## Who We Are

**Peninsula Youth Centre** is a secure custody and detention facility with programs designed for young males between the ages of twelve to eighteen, who have been found guilty of an offence under the Youth Criminal Justice Act (YCJA) or have been charged of committing such an offence, that is serious in nature that the young person cannot remain in the community under their own recognizance. The facility is licensed for 32 beds.

The program falls under the mandate of the Ministry of Children and Youth Services. We seek to promote rehabilitation and positive re-integration back in to the community by providing cognitive based pro-social programming and skill based recreational activities that promote self esteem and challenge existing thought processes. Upon admission, youth attend at least two cognitive-behavioural programs per week for the duration of their stay in the facility, in addition to recreational and life-skill based programming. Youth begin by attending our three core cognitive-behavioural based programs: Anger Awareness (8 modules), Victim Awareness (4 modules), and Problem Solving (4 modules). Upon completion of these programs, youth transition into a variety of available programs that best meet individualized needs such as Conflict Resolution, Life Skills, Stress Management, Leadership, Healthy Sexuality, and Financial Capability.

## Goals and Intentions

**Program Goal:** To improve the pro-social skills of youth involved in the justice system so they can use these tools to become successful members of the community.

It is the intent of Peninsula Youth Centre to build our evaluation capacity in order to determine whether or not our three core cognitive behavioural programs (Anger Awareness, Victim Awareness, and Problem Solving) are effective at promoting a positive change in youths' cognitions and behaviours.

## Evaluating Effectiveness

In 2008, PYC was awarded the Evaluation Capacity Building Grant through The Provincial Centre of Excellence for Child and Youth Mental Health at CHEO. We used this opportunity to further enhance our evaluation process to determine the effectiveness of our three core cognitive behavioural programs: Anger Awareness, Victim Awareness, and Problem Solving. With the development of a Program Logic Model and Evaluation Plan from our first grant, PYC became the successful recipients of the 2009/2010

Evaluation Implementation Grant *(full report attached)* once again funded through The Provincial Centre of Excellence for Child and Youth Mental Health at CHEO.  This grant provided us with the opportunity to put into action  our evaluation plan designed to yield useful data and insight.  Staff at PYC are excited about this new direction that we are taking in evaluation practices and are eager to use data collected to better offer meaningful and impactful programming to the youth that we serve.  We intentionally designed a sustainable evaluation plan that will continue beyond the grant period.  In addition, we plan to disseminate lessons learned and the results of our evaluation process to other programs of Banyan Community Services to further build upon internal organizational evaluation practices.  Community partners have expressed a keen interest in our activity of building evaluation capacity within our organization and have requested to be kept appraised of further development and findings which may be of benefit to their own programs designed for at-risk youth.

## Next Steps

We are extremely pleased to be the successful recipients of the 2010/2011 Doing Evaluation Grant awarded through The Provincial Centre of Excellence for Child and Youth Mental Health at CHEO.  Encouraged by results from the Evaluation Implementation Grant, this year we greatly anticipate findings that will be generated from a larger sample size.  We look forward to working in partnership with Brock University in the data collection process and analysis.   Results and Final Report for this grant will be posted on the website in October 2011.

Evaluation of the Cognitive Behavioural Programs at Peninsula Youth Centre

Banyan Community Services

Peninsula Youth Centre

Evaluation Implementation Grant
EIG–1156

Final Report:  September 30, 2010

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**Executive Summary**

**Banyan Community Services: Peninsula Youth Centre**
Cam Uhler, Program Manager

Peninsula Youth Centre is a thirty-two bed all male detention and custody youth facility. The present evaluation explores the effectiveness of the cognitive behavioural groups offered to the youth admitted to the facility. The evaluation focuses on content and program delivery that foster youth engagement and participation with the overarching goal of decreasing aggressive behaviour and providing youth with the tools to become successful members of society.

**The Purpose**

- To evaluate the effectiveness of the Anger Awareness, Problem Solving, and Victim Awareness cognitive behavioural groups offered to youth at Peninsula Youth Centre

- To inform the future development of program content and delivery of the cognitive behavioural groups offered at Peninsula Youth Centre

- To increase capacity for future and ongoing evaluation of the cognitive behavioural programs offered at Peninsula Youth Centre, as well as organizationally within the other youth justice programs at Banyan Community Services

**The Program**

Peninsula Youth Centre (PYC) is a secure custody and detention facility with programs designed for young males between the ages of twelve to eighteen, who have been found guilty of an offence under the Youth Criminal Justice Act (YCJA) or have been charged of committing such an offence, that is serious in nature that the young person cannot remain in the community under their own recognizance. The facility is licensed for 32 beds and is located in Niagara, Ontario. The program falls under the mandate of the Ministry of Children and Youth Services with the mission statement detailing that we will strive to make a difference for children and youth at risk in Ontario by improving outcomes through supporting a continuum of evidence-based programming and building strong partnerships with youth, families, communities and

governments.  We seek to promote rehabilitation and positive re-integration back in to the community by providing cognitive behavioural based pro-social programming and skill based recreational activities that promote self esteem and challenge existing thought processes (Ministry of Children and Youth Services, 2006).

Over the past three years, PYC has utilized a multifaceted approach to delivering cognitive behavioural programming, with a core curriculum designed to be youth friendly and engaging. The goal of the program is to increase the youth's awareness of the role that past experiences, feelings, and thinking patterns play when choosing their behavioral responses and impulses.  Program activities have been designed to address a variety of learning styles to assist youth in gaining insight to "re-learn" pro-social approaches to everyday life events, and enable them to further develop self-awareness, increased empathy, and the skills necessary to achieve positive outcomes in their lives.  Examples of such activities are interactive role plays, debates, technology-based game shows, and kinesthetic team building challenges.  Upon admission to the program, youth attend at least two cognitive-behavioral programs per week: Anger Awareness (8 modules), Victim Awareness (4 modules), and Problem Solving (4 modules) within an 8 week looping curriculum.    Since the introduction of this new program approach, an average of 150 clients per year have participated in these programs, many of whom have been exposed to these programs on more than one occasion.

Typically, young people admitted to PYC fall within the most at-risk population of youth within our community.  Due to a myriad of issues including systemic barriers, mental health issues, and lack of support, many of the young people who leave PYC do not follow through with referrals to community services designed to reduce recidivism and promote protective factors.  Thus, our facility strives to provide the most effective program delivery possible to make a meaningful impact on youth while they are in our care.

**The Plan**

It is the intent of Peninsula Youth Centre to build our evaluation capacity in order to determine whether or not our three core cognitive behavioural programs (Anger Awareness, Victim Awareness, and Problem Solving) are effective at promoting youth participation as well as impacting positive change in youths' cognitions and behaviours.

The client population for the evaluation is young males between the ages of 12 – 18 years of age, who due to the severity of their crime or suspected crime meet the criteria for secure custody. Due to the fact that PYC is a secure detention/custody facility and we have no control over the number of clients referred or the length of stay, it is difficult for us to predict our sample size at any one time. For the Evaluation Implementation Grant, data was collected from January 1, 2010 to May 31, 2010, with no new cases added to the sample after April 1, 2010. During that time, 25 clients were admitted to PYC.

