992a). Juvenile delinquent treatment: A meta-analytic inquiry into variables of effects. In T. D. Cook, H. Cooper, D. S. Cordray, H. Hartmann, L. V. Hedges, R. L. Light, T. A. Louis & F. Mosteller (Eds.), Meta-analysis of evaluation (pp. 83-127). New York: Russell Sage Publications.

Lipsey, M. W. (1992b). The effects of treatment of juvenile delinquency: Results from meta-analysis. In F. Losel, D. Bebdler & T. Bliesener (Eds.), Psychology of law: International perspectives (pp. 131-143). New York: De Gruyter Publishers.

Lipsey, M. W. & Wilson, D. B. (1993). The efficacy of psychological, educational, and behavioral treatment: Confirmation from meta-analysis. American Psychologist, 48, 1181-1209.

Lyman, R. D., Prentice-Dunn, S., Wilson, D. R., & Taylor, G. E. Jr. (1989). Issues in residential and inpatient treatment. In R. D. Lyman, S. Prentice-Dunn & S. Gabel (Eds.), Residential and inpatient treatment of children and adolescence (pp. 1-22). New York: Plenum Press.

MacKenzie, K. R. (1994). Group development. In A. Fuhriman & G. M. Burlingame (Eds.), Handbook of group psychotherapy (pp. 223-268). New York: John Wiley & Sons.

Martin, G. & Pear, J. (1992). Behavior modification: What it is and how to do it (4th ed.). Englewood, NJ: Prentice Hall.

Martin, F. P., & Osgood, D. W. (1987). Autonomy as a source of pro-social influence among incarcerated adolescents. Journal of Applied Social Psychology, 17, 97-107.

Martinson, R. (1974). What works? Questions and answers about prison reform. The Public Interest, 35, 22-54.

Maxfield, M. C. & Babbie, E. (1998). Research methods in criminal justice and criminology (2nd ed.). Belmont, CA: West Wadsworth.

McCorkle, L. W. (1949). Group therapy in correctional institutions. Federal Probation, 13, 34-37.

McCorkle, L. W., Elias, A., & Bixby, F. L. (1958). The highfields story: An experimental treatment project for youthful offenders. New York: Henry Holt and Company.

McGuire, J. (Ed). (1995). What works - Reducing reoffending: Guidelines from research and practice. Chichester, England: John Wiley & Sons Ltd.

McKinney, F., Miller, D. J., Beier, L., & Bohannon, S. R. (1978). Self-concept, delinquency, and positive peer culture. Criminology, 15, 529-538.

McVicar, H. L. (1991). The effects of a positive peer culture approach on the moral development, institutional climate, and behavioral adaptation of male young offenders in secure custody settings. Unpublished master's thesis, University of Calgary, Calgary, Alberta.

Meyer, R. G. (1974). Positive peer culture. Child Welfare, 53, 605-606.

Mihel, L., & Waskin, T. (1989). Adolescent group treatment in day group settings. School Social Work Journal, 13, 11-17.

Miller, L. C. (1970). Southfields: Evaluation of a short-term inpatient treatment center for delinquents. Crime and Delinquency, 16, 305-316.

Minneapolis Public Schools. (1972). Jefferson junior high pocket school and positive peer culture: An evaluation. Minnesota Department of Research and Evaluation. (ERIC Reproduction Service No. ED 083 311)

Minnesota Department of Corrections. (1974, April). A follow up study of boys participating in positive peer culture at red wing state training school from January 1, 1970 through December 21, 1972. St. Paul, MN: Research Division.

Missouri General Assembly House of Representatives. (1980). Facilities and programs for juveniles in Missouri: A report. Jefferson City, MO: Author.

Mitchell, J. D., & Cockrum, D. L. (1980). Positive peer culture and a level system: A comparison in an adolescent treatment facility. Criminal Justice and Behavior, 7, 399-406.

Moody, E. E. & Lupton-Smith, H. S. (1999). Interventions with juvenile offenders: Strategies to prevent acting out behavior. Journal of Addictions and Offender Counseling, 20, 2-14.