The evaluation examines both process and outcome. The process component of the evaluation is designed to ascertain whether the processes we have in place are conducive to supporting positive outcomes. The process questions are as follows: Are the cognitive behavioural groups offered at Peninsula Youth Centre structured to be youth friendly?; Do the cognitive behavioural groups offered at Peninsula Youth Centre promote youth participation?; Is the curriculum relevant to all ages?; and Do youth perceive the cognitive behavioural groups as helpful? This data was collected through an in-depth semi-structured qualitative interview administered after the young person completed the cognitive programs. In addition, further data supporting these questions were obtained from Cognitive Behaviour Group Facilitator Progress Notes, which examined youth engagement.

The two outcome questions are as follows: Do youth show decreased acts of aggression after completing Anger Awareness, Problem Solving, and Victim Awareness?; and Do youth show a decreased use of self-serving cognitive distortions? The validated structured youth

report assessment tool How I Think (H.I.T.) (Gibbs, Barriga, & Potter, 2001) was administered upon intake and every 60 days thereafter.  Data from this tool provided a baseline picture of the clients' self reported cognitive distortions.  Data collected from subsequent administrations were used to ascertain whether there is a reduction in client reported cognitive distortions. Decreased acts of aggression were also measured through content analysis of the facility's Serious Occurrence Log.  Finally, the MCYS mandated Youth Admission Tool provided both demographic data and information regarding aggressive behaviour, which was used to provide descriptive baseline data of the sample population.

**The Product**

The sample size consisted of 25 youth, which is reflective of the number of youth admitted to PYC between January 1, 2010 and April 1, 2010.  Although this time frame allowed for all admitted youth opportunity to complete Anger Awareness, Problem Solving, and Victim Awareness, only four of the twenty-five youth were at the facility long enough to be able to do so.  Youth ranged in age from 12 to 18 years, and had an average age of 15.97 years.  Due to the small sample size, findings were not statistically significant, however noteworthy trends were identified.

Process Analysis Findings:

Four youth completed Anger Awareness, Problem Solving, and Victim Awareness during the data collection phase of the evaluation process and thus were eligible to complete qualitative interviews. Overall, youth found the groups to be appealing – in particular, the opportunities they had for engaging with the information and the varied ways in which information was presented.  All of the participants indicated that the interactive nature of the groups (e.g. discussions, games, slideshows) were integral to their motivation to attend and participate.  Analysis of the Youth Progress Notes showed 100% youth participation in Anger

Awareness group discussions and 100% participation in Problem Solving group activities. Average participation scores in all groups were at a moderate level. The qualitative interview questions related to relevance of groups to youth of various ages proved to be somewhat abstract to the four participants, and nearly all of them requested clarification on what was meant by "connected", "fitting", or "meaningful". As a result, responses regarding the relevance of groups (Process Evaluation Question #3) overlapped with youths' responses about their helpfulness (Process Evaluation Question #4), making it somewhat difficult to extract accurate information. All of the interviewed youth felt that the topics were relevant to some degree, and they all found that the topics were fitting to their own situations. All four of the youth participants found aspects of group to be helpful. The anger awareness modules seemed to be particularly useful, and were mentioned at different times by three of the four youth. Two youth also referred to the fact that the groups at PYC helped them in ways that other programs in other facilities were unable to previously. In addition, when asked about what they would take away from the groups for use in their lives (both at PYC and in the community), all participants were able to give examples.

Outcome Analysis Findings:

During the evaluation period, there were eight incidents of aggressive behaviour reported, of which four involved youth who had completed all three of the cognitive behavioural groups. Paired t-tests were conducted to compare participant's intake and 60 day post H.I.T. scores on the subscales representing cognitive distortions, showing no significant differences in scores ($p < 0.05$). Although youth struggled with the language used for the Qualitative Interview, youth reported a belief that attending the cognitive behavioural groups provided them with skills to better manage their anger and aggressive behaviour.

Preliminary findings suggest that the cognitive behavioural groups offered at Peninsula Youth Centre are youth-friendly, relevant, helpful, and promote youth participation; however due to the small sample size none of the results have statistical significance.   Although the outcome evaluation data provided limited positive results, trends thus far are encouraging and lend support to the current activities and discussions for Anger Awareness, Problem Solving, and Victim Awareness.  This provides encouragement to continue the evaluation process at Peninsula Youth Centre to increase the sample size and reported findings.

Knowledge exchange activities include sharing evaluation results with the two other youth justice programs at Banyan Community Services to influence their cognitive behavioural program model and delivery, as well as enhance their evaluation capacity.  Furthermore, community agencies have expressed interest in developing a continuum of programming for youth once they return to the community using the program and evaluation practices at PYC as the foundation.  Brock University has also agreed to work closer with PYC to continue the evaluation process and explore how findings can be used to augment their areas of research.

Recommendations include modifying the language used for the qualitative interviews to aid youth comprehension with the hope of yielding richer data, as well as using multiple sources of data to answer the process evaluation questions.

Amount Awarded:  $10, 000

Final report submitted:  September 30, 2010

Region:  Western Region

**Table of Contents**

**Introduction**

*Description of the Program and Purpose of the Evaluation*

Peninsula Youth Centre (PYC) is a secure custody and detention facility with programs designed for young males between the ages of twelve to eighteen, who have been found guilty of an offence under the Youth Criminal Justice Act (YCJA) or have been charged of committing such an offence, that is serious in nature that the young person cannot remain in the community under their own recognizance. The facility is licensed for 32 beds. The program falls under the mandate of the Ministry of Children and Youth Services with the mission statement detailing that we will strive to make a difference for children and youth at risk in Ontario by improving outcomes through supporting a continuum of evidence-based programming and building strong partnerships with youth, families, communities and governments. We seek to promote rehabilitation and positive re-integration back in to the community by providing cognitive behavioural based pro-social programming and skill based recreational activities that promote self esteem and challenge existing thought processes (Ministry of Children and Youth Services, 2006).

It is the intent of Peninsula Youth Centre to build our evaluation capacity in order to determine whether or not our three core cognitive behavioural programs (Anger Awareness, Victim Awareness, and Problem Solving) are effective at promoting a positive change in youths' cognitions and behaviours. Due to the fact that PYC is a secure detention/custody facility and we have no control over the number of clients referred or the length of stay, it is difficult for us to predict our sample size at any one time. In 2009, 248 youth were admitted to PYC and 150 received sentences of sufficient length or repeated sentences to complete the curriculum.

Over the past three years, PYC has utilized a multifaceted approach to delivering cognitive behavioural programming, with a core curriculum designed to be youth friendly and engaging. The goal of the program is to increase the youth's awareness of the role that past

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experiences, feelings, and thinking patterns play when choosing their behavioural responses and impulses. Program activities have been designed to address a variety of learning styles to assist youth in gaining insight to "re-learn" pro-social approaches to everyday life events, and enable them to further develop self-awareness, increased empathy, and the skills necessary to achieve positive outcomes in their lives. Examples of such activities are interactive role plays, debates, technology-based game shows, and kinesthetic team building challenges. The cognitive behavioural programs are offered in small group settings, facilitated by 2 trained staff facilitators. Upon admission to PYC, youth attend at least two cognitive-behavioural programs per week, in addition to recreational and life-skill based programming. Youth begin by attending Anger Awareness (8 modules), Victim Awareness (4 modules), and Problem Solving (4 modules) within an 8 week looping curriculum. These three groups form the basis of our approach in constructively dealing with cognitive distortions.

Anger Awareness consists of eight sessions and is primarily focused on examining anger triggers and the youth's responses. Emphasis is placed on developing skill sets and practical tools to deal with these feelings.

Problem Solving consists of four sessions and is based on learning and practicing a problem solving sequence that can be applied in various aspects of a youth's life. The concept of cost/gains analysis and how the youth's values will affect their decision making is important to discuss and explore. The young people are encouraged to set short term and long term goals and are given support to promote success.

Victim Awareness consists of four sessions and is crucial in examining the impact of victimization. Participants are encouraged to discuss personal experiences of victimization and how their own stories are a good illustration of how critical thinking errors can lead to irresponsible behaviour. Incorporated into this group is how the young person's self esteem and attitude may influence their behaviour towards others.

*Evaluation Questions*

The evaluation examines both process and outcome.  The process component of the evaluation is designed to ascertain whether the processes we have in place are conducive to supporting positive outcomes.  The process questions are as follows:  Are the cognitive behavioural groups offered at Peninsula Youth Centre structured to be youth friendly?; Do the cognitive behavioural groups offered at Peninsula Youth Centre promote youth participation?; Is the curriculum relevant to all ages?; and Do youth perceive the cognitive behavioural groups as helpful?  This data is collected through an in depth semi-structured qualitative interview administered after a young person completes the cognitive programs.  In addition, further data supporting these questions will be obtained from Cognitive Behaviour Group Facilitator Progress Notes.  This measure is reported by the program facilitator and it examines youth engagement.

The two outcome questions are as follows: Do youth show decreased acts of aggression after completing Anger Awareness, Problem Solving, and Victim Awareness?; and Do youth show a decreased use of self-serving cognitive distortions?  The validated structured youth report assessment tool How I Think (H.I.T.) (Gibbs, Barriga, & Potter, 2001) is administered upon intake and every 60 days thereafter.  Data from this tool will provide a baseline picture of the clients' self reported cognitive distortions.  Data collected from subsequent administrations will be used to ascertain whether there is a reduction in client reported cognitive distortions. Decreased acts of aggression will also be measured through content analysis of the clients' facility records such as review of daily behaviour point sheets.  Finally, the MCYS mandated Youth Admission Tool, that provides both demographic data and information regarding aggressive behaviour, is used to provide descriptive baseline data of the sample population.

*Target Population*

Typically, young people admitted to PYC fall within the most at-risk population of youth within our community. Due to a myriad of issues including systemic barriers, mental health issues, and lack of support, many of the young people who leave PYC do not follow through with referrals to community services designed to reduce recidivism and promote protective factors. Thus, our facility strives to provide the most effective program delivery possible to make a meaningful impact on youth while they are in our care. The results of this evaluation will be used to inform our decision-making around program delivery and insure that we are achieving desired program effectiveness.

*Relevant Stakeholders*

Banyan's Board of Directors, CEO, Strategic Management Team, and frontline staff have been kept regularly apprised as our evaluation activities move forward. Frontline staff provide the medium for program delivery, and are utilized to provide assessment of client engagement and response to core program delivery on a module by module basis. Our plan is to share knowledge and deliverables with Banyan's two other youth justice programs with the intent of having these programs adopt similar programming structure and evaluation practices. The Ministry of Children and Youth Services have been kept apprised of evaluation results as they are produced in order to ensure our compliance with evidence-informed practices. Community partners such as the police, probation services, the John Howard Society, Brock University, the school board, youth mental health agencies, YMCA, Public Health, Native services, and Settlement services have expressed continued interest in learning more about our evaluation process and outcomes. The John Howard Society of the Niagara Region in particular has expressed a keen interest in our programming and evaluation practices due to the large number of shared youth between our organizations, and the potential of creating a bridge of evidence based cognitive behaviour programs for youth at-risk.

*Review of Related Research*

Review of related research lends support to PYC's approach to cognitive behavioural programming, as well as stresses the need for further research and evaluation of programming for at-risk youth. There has been relatively limited sound empirical program evaluation that sanctions judgment on the effectiveness of reducing adolescent offending behaviour (Tolan & Guerra, 1994). Furthermore according to Tolan and Guerra (1994), there is a considerable gap between the most commonly used programs and the most frequently evaluated ones, and they emphasize the need for further evaluation outcomes.

In 2006, nearly 180 000 youth were in violation of the Criminal Code, excluding traffic offences (Statistics Canada, 2006). Nearly one-quarter of arrested youth were accused of violent offences; with a dramatic increase in assaults, which represent nearly 80% of these offences (Statistics Canada, 2006). Studies from different countries and throughout the past several decades indicate that adolescence is the most common age period to break the law throughout the life span (Graham & Bowling, 1995 as cited in Shaw, 2001). Thus, creating and implementing effective programming to reduce adolescent law breaking would not only benefit this particular subset of adolescents in supporting a more successful future, but society as a whole by reducing victimization, the cost of the judicial system etc.

Individual-level risk factors such as cognitive self-control, anger management, social perspective taking, moral reasoning, social problem solving, and attitude change, have all been identified as significant predictors of aggressive and antisocial behaviour (Tolan & Guerra, 1994). In addition, research suggests that youth engaged in more severely aggressive behaviour struggle with how to solve problems and are more likely to distort and misperceive situations which can lead to problems with anger and impulsivity (Baker & Scarth, 2002). At a deeper level, distorted ways of thinking can be used to deny self-blame and to justify aggressive or antisocial behaviour (Barriga, Gibbs, Potter, & Liau, 2001). Lipsey, Chapman, and Landenberger (2001) make similar comments that cognitive distortions can lead youth engaged

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in law-breaking behaviour to interpret benign situations as threatening, hold conceptualizations of themselves and others that justify antisocial behaviour, and demonstrate behaviour that may be misguided in terms of how they believe one should behave.

Cognitive behavioural theory aims to assist youth in connecting how their thoughts (i.e. internal running dialogue) affect their feelings, which then directly affect their choices and behaviour. The relationship between youth and their environment is viewed as interactive (Baker & Scarth, 2002). It is believed that external stimuli, such as people and circumstances, can influence a youth's thought and belief system. Likewise, how a youth interprets situations or the motives of others will affect their behaviour and how they choose to interact with their environment.  Youth are taught how to identify and replace maladaptive thoughts and beliefs with more accurate and insight-orientated ones. By changing the way youth interpret external stimuli, associated feelings about the person, circumstance, etc. may also be modified. This alteration in feelings may then influence different behaviour choices and patterns (Baker & Scarth, 2002).  Treatment based on cognitive behavioural theory aims to encourage cognitive restructuring and cognitive flexibility in order to promote more adaptive patterns of reasoning and reacting in situations that commonly act as triggers for aggressive and anti-social behaviour (Lipsey, Chapman, & Landenberger, 2001). In addition they are taught how to use pro-social problem solving skills by following a step sequence aimed to encourage youth to find alternate ways to deal with conflict other than aggression, and to stop and think before reacting.