Morrison, D. R. (1993). Guided group interaction revisited: An evaluation of residential treatment effectiveness as defined by outcome performance standards (juvenile offenders) (Doctoral dissertation, United States International University, 1992). Dissertation Abstracts International, 54, 93A.

Nichols, M. P. & Schwartz, R. C. (2001). Family therapy: Concepts and methods (5th ed.). Boston: Allyn and Bacon.

Northern, H. (1969). Social work with groups. New York: Columbia University Press.

O'Donnell, C. R. (1992). The interplay of theory and practice in delinquency prevention: From behavior modification to activity settings. In J. McCord & R. E. Tremblay (Eds.), Preventing antisocial behavior: Interventions from birth through adolescence (pp. 209-232). New York: Guildford Press.

Osgood, D. W., Gruber, E., Archer, M. A., & Newcomb, T. M. (1985). Autonomy for inmates: Counterculture or cooperation? Criminal Justice and Behavior, 12, 71-89.

Palmer, T. (1983). The effectiveness issue today: An overview. Federal Probation, 46, 3-10.

Palmer, T. & Herrera, A. (1972). Community treatment program's San Francisco experiment (1965-1969): Post discharge behavior of differential treatment and guided group interaction subjects. Sacramento, CA: California Youth Authority.

Phillips, E. L. (1975). Positive Peer Culture. Behavior Therapy, 6, 717-718.

Pilnick, S. (1971). Crime and delinquency: Guided group interaction. In R. Morris, B. Dana, P. Glasser, R. Marks, M. Rein, & P. Schreiber (Eds.), Encyclopedia of social work (vol. 1, pp. 181-186). New York: National Association of social workers.

Pilnick, S., Allen, R. F., Dubin, H. N., Youtz, A. C., Treat, R. V., White, J., Rose, F. O. & Habas, S. (1967). Collegefields: From delinquency to freedom. Newark, NJ: Newark State College, Laboratory for Applied Behavioral Science. (ERIC No. 016 244)

Pilnick, S., Elias, A. & Clapp, N. W. (1966). The essexfields concept: A new approach to the social treatment of juvenile delinquents. Journal of Applied Behavioral Science, 2, 109-125.

Polsky, H. W. (1962). Cottage six: The social system of delinquent boys in residential treatment. New York: Russell Sage Foundation.

Pombeni, M. L., Kirchler, E., & Palmonari, A. (1990). Identification with peers as a strategy to muddle through the troubles of the adolescent years. Journal of Adolescence, 13, 351-369.

Potter, G. B., Gibbs, J. C. & Goldstein, A. P. (2001). The equip program: Implementation guide. Champaign, IL: Research Press.

Pratt, J. H. (1907). The class method of treating consumption in the homes of the poor. Journal of the American Medical Association, 49, 755-759.

Raynor, P. (1997). Some observations on rehabilitation and justice. The Howard Journal, 36, 248-262.

Riessman, F. (1965). The helper-therapy principle. Social Work, 10, 27-32.

Robinson, M. J. (1980). Outcomes of two treatment technologies at the Michigan Training School for boys: A comparative study. (Doctoral dissertation, University of Michigan). Dissertation Abstracts International, 41, 808-809A.

Roberts, A. R., & Schervish, P. (1988). A strategy for making decisions and evaluating alternative juvenile offender treatment programs. Evaluation and Program Planning, 11, 115-122.

Ross, R. R. & Fabiano, E. A. (1985). Time to think: A cognitive model of delinquency prevention and offender rehabilitation. Johnson City, TN: Institute of Social Sciences and Arts.

Rothman, D. J. (1980). Conscience and convenience: The asylum and its alternatives in progressive America. Boston: Little, Brown.

Salend, S. J., Jantzen, N. R. & Giek, K. (1992). Using a peer confrontation system in a group setting. Behavioral Disorders, 17, 211-218.

Sarri, R. C., & Selo, E. (1974). Evaluation process and outcome in juvenile corrections: Musings on a grim tale. In P. O. Davidson, F. W. Clark, & L. A. Hamerynck (Eds.), Evaluation of behavioral programs in community, residential and school settings (pp. 253-302). Champaign, IL: Research Press.

Saunders, S. M., Resnick, M. D., Hoberman, H. M., & Blum, R. W. (1994). Formal help-seeking behavior of adolescents identifying themselves as having mental health problems. Journal of the American Academy of Child and Adolescent Psychiatry, 33, 718-728.

Schaefer, C. (1980). The impact of the peer culture in the residential treatment of youth. Adolescence, 15, 831-845.

Schwartz, I. & Lindgren, J. (1984). Evaluation report. Duluth, MN: Woodland Hills Residential Treatment Centre.

Sherer, M. (1985). Effects of group intervention on moral development of distressed youths in Israel. Journal of Youth and Adolescence, 14, 513-526.

Shinto, H. (1981). Meeting for mutual criticism at correctional facilities for youthful offenders. Japanese Journal of Criminal Psychology, 17, 33-42.

- Slotnick, M. (1977). Alternative approaches to juvenile corrections: A case study. Rockville, MD: National Institute of Justice.
- Smith, D. M. (1985). Perceived peer and parental influences on youth's social world. Youth and Society, 17, 131-156.
- Soby, J. M. (1994). Prenatal exposure to drugs/alcohol: Characteristics and educational implications of fetal alcohol syndrome and cocaine/polydrug effects. Srpingsfield, IL: Charles C Thomas Publishers.
- Spergel, I. (1975). Positive peer culture. Social Work, 20, 80.
- Stacy, M. P. (1985). Institutionalized male delinquents' perceptions of curative factors in positive peer culture. Unpublished Dissertation. University of Missouri, Missouri.
- Stanford, R. F. (1973). The use of positive peer culture versus conformative behavior in the treatment of delinquent behavior at the Dakota State Training School. Unpublished master's thesis, University of South Dakota, South Dakota.
- Steele, P. D. (2002). Evaluation of the EQUIP program: A partnership between New Mexico Statistical Analysis Centre and the New Mexico Children, Youth and Families Department. Albuquerque, NM: New Mexico Criminal Justice Analysis Centre, Institute for Social Research.
- Stephenson, R, M., & Scarpitti, F. R. (1974). Group interaction as therapy: The use of the small group in corrections. Westport, CT: Greenwood Press.
- Sutherland, E. H. (1947). Criminology (4th ed.). Philadelphia: Lippincott.
- Sutherland, E. H. & Cressey, D. R. (1978). Criminology (10th ed.). Philadelphia: Lippincott.

Sykes, G. M. (1958). Society of captives: A study of a maximum security institution. Princeton, New Jersey: Princeton University Press.

Tabachnick, B. G. & Fidell, L. S. (2001). Using multivariate analysis (4th ed.). Boston: Allyn & Bacon.

Tannehill, R. L. (1987). Employing a modified positive peer culture treatment approach in a state youth center. Journal of Offender Counseling , Services and Rehabilitation, 12, 113-129.

Taylor, C. A. A., & Hepburn, J. R. (1977). Positive peer culture and token economy: An evaluation of the Missouri Division of Youth Services treatment program. Jefferson City, MO: Missouri Department of Social Services.

Toseland, R. W. & Rivas, R. F. (2001). An introduction to group work practice (4th ed.). Boston: Allyn and Bacon.

Tuckman, B. (1963). Developmental sequence in small groups. Psychological Bulletin, 63, 384-399.

Turnquist, R. W. (1984). Assessing the personal skills development of incarcerated juvenile delinquents (Doctoral dissertation, Sam Houston State University, 1980). Dissertation Abstracts International, 44, 2590-2591A.

Vincent, J., Houlihan, D., & Mitchell, P. (1994). Using sociometric measures to predict help seeking behaviors in a positive peer culture program. Behavioral Intervention, 9, 87-92.

Viriden, T. (1984). Supportive peer groups: A behavior management program for children. In J. K. Grosenick, S. L. Huntze, E. McGinnis & C. R. Smith (Eds.),

Social/affective interventions in behavioral disorders (pp. 70-86). Des Moines, IA: State of Iowa, Department of Public Instruction, Special Education Division.

Von Hirsch, A., & Maher, L. (1998). Should penal rehabilitationism be revived? In A. Von Hirsch & A. Ashworth (Eds.), Principled Sentencing (pp. 26-33). Oxford: Hart Publishing.