Lipsey, Chapman, and Landenberger (2001) conducted a systematic review using meta-analytic techniques on fourteen selected studies to probe the effectiveness of cognitive behavioural programs for reducing the recidivism of youth and adults convicted of a criminal offence.  Of the fourteen studies selected, all were conducted in either Canada or the United States and were published in 1985 or later. Treatment was offered in a group format, and almost two-thirds of the groups were run in custodial institutions. Participants were primarily males ranging in age between fifteen to thirty years old. When grouped together, the results of

the studies clearly showed that cognitive behavioural therapy is an effective intervention and capable of producing noticeable reductions in recidivism. Participants who were a part of the cognitive behavioural treatment groups averaged lower recidivism rates at about two-thirds to that of participants in the treatment-as-usual control groups. In addition, the most effective groups reduced recidivism rates by about one-third compared to control groups. Of noteworthy importance, researchers discovered a sizeable difference in effectiveness between cognitive behavioural programs run routinely in custodial settings as opposed to programs that were run once as a demonstration/pilot program. Researchers concluded that although cognitive behavioural treatment was shown as effective, it is important to maintain the integrity of the program as it becomes routinely delivered in an institutionalized setting.

The empirical review conducted by Tolan and Guerra (1994) found that the use of multi-component cognitive behavioural programs, particularly those that include problem solving skills, were supported as an effective individual-level of intervention in reducing adolescent violence. Lipsey and Wilson (1998) reviewed 200 experimental or quasi-experimental studies to determine effective program interventions for youth convicted of violent offences. Of the 200 studies, 74 focused on programs run in youth custody facilities. The researchers stressed the difficulties in deriving sound conclusions. They commented that the range and diversity of the programs studied the differences amongst the youth, and the assortment of methods and procedures used in the studies all interact to produce "a bewildering variety of combinations and permutations". Lipsey and Wilson emphasized the need for sufficient research on the effectiveness of interventions for youth engaged in offending behaviour. They did however comment on their finding that groups with a focus on social problem solving skills and modifying cognitive distortions through instruction and structured discussion ranked highly as effective treatment programming.

Meta-analysis has consistently indicated that on average cognitive behavioural theory has shown significant positive effects on reducing recidivism for offending behaviour

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(Landenberger & Lipsey, 2005). With this information, Landenberger and Lipsey (2005) decided to conduct a meta-analysis consisting of 58 studies to determine possible variables that may influence the level of effectiveness of cognitive-behavioural treatments on recidivism with adult and youth convicted of criminal charges. They found that variation in recidivism effects were explained mostly by the level of risk of participants, the quality of treatment implementation, and the presence of anger control and interpersonal problem solving components in the treatment program. They did not find any differences between the use of generic or brand name cognitive behavioural treatments such as Aggression Replacement Training (Goldstein, Glick, & Gibbs, 1998). More important than the specific type of cognitive behavioural program was the quality of implementation as demonstrated through low group drop-out rates of the programs that were closely monitored for quality and fidelity of implementation; as well as sufficient training for the group facilitators. They also found that effects of cognitive behavioural therapy were greater for youth with higher risks of recidivism than those with lower risk.

Literature reviewed indicates support for the effectiveness and use of cognitive behaviour treatment for reducing youth offending behaviour and recidivism. Certainly, consistent throughout the literature is the emphasis on providing multi-component treatment programs; in particular those that involve anger and problem solving skills. In addition, Lipsey (1995) concluded that group leaders must not rely solely on the group curriculum of cognitive behavioural programs, but must deliver the content with high levels of authenticity. Lipsey & Wilson (1998) also stress the importance of the relationship between the group leaders and participants.

It is with this information that we have laid the foundation for our evaluation process of program effectiveness offered to youth at Peninsula Youth Centre. As we aim to design and implement group programs from an informed knowledge base, our goal is to provide meaningful course content to promote youth engagement and positive outcomes. Although primary importance will be placed in targeting risk factors using an evidence-based approach, it is also

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important to build on youths' strengths and increase protective factors. Additionally, given the short-term stay of some of our youth, further thought is being placed into a continuum of care back into the community. It would be optimal for treatment that begins in our facility to be continued once youth return to their communities in hopes of building on gains made and expanding points of intervention to family and community.

**Methodology**

*Design of the Evaluation*

With the assistance of The Centre, the evaluation team summarized our large endeavour into a concise program goal of improving the pro-social skills of youth involved in the justice system so that they can use these tools to become successful members of the community. From our program goal, we reviewed our existing available resources, products, and activities to determine desired short-term and intermediate outcomes. Out of this data, emerged our program logic model, please see Appendix A. Our evaluation matrix consisted of four process questions and two outcome questions. We chose to focus our evaluation around the following questions: Are the cognitive behavioural groups offered at PYC youth friendly?; Do the cognitive behavioural groups offered at PYC promote youth participation?; Is the curriculum relevant to all ages?; Do youth perceive the cognitive behavioural groups as helpful?; Do youth show decreased acts of aggression after completing Anger Awareness, Problem Solving skills and Victim Awareness?; and Do youth show a decreased use of self-serving cognitive distortions? See Appendix B.

To gather this quantitative and qualitative data, we designed a process whereby youth completed the How I Think evaluation survey tool (Gibbs, Barriga, & Potter, 2001) upon admission and every sixty days thereafter, as well as an in-depth semi-structured qualitative interview with the facility social worker upon completion of the core cognitive behavioural therapy (CBT) groups. In addition, youth participation in the groups was evaluated by the Program Facilitator and a residential staff co-facilitator after each module using the Youth Progress Note template, designed by our facility. See Appendix C.

Over the grant period, data was collected from January 1, 2010 through to May 31, 2010, with no new cases added to the sample after April 1, 2010. During that time, 25 youth

were admitted to PYC.  Of those admissions, 19 youth were exposed to a minimum of one of 16

cognitive program modules divided as follows; Anger Awareness - eight modules, Problem

Solving – four modules, Victim Awareness – four modules.  At the end of the evaluation period,

four youth had fully completed all elements of the evaluation including complete CBT program

exposures, questionnaires and interviews.

*Methods of Data Collection*

Data was collected from a range of sources, and is summarized in the table below.

Following this table are short descriptions of the tools used in this project.

| Source of Information | Measure | Collected By |
|---|---|---|
| Youth | How I Think (H.I.T.) questionnaire | Program Facilitator |
| Youth | Youth Admission Interview Tool (YAIT) | Residential Staff |
| Residential Staff & Program Facilitator | Youth Group Progress Note | Program Facilitator |
| Youth | Qualitative Interviews | Social Worker and Information Management Coordinator |
| Program Facilitator | Serious Occurrence Log | Program Supervisor |

The How I Think (H.I.T.) Questionnaire

The H.I.T. is a pencil and paper questionnaire that is designed to measure cognitive

distortions and problem behaviour in antisocial young people between the ages of thirteen to

twenty (Barriga & Gibbs, 1996). The questionnaire is self administered, and takes approximately

five to fifteen minutes to complete, and requires a fourth grade reading level.  This measure

uses 54 Likert scale questions (from one to six, with one equalling "disagree strongly" and six

equalling "agree strongly"). The results are further broken down into four subscales of cognitive

distortions: 1) self-centred, 2) blaming others, 3) minimizing/mislabelling, 4) assuming the worst;

and four behavioural subscales: 1) opposition-defiance, 2) physical aggression, 3) lying and 4)

stealing. In other words, each item corresponds to both a cognitive distortion category, as well

as a behavioural category.  The H.I.T. is completed by youth upon each admission to the facility and every 60 days thereafter until discharge.

<u>Youth Admission Interview Tool (YAIT)</u>

The Youth Admission Interview Tool is a tool mandated by the Ministry of Child and Youth Services Youth Justice Services division for "…early identification and subsequent planning of care for clients with disabilities and other needs" in all open and secure youth justice residential facilities across Ontario (see [http://www.children.gov.on.ca/htdocs/English/about/](http://www.children.gov.on.ca/htdocs/English/about/) [accessibility_2009-2010_part2.aspx](accessibility_2009-2010_part2.aspx)). This tool assists our residential staff in identifying risk areas for clients immediately upon their admission to this secure custody facility.  For the purposes of this evaluation, selected information was highlighted from this tool as it related to identifying incidents of conflict with peers and or authority figures, past acts of aggression, and prior responses to youth justice custodial interventions as reported by the youth, in order to establish baseline behavioural tendencies that can be later compared to Serious Occurrence Report Logs to support the outcome question: Do youth show decreased acts of aggression after completing Anger Awareness, Problem Solving skills, and Victim Awareness?

<u>Youth Group Progress Note</u>

For youth in programs during the research study period, the Program Facilitator designed an evaluation template and database to provide data to support the evaluation question: "Do the cognitive behavioural groups offered at PYC promote youth participation?" See Appendix C.  It provides an overview of the youth's attendance and participation in the core CBT programs. In addition to tracking which sessions each youth had attended and on which date, the progress note database also indicated the level of participation in discussions and activities for each module. Participation was rated using a Likert scale, ranging from one ("no participation") to five ("exceptional participation; demonstrates leadership skills; appropriate challenges and encourages other youth to participate in the group process").  In addition to

rating participation levels, this database collected qualitative comments on participation.[1]

Qualitative Interviews

This in-depth semi-structured interview offered insight into how the youth perceive the CBT programs and what effect they may have on their attitudes and beliefs. An interview guide (Appendix D) aided in the collection of qualitative data to support the following evaluation questions: Are the cognitive behavioural groups offered at PYC youth friendly?; Is the curriculum relevant  to all ages?; and  Do youth perceive the cognitive behavioural groups as helpful?

Interviews were conducted with four youth who had completed all program modules prior to their release from the facility.  Interviews were conducted on-site by a social worker.   During the interview, field notes were taken via laptop by a BCS staff member, the Information Management Coordinator.  The interviews were then transcribed and coded by a student from McMaster University.

Serious Occurrence Log

On an ongoing basis, a record is maintained of all occurrences of serious incidents requiring written notification to the Regional Ministry office.   During the evaluation period, data was extracted from the Serious Occurrence Reports (SO) involving aggressive behaviour. The date and details of the incident were recorded along with the individual(s) involved. Two types of aggression were tracked: assault on staff, and peer on peer altercations.  During the evaluation period, there were eight incidents reported, of which four involved youth who had completed all of the CBT modules.

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[1] Comments did not add a great deal of value, as they were typically expansions on the quantitative participation data. As such, comments were not included as part of the analysis.

<u>Quantitative Data Analysis</u>

Descriptive data were presented as means or frequencies. Comparisons between groups of youth were conducted using t-tests and paired t-tests. All analyses were done using PASW Statistics 18.

<u>Qualitative Data Analysis</u>

Qualitative interviews were conducted for four participants who had completed all program modules at PYC. After transcription, analysis of the interviews began with reading through the field notes, and organizing all of the responses by question.[2] Responses were further categorized using the broader evaluation questions, and any additional trends were noted.[3]

*Evaluation Limitations*

Throughout the course of this evaluation process, a number of limitations were found relating to methods, data sources, and biases, which required ongoing attention. Some foreseeable accounts were addressed, but will also be noted below.  Solutions to those limitations that could not be immediately remedied without compromising the integrity of the evaluation have been addressed within our conclusions and future recommendations.

As a short term detention/custody facility, the frequency and duration of youth admissions and dispositions solely lies on the judgment of the court. Knowing that a youth's average length of placement within our facility is 60 days, our core CBT programs have been based on an eight week, looping cycle of learning modules in an effort to maximize a client's potential for program exposure and completion.  It was our experience that during the evaluation

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[2]One youth declined for his interview to be audio-recorded; therefore, quotations were based on the field notes.
[3] An audit trail of the quotations and participants were kept for the purposes of accountability, but as a result of the small sample size and to further protect the four youth, quotations are not identified in any way.

process we experienced a historically low number of youth admissions coupled with shorter than average lengths of disposition.  This has resulted in a significantly smaller than projected sample size.  Though this smaller sample was beneficial to the learning process, it has limited our ability to reach significantly reliable outcomes.   It is our hope that as we embark on the *Evaluation Doing Grant*, the extended data collection period will allow for a more suitable sample.

In recognizing the limitations of our data sources, we must acknowledge the wide range of the youth's psychological functioning and how their willingness to change may influence our corresponding results of determining the effectiveness of our core CBT programs.  A number of our information sources rely on self-report by the youth; namely the H.I.T., the Y.A.I.T, and the qualitative interview.  During the completion of these evaluation tools, one must recognize the potential for false reports and a reluctance on the part of youth to disclose sensitive information that they may interpret as self incriminating, or being potentially damaging to their court proceedings.  Despite ongoing reassurances, an oath of confidentiality, and signed documentation to that end, youth may continue to hold feelings of mistrust, or the desire to present inaccurate information in order to offer a more positive impression.   Cognitive distortions labelled egocentric bias, observed in our clientele may be indicative of a developmental delay (Chantler, 1973 as cited by Barriga et al, 2001).  This developmental delay may explain a lack of moral judgment and an inability to understand social perspective.

When designing the Youth Group Progress Note template, there was an acknowledgement of potential bias and inconsistency in scoring.  In effort to avoid such occurrences, the template was designed to be completed jointly by the Program Facilitator, who is the constant instructor across all program groups, and a randomly assigned residential staff co facilitator.  After an open discussion of each youth's level of participation, a score was mutually decided upon utilizing a Likert scale.

**Results**

*Demographic Characteristics*

Age

       The sample of youth (N=25) entering PYC ranged in age from 12 to 18 years of age, and have an average age of 15.97 years (sd 1.26).