Vorrath, H. H., & Brendtro, L. K. (1974). Positive peer culture. New York: Aldine de Gruyter.

Vorrath, H. H., & Brendtro, L. K. (1985). Positive peer culture (2nd ed.). New York: Aldine de Gruyter.

Wasmund, W. C. (1980a). The effects of positive peer culture upon the self-concept of adolescent offenders. Duluth, MN: Woodland Hills.

Wasmund, W. C. (1980b). A research evaluation November, 1977 through March, 1980 of the woodland hills residential treatment program. Unpublished manuscript, Woodland Hills, Duluth, MN.

Wasmund, W. C. (1988a). Positive peer culture: Tapping an invaluable resource. Journal of Child Care, 3, 31-40.

Wasmund, W. C. (1988b). The social climates of peer group and other residential programs. Child and Youth Care Quarterly, 17, 146-155.

Wasmund, W. C. & Brannon, J. M. (1987). Integrating affective change: A reevaluation of offender self-concept and peer group treatment. Residential Treatment for Children and Youth, 5, 93-101.

Wasmund, W. C. & Tate, T. F. (1988). Personality and performance: Attributes of residential child care workers. Child Welfare, 67, 291-299.

Weber, G. H. (1988). Two studies of positive peer culture: A response. Child and Youth Quarterly, 17, 163-164.

Weeks, H. A. (1958). Youthful offenders at highfields: An evaluation of the effects of the short-term treatment of delinquent boys. Ann Arbor, MI: The University of Michigan Press.

Wheelan, R. (1994). Group processes: A developmental perspective. Boston: Allyn and Bacon.

Whittaker, J. K. (1979a). Caring for troubled children: Residential treatment in a community context. San Francisco, CA: Jossey-Bass Publishers.

Whittaker, J. K. (1979b). Program activities. In A. E. Trieschman, J. K. Whittaker & L. K. Brendtro (Eds.), The other 23 hours: Child-care work with emotionally disturbed children in a therapeutic milieu (pp. 100-119). New York: Aldine Publishing Company.

Worchell, S. (1994). You can go home again: Returning group research to the group context with an open eye on developmental issues. Small Group Research, 25, 205-223.

Wortley, R. (2002). Situational prison control: Crime prevention in correctional institutions. Cambridge, UK: Cambridge University Press.

Yochelson, S. & Samenow, S. E. (1976). The criminal personality: Vol 1. A profile for change. New York: Jason Aronson.

Yochelson, S. & Samenow, S. E. (1977). The criminal personality: Vol 2. The change process. New York: Jason Arsonon.

Zimpfer, D. G. (1992). Group work with juvenile delinquents. Journal for Specialists in Group Work, 17, 116-126.

Ziv, A. (1976). Measuring aspects of morality. Journal of Moral Education, 5, 189-201.

APPENDIX A

Classification of Offences

Appendix A.1

Seriousness of Specific Offences

Low	Medium	Hi
Attempt theft/break and enter	Assault police officer	Abduction
Breach of probation	Assault	Accessory after fact of murder
Breach of recog	Careless use of firearm	Aggravated assault
Break and enter	Criminal negligence in operation of motor vehicle	Aggravated sexual assault
Cause disturbance	Dangerous driving cause death	Arson
Provide false information	Dangerous driving cause bodily harm	Assault with a weapon
Cause fire by negligence	Discharge firearm	Assault cause bodily harm
Conspiracy	Domestic assault	Assault with explosives
Corrupt public morals	Escape custody (no force)	Attempt murder
Dangerous Driving	Extortion (no force)	Bestiality, buggery
Driving while suspended	Fire setting	Cause death by criminal negligence
Fail to appear	Indecent exposure	Cause bodily harm by criminal negligence
False pretences	Indecent assault	Escape custody with use of force
Federal statutes (not NCA,FDA)	Invitation of sexual touching	Forcible confinement
Forgery	Point Firearm	Gross indecency
Fraud	Possess weapons dangerous to public peace	Incest
Impaired Driving/over .08	Possess restricted, concealed, prohibited weapon	Kidnapping
Keep bawdy house	Robbery (no force)	Manslaughter
Live on avails of prostitution	Set fire to substance	Murder 1 st
Nuisance	Sexual interference of young person	Sexual exploitation of a young person
Obscene calls	Trafficking	Robbery with use of force
Obstruct justice	Use firearm in commission of offence	
Obstruct police officer	Uttering threats	
Possess goods attained by crime	Wear disguise	
Possess house breaking equip		
Provincial statutes (BLA, HTA)		
Refuse breathalyzer		
Simple possession		
Soliciting prostitution		
Take auto without consent		
Theft under/over		
Theft of communication		
Trespass at night		
Unlawfully at large		
Unlawful impersonation		
Unlawful assembly		
Unlawfully in dwelling house		
Uttering		
Wilful damage/mischief		

Appendix A.2

Type of Specific Offences

Property	Person	Other
Attempt theft/be	Dangerous driving	Breach of probation
Break and enter	Keep bawdy house	Breach of recog
Cause fire by negligence	Lives on avails of prostitution	Cause disturbance
Forgery	Soliciting prostitution	Fail to appear
Fraud	Uttering	Conspiracy
Impaired driving / over .08	Assault police officer	Escape custody
Possess goods attained by crime	Assault	Drive suspended (without force)
Possess house breaking instruments	Dangerous driving cause death	Cause an investigation with false information
Possession	Dangerous driving cause bodily harm	Federal statutes (not NCA and FDA)
Take auto without consent	Discharge firearm	False pretences
Theft under/over	Domestic assault	False fire alarm
Theft of communication	Extortion	Nuisance
Trespass at night	Indecent exposure	Obscene calls
Wilful damage/mischief	Indecent assault	Obstruct justice
Criminal negligence in operation of motor vehicle	Invitation of sexual touching	Provincial statutes (BLA, HTA)
Fire setting	Point firearm	Obstruct police officer
Possess weapons dangerous to public peace	Robbery	Refuse breathalyzer
Possess restricted, concealed, prohibited weapon	Sexual interference of young person	Unlawfully at large
Set fire to substance	Use firearm in commission of offence	Unlawful personation
Trafficking	Uttering threats	Unlawful assembly
Arson	Corrupt public morals	Careless use of firearm
Unlawfully in dwelling house	Abduction	Wear disguise in commission of offence
	Accessory after fact to murder	
	Aggravated assault	
	Aggravated sexual assault	
	Assault with a weapon	
	Assault cause bodily harm	
	Assault with explosives	
	Attempt murder	
	Bestiality, buggery	
	Cause death by criminal negligence	
	Cause bodily harm by criminal negligence	
	Forcible confinement	
	Gross indecency	
	Incest	
	Kidnapping	
	Manslaughter	
	Murder	
	Robbery	
	Sexual exploitation of young person	

APPENDIX B

Description of the EQUIP Program

The EQUIP program is a modified PPC program that specifically addresses the limitations of PPC without compromising PPC's basic strengths. This modified program was created by John Gibbs, a psychology professor known for his work with the moral development of delinquents, and Granville Potter, a correctional administrator with extensive PPC experience. Gibbs found that while moral development was an important part of rehabilitation, the youth's negative peer pressure was a major roadblock to success. Conversely, Potter found that PPC was an excellent program for creating a prosocial environment, but that environment was not being fully utilized for the purpose of treatment. Something was missing. As EQUIP developed, Arnold Goldstein joined the effort and brought expertise in anger management programming. In the end, the program combined empirically effective educational components with PPC (Gibbs, Potter, Barriga & Liao, 1996). The following description of EQUIP will consider the program's goals and the means to reach those goals. This simple consideration will discuss how EQUIP overcomes the limitations of PPC.