History in Residential Facilities and Previous Charges

       Out of the twenty-five youth in the evaluation sample, 76% (n=19) of them had previously been in detention or custody. Twenty-eight percent of these youth also reported physical altercations with other residents during their detention placements. When asked about the charges they were currently dealing with the following responses were given:

- Breach of probation (n=7, 28%)
- Failure to comply (n=6, 24%)
- Uttering threats (n=3, 12%)
- Possession of drugs (n=2, 8%)
- Break and enter (n=1, 4%)
- Sexual assault (n=1, 4%)

- Possession of a weapon (n=6, 24%)
- Assault (n=4, 16%)
- No comment (n=4, 16%)
- Robbery (n=2, 8%)
- Escaped custody (n=1, 4%)
- Drug trafficking (n=1, 4%)

       When asked about their histories of violence, 52% (n=13) shared that they had previously been charged with physical assault, 8% (n=2) had been charged with sexual assault, 60% (n=15) had been charged with using a weapon, and 8% (n=2) had been charged with starting a fire. Sixteen percent (n = 4) of the youth indicated that they had assaulted someone in a position of authority (i.e., a teacher or staff at a facility), and 48% (n=12) disclosed that they had a history of fighting with others (i.e., physically and/or verbally).

Self-Harm

       Sixteen percent (n=4) of the youth disclosed that they had tried to hurt themselves in the past, with 12% (n=3) reporting that they had tried to harm themselves multiple times. One individual shared that he was planning or thinking of hurting himself at the time of intake.

## Housing Background

Youth were asked two questions regarding their living situation: 1) Who are you presently living with? and 2) Have you recently lived on the streets? Sixty-four percent (n=16) of the youth reported that they were living with their family or a family member, 12% (n=3) of youth were living in a group home, 12% (n=3) were living with a friend/girlfriend, and 8% (n=2) were living in foster care. When asked if they had recently lived on the streets, 20% (n=5) replied "yes".

## Substance Abuse History

Thirty-two percent (n=8) of the youth disclosed that they had been drinking or doing drugs in the 48 hours prior to coming to the facility. When asked what drugs they had taken in the last six months, 52% (n=13) said marijuana, 28% (n=7) said alcohol, 12% (n=3) said prescription drugs, and 20% (n=5) reported using some other illegal drug. Forty percent (n=10) of the youth indicated that they were supposed to be taking a prescription drug.

## Formal Support Services

Of the 25 youth in the evaluation sample, 28% (n=7) reported having a social worker. Youth were also asked if they had a probation officer. Sixty-four percent (n=16) indicated that they did have a probation officer.

## Entry/Exit Status

The participants' status (detention or custody) upon entry and exit was recorded. Upon entry, 74.2% (n=23) of the evaluation youth were in detention and 6.5% (n=2) were in custody. Upon exiting the facility, 67.7% (n=21) of the evaluation youth were in detention and 12.9% (n=4) were in custody.

<u>Average Length of Stay</u>

The length of stay for youth in the evaluation sample (n=25) ranged from 1 to 190 days. The average length of stay was 38 days (sd 56.02).

*How I Think (H.I.T.) Questionnaire Scores*

<u>Baseline</u>

The baseline (Time 0) H.I.T. Questionnaire scores are presented in the table below:

| Subscale Category | Time 0 (N=16) | |
| --- | --- | --- |
| | Mean score (SD) | (min./max.) |
| H.I.T. | 78.88 (21.48) | Min=50, Max=100 |
| Overt (OV) | 81.25 (21.37) | Min=50, Max=100 |
| Covert (COV) | 74.50 (23.20) | Min=50, Max=100 |
| Self-Centered (SC) | 79.00 (21.63) | Min=50, Max=100 |
| Blaming Others (BO) | 75.88 (20.31) | Min=50, Max=100 |
| Minimizing/Mislabelling (MM) | 78.50 (21.52) | Min=50, Max=100 |
| Assuming the Worst (AW) | 81.13 (21.09) | Min=50, Max=100 |
| Opposition-Defiance (OD) | 79.63 (19.96) | Min=50, Max=100 |
| Physical Aggression (PA) | 84.00 (19.42) | Min=50, Max=100 |
| Lying (L) | 75.63 (21.48) | Min=50, Max=100 |
| Stealing (S) | 77.13 (21.63) | Min=50, Max=100 |

The percentile scoring of the H.I.T. Questionnaire is arranged into three sections: Clinical percentile (upper range), the Borderline Clinical percentile (mid-range) and the Non-clinical

percentile (lower range). The overall H.I.T. percentage is determined by averaging the means of all eight sub-scales.

The baseline H.I.T. percentage of 78.88 (sd 21.48) calculated for the youth in the evaluation sample indicates that as a group, they score in the middle of the Borderline Clinical percentile. The Overt percentage is determined by averaging the scores on the Opposition Defiance and Physical Aggression subscales of the questionnaire. The sample youth's Overt percentage was in the upper part of the Borderline Clinical percentile (81.25, sd 21.37). The Covert percentage is calculated by averaging the Lying and Stealing subscales of the questionnaire. The Covert percentage for sample youth of 74.50 (sd 23.20) fell in the lower end of the Borderline Clinical percentile. The only percentage that registered in the Clinical range was the Physical Aggression score (84.00, sd 19.42).

*Average Number of Modules Attended*

The number of modules attended in the three groups (Victim Awareness, Problem Solving, and Anger Awareness) was tracked. The results are presented in the table below.

| CBT Group | Project Sample | | |
| --- | --- | --- | --- |
| | n | mean | SD |
| Victim Awareness | 14 | 2.50 | 1.40 |
| Problem Solving | 10 | 2.50 | 1.27 |
| Anger Awareness | 16 | 3.75 | 2.93 |

Sixty Day Post Intake H.I.T. Scores

There were no significant differences to report between intake and 60 day post H.I.T. scores for the youth included in the evaluation sample; however there was mild improvement on five subscales (COV, SC, MM, L, S). There was a mild decrease in Assuming the Worst and no movement in COV and Lying.

*Process Analysis Findings*

Most of the process analysis findings were derived from qualitative interview data,

except for data pertaining to the second evaluation question. Because of the small sample size

and for ease of understanding, findings will be categorized by evaluation question.

*Youth friendliness of groups*

Overall, youth found the groups appealing – in particular, the opportunities they had for

engaging with the information, and the varied ways in which information was presented. Two

participants indicated that initially they were not at all motivated to attend group, as they were

unsure as to what it was about, and were also told it was mandatory – something that one youth

felt "took away from the group." The other two participants shared that they were motivated to

attend the groups from the beginning, as they felt it would look good for their upcoming court

appearances.

The motivation levels of participants were influenced by a number of factors. Three of

the four participants indicated that they were open to learning things, and that the group

provided a forum to learn in a different way than they had previously. All of the participants

indicated that the interactive nature of the groups (e.g., discussions, games, slideshows) were

integral to their motivation to attend and participate. One youth shared:

Well, what I liked about group was, like I said about the interactions and stuff, like it
would give you a reason to want to come to the group, instead of just sitting here
reading out of a book. We did something, which was fun, right – you get everyone
talking, that would be what we take with us...

I've been through stuff like this, so I thought [this group] is maybe something else
that might teach me something. Uh, and it was probably just the interactions – like
sometimes they had a whole bunch of slide show...it was just pretty awesome.