As mentioned earlier, the goal of PPC is to create a climate of change through care and concern that enables peers to experiment with caring and helping one another in a supportive environment; whereby experiencing the benefits of prosocial behaviour, the youth will be compelled to adopt more prosocial behaviour, attitudes and values after release. Vorrath and Brendtro (1985) state that youth will know that their problems have been overcome when their behaviour is in line with the "when solved" list that is associated with the PPC problem list (described earlier). Gibbs, Potter and Goldstein (1995) explain that while PPC is able to create a climate for change, it does not specify the steps to achieve that goal. PPC simply expects youth to help. EQUIP maintains that

delinquent youth are limited by their delayed moral development, social skill deficiencies and cognitive thinking errors (Gibbs, Potter & Golsdstein, 1995). For these reasons, expecting youth to help without addressing these concerns may not be realistic (Gibbs, 1993). Leeman, Gibbs and Fuller (1993) maintain that youth need more teaching and direction than PPC states. The goal of EQUIP is therefore "to equip youth with the necessary skills and resources for helping their peer group members and themselves through the process of developing a prosocial value system" (Steele, 2002, p. 14). While PPC and EQUIP tend to share the similar end goals (prosocial behaviour and values), EQUIP's strength is in its ability to prescribe the steps to reach those goal.

While PPC generally assumes that youth have the ability to help if they choose, EQUIP maintains that youth must be taught to think and act empathically. Therefore, EQUIP adds educational components to the PPC program that addresses moral development, anger management, thinking errors and social skills training. These components are highly integrated with the rest of the program and taught by the group leader during special group meeting called EQUIP meetings.

EQUIP specifically addresses the delayed sociomoral development of delinquent youth, in other words their prolonged selfish immaturity. Theoretically rooted in Kohlberg's (1984) stages of moral development, Gibbs, Basinger and Fuller (1992) state that delinquent youth tend to be more selfish and immature than prosocial youth of the same age. This sociomoral delay must be targeted to bring youth to a more "other oriented" stage of moral development. This is done using EQUIP's moral problem situations. These prescribed problem situations highlight the inferiority of self-centred immaturity. Staff guide the group's discussion as each situation is read. EQUIP offers

sample questions to maximize the potency of the exercise.

EQUIP has integrated a modified version of Goldstein's Aggression Replacement Training (ART) into the program (Goldstein & Glick, 1987). This component of EQUIP seeks to relabel aggression and anger, link the importance of thinking with anger, as well as describe relaxation, self talk and self monitoring techniques. While PPC may physically restrain violent youth who do not control their aggression, EQUIP attempts to give youth more tools to deal with their anger, therefore decreasing the use of physical restraints.

EQUIP also addresses youth's cognitive distortions through thinking errors. Four simple thinking errors are used to help identify the underlying thinking that produces the problem behaviour that is identified in traditional PPC programs. Youth report their problems during a PPC meeting; in EQUIP, the youth also identifies the underlying thinking error that is linked to each problem. This allows the group meeting to more easily focus on the values and beliefs of the youth and not just their problem behaviour. The four thinking errors are assumes the worst, blames others, minimizing and self-centeredness (Gibbs, Potter & Goldstein, 1995).

Finally, EQUIP offers a step-by-step guide for youth to follow in various difficult social situations. This guide addresses the social limitations youth. In other words, delinquent youth often do not know how to get out of a fight, accept criticism, say no to negative peers, or respond constructively to failure. While the anger management component guides the internal cognitive response to these situations, it is also helpful to know physically how to respond to these situations (Gibbs, Potter & Goldstein, 1995). Within the EQUIP program these social skills are taught and practiced in a structured role

playing environment as well as outside the daily group meeting time.

In a recent evaluation, EQUIP significantly increased the youth's social skills, significantly decreased institutional behaviour problems and subsequent recidivism (Leeman, Gibbs & Fuller, 1993). The keys to EQUIP's success are that the educational components are simple to understand, are exhaustively described to prevent the abuse and misuse of its content and the skills are practical outside of incarceration. EQUIP also specifically targets the known cognitive and behavioural limitations of youth as well as highly integrates it with the motivational aspects of PPC (Moody & Lupton-Smith, 1999). Simply stated, EQUIP describes and teaches all the specific tools that are needed to create a positive peer culture, while PPC tends to assume the youth already know these tools and will use them if they are in a supportive peer environment. EQUIP maintains many of the basic components of PPC including the 12 problems, problem identification, group meeting and similar staff interventions, while adding educational components that address many of the limitations of PPC. For a more comprehensive description of EQUIP, Gibbs, Potter and Goldstein (1995) is a good start.