Similarly, another youth commented that the facilitator

...played games for some of [the sessions]…whoever like did the best would
get kind of like a pop or something.  So…and that helped everybody out…

One youth felt that the group provided him an opportunity to "just talk," and shared that there was "no judging" of residents by the facilitator. Further, he felt that the group was an environment where residents could "express our own opinions and views", which was valuable to him. Another youth appreciated that the group did not require a lot of reading and writing ("like school"), which was something he had originally feared. Nearly all participants referred to groups as "fun" at one time or another during the interview.

*Youth participation in groups*

Data was recorded in the Youth Progress Notes after every module of the three cognitive behavioural groups offered to youth in the facility.  As mentioned, the groups included: Anger Awareness (8 modules), Problem Solving (4 modules), and Victim Awareness (4 modules),[4] and are meant to promote pro-social approaches and skills that will allow participating youth to apply self-control, express/manage anger in a healthy manner, and increase social competence.

Following each module, PYC staff members assign attendees a rating in terms of participation in group discussion, and participation in group activities. This scale is scored from 1 to 5, where 1=no participation, 2=minimal participation - requires much staff support, 3=moderate participation – youth meets basic expectations with little staff support, 4=full participation with minimal or no staff support, and 5=exceptional participation – youth demonstrates leadership skills and appropriately challenges other youth to participate in the group process.

The mean scores for overall participation, as well as the number of youth who attended each program are presented in the table below.  Although the participation levels varied, it is notable that there was 100% participation in Anger Awareness group discussions and 100%

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[4] The breakdown of each group by module can be found in the Appendix E.

participation in Problem Solving group activities. Further, average participation scores in all

groups were at a moderate level.

**Table 1: Mean participation scores for group discussions and activities**

| Program | n | Participation in Discussion | Min/Max | Participation in Activities | Min/Max |
|---|---|---|---|---|---|
| Anger Awareness | 65 (n=4 missed groups) | mean=3.57 | 2 / 5 | mean=3.69 | 1 / 5 |
| Problem Solving | 28 (n=2 missed groups) | mean=3.39 | 1 / 5 | mean=3.57 | 2 / 5 |
| Victim Awareness | 39 (n=2 missed groups) | mean=3.38 | 1 / 5 | mean=3.46 | 1 / 5 |

Although the mean scores for participation in Table 1 are quite similar, looking at

participation percentages for the discussion and activity components in each group gives us

additional information.

**Table 2: Percentile comparisons of participation levels in and between groups**

| Program | Participation in Discussion | | | | | Participation in Activities | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | None % | Min % | Mod % | Full % | Excep % | None % | Min % | Mod % | Full % | Excep % |
| Anger Awareness (n = 65) | 0 | 15.4 | 26.2 | 44.6 | 13.8 | 1.5 | 6.2 | 27.7 | 50.8 | 13.8 |
| Problem Solving (n = 28) | 3.6 | 17.9 | 28.6 | 35.7 | 14.3 | 0 | 17.9 | 28.6 | 32.1 | 21.4 |
| Victim Awareness (n = 39) | 2.6 | 17.9 | 28.2 | 41.0 | 10.3 | 2.6 | 15.4 | 28.2 | 41.0 | 12.8 |

Further, when we look at participation levels for each of the individual modules,

additional trends become evident. The following sections will explore general participation for

each group, as well as mean participation by module.

In the Anger Awareness groups, 58.4% of the participation scores in the discussion component fell in the full to exceptional participation range, while 26.2% were in the moderate range and 15.4% in the minimal range. All youth participated in discussions.

For the activities component of the group, 64.6% of youth fell into the full to exceptional participation range and 27.7% participated at a moderate level. Only 6.2% scored in the minimum participation range, and 1.5% declined to participate in activities at all. From this information, we may conclude that the activities portion of the Anger Awareness groups encouraged higher participation than did the discussions.

When participation levels were analyzed by module, additional trends were discovered. For example, the mean participation level for discussions is moderate for most Anger Awareness modules, and full for modules 7 and 8. For activities, mean participation levels are between moderate and full for most modules. The minimum and maximum scores within each module also lend context to youth participation. For instance, modules 2 and 8 have most of their scores (for both discussions and activities) in the upper levels of participation (from moderate to exceptional). An inference from this data could be that these modules are particularly useful or thought-provoking for youth.

*Table 3: Mean participation in Anger Awareness discussions and activities by module*

| Anger Awareness Module # | Participation in Discussion | | | | Participation in Activities | | | |
|---|---|---|---|---|---|---|---|---|
| | n | mean | SD | min/max | n | mean | SD | min/max |
| 1 | 7 | 3.00 | 1.00 | 2 / 4 | 7 | 3.43 | 0.79 | 2 / 4 |
| 2 | 7 | 3.86 | 0.69 | 3 / 5 | 7 | 3.86 | 0.90 | 3 / 5 |
| 3 | 8 | 3.63 | 0.74 | 3 / 5 | 8 | 3.50 | 0.54 | 3 / 4 |

| 4 | 8 | 3.00 | 0.93 | 2 / 4 | 8 | 3.50 | 0.76 | 2 / 4 |
|---|---|------|------|-------|---|------|------|-------|
| 5 | 9 | 3.67 | 0.71 | 2 / 4 | 9 | 4.00 | 1.00 | 2 / 5 |
| 6 | 12 | 3.42 | 0.90 | 2 / 5 | 12 | 3.58 | 1.00 | 1 / 5 |
| 7 | 6 | 4.00 | 1.27 | 2 / 5 | 6 | 3.83 | 1.17 | 2 / 5 |
| 8 | 7 | 4.00 | 0.82 | 3 / 5 | 7 | 3.86 | 0.69 | 3 / 5 |

When we look at the distribution of youth's participation in discussions and activities within each group, we note some variations. For example, although there was good participation in nearly every module's discussions, 50% of youth had exceptional participation in the discussion in module 7. For module 4, 87.5% of youth had moderate to exceptional participation in the activities portion of the group, while only 62.5% had the moderate to exceptional participation in the discussion.

*Table 4: Distribution of participation scores for Anger Awareness discussion and activities*

| Anger Awareness Module # | Discussion Participation | | | | | Activities Participation | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | None % | Min % | Mod % | Full % | Excep % | None % | Min % | Mod % | Full % | Excep % |
| 1 | 0 | 42.9 | 14.3 | 42.9 | 0 | 0 | 14.3 | 28.6 | 57.1 | 0 |
| 2 | 0 | 0 | 28.6 | 57.1 | 14.3 | 0 | 0 | 42.9 | 28.6 | 28.6 |
| 3 | 0 | 0 | 50.0 | 37.5 | 12.5 | 0 | 0 | 50.0 | 50.0 | 0 |
| 4 | 0 | 37.5 | 25.0 | 37.5 | 0 | 0 | 12.5 | 25.0 | 62.5 | 0 |
| 5 | 0 | 11.1 | 11.1 | 77.8 | 0 | 0 | 11.1 | 11.1 | 44.4 | 33.3 |
| 6 | 0 | 16.7 | 33.3 | 41.7 | 8.3 | 8.3 | 0 | 25.0 | 58.3 | 8.3 |
| 7 | 0 | 16.7 | 16.7 | 16.7 | 50.0 | 0 | 16.7 | 16.7 | 33.3 | 33.3 |
| 8 | 0 | 0 | 28.6 | 42.9 | 28.6 | 0 | 0 | 28.6 | 57.1 | 14.3 |

<u>Problem Solving</u>

In the Problem Solving group discussions, 50% of youth had full to exceptional participation, and 28.6% of youth participated at a moderate level. Further, 17.9% scored in the minimum participation range, and 3.6% did not participate at all.

In terms of participation in the Problem Solving activities, 53.5% of youth had full to exceptional  participation, and the same number of youth participated moderately (28.6%) and minimally (17.9%) in discussions and activities. There were no youth who refused to participate in the activities. Again, it appears that the activity component encourages greater participation than the discussion component for this group.

Again, additional trends are noted when looking at the participation data by module, as seen in the tables below. For example, module 12 elicits moderate participation overall, but mean scores are the lowest of all of the modules. Further, the range of scores is only from 2 to 4, whereas 25% and 37.5% of participants had exceptional participation for the discussion and activities in module 11, respectively.  Also of interest is the fact that 20% of youth did not participate at all in discussions for module 10 – the highest rate of non-participation for any group module in the whole program.

*Table 5: Mean participation levels in Problem Solving discussions and activities by module*

| Problem Solving Module # | Discussion Participation Score | | | | Activities Participation Score | | | |
|---|---|---|---|---|---|---|---|---|
| | n | mean | SD | min/max | n | mean | SD | min/max |
| 9 | 7 | 3.71 | 0.76 | 3 / 5 | 7 | 3.71 | 0.76 | 3 / 5 |
| 10 | 5 | 3.80 | 1.64 | 1 / 5 | 5 | 4.00 | 1.23 | 2 / 5 |
| 11 | 8 | 3.50 | 1.07 | 2 / 5 | 8 | 3.87 | 1.13 | 2 / 5 |
| 12 | 9 | 3.00 | 1.00 | 2 / 4 | 9 | 3.00 | 0.87 | 2 / 4 |

*Table 6: Distribution of participation scores for Problem Solving discussion and activities*

| Problem Solving Module # | Discussion Participation | | | | | Activities Participation | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | None % | Min % | Mod % | Full % | Excep % | None % | Min % | Mod % | Full % | Excep % |
| 9 | 0 | 0 | 42.9 | 42.9 | 14.3 | 0 | 0 | 42.9 | 42.9 | 14.3 |
| 10 | 20.0 | 0 | 0 | 40.0 | 40.0 | 0 | 20.0 | 0 | 40.0 | 40.0 |
| 11 | 0 | 12.5 | 50.0 | 12.5 | 25.0 | 0 | 12.5 | 25.0 | 25.0 | 37.5 |
| 12 | 0 | 44.4 | 11.1 | 44.4 | 0 | 0 | 33.3 | 33.3 | 33.3 | 0 |

<u>Victim Awareness</u>

A total of 51.3% of youth participated at a full to exceptional level in discussions in this group, with 28.2% participating at a moderate level, 17.9% at a minimal level, and only 2.6% refusing to participate at all.

Participation in the activities occurred at a full to exceptional level for 53.8% of participants, while 28.2% participated at a moderate level in activities. There were 15.4% of youth participating at a minimal level, and only 2.6% refusing to participate at all. Interestingly, the Victim Awareness group appears to be unique, in that it encourages equal participation levels for its discussions and activities.  This appears to be true for individual modules as well, as seen by Table 7.

However, looking at individual modules again suggests additional context.   Although a full 90% of youth participated at a moderate or full level in both discussions and activities for module 16, for example, no youth had exceptional participation. For module 15, although the distribution of scores is more spread out, with over 60% participating in at least a moderate level for the discussion and activities, nearly 40% had minimal participation, or did not participate at all.

*Table 7: Mean participation levels in Victim Awareness discussions and activities by module*

| Victim Awareness Module # | Discussion Participation Score | | | | Activities Participation Score | | | |
|---|---|---|---|---|---|---|---|---|
| | n | mean | SD | min/max | n | mean | SD | min/max |
| **13** | 7 | 3.57 | 0.98 | 2 / 5 | 7 | 3.86 | 0.69 | 3 / 5 |
| **14** | 9 | 3.56 | 1.01 | 2 / 5 | 9 | 3.67 | 1.00 | 2 / 5 |
| **15** | 13 | 3.00 | 1.16 | 1 / 5 | 13 | 3.08 | 1.26 | 1 / 5 |
| **16** | 10 | 3.60 | 0.70 | 2 / 4 | 10 | 3.50 | 0.71 | 2 / 4 |

*Table 8: Distribution of participation scores for Victim Awareness discussion and activities*

| Victim Awareness Module # | Discussion Participation Score | | | | | Activities Participation Score | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | None % | Min % | Mod % | Full % | Excep % | None % | Min % | Mod % | Full % | Excep % |
| 13 | 0 | 14.3 | 28.6 | 42.9 | 14.3 | 0 | 0 | 28.6 | 57.1 | 14.3 |
| 14 | 0 | 11.1 | 44.4 | 22.2 | 22.2 | 0 | 11.1 | 33.3 | 33.3 | 22.2 |
| 15 | 7.7 | 30.8 | 23.1 | 30.8 | 7.7 | 7.7 | 30.8 | 23.1 | 23.1 | 15.4 |
| 16 | 0 | 10.0 | 20.0 | 70.0 | 0 | 0 | 10.0 | 30.0 | 60.0 | 0 |

*Relevance of groups to participants of various ages*

The four youth who completed qualitative interviews were aged 15 to 18 years during the data collection period. Due to the small sample size and to the narrow age range, it was difficult to comment on group relevance and age specifically, although this should become clear with a larger sample.

As a part of the qualitative interview, the youth explored how connected they felt to the group topics, how fitting they were to their own situations, and how meaningful they considered groups to be. These questions proved to be somewhat abstract to the four participants, and nearly all of them requested clarification on what was meant by 'connected,' 'fitting,' or

'meaningful'. As a result, responses regarding the relevance of groups (Goal #3) overlapped

with youths' responses about their helpfulness (Goal #4), making it somewhat difficult to extract

accurate information.

When participants were asked how meaningful they found the group experience, they

had only positive things to say, as demonstrated by the following quotations:

...When people start talking you start to listen just because, you start to get it,
if you don't get the question you get it through other people's answers.

...Sometimes when you were reading everything you would go around and ask
what people thought, like, give a scenario and start to make you think about it,
kinda, it just makes you think...

I will remember [the groups] when I leave here...that should mean a lot to me.
I'll try to take a lot of stuff I learned here with me.

Before I came here I did different programs – mostly just sit down and read ones.
This gave me a hands-on chance to be more vocal about stuff.

It was all right. We learned a lot like I said. Kids come in here and they think
they're not going to learn anything...[but] they just come and then they learn.
They learn how to problem solve...

Further, all of the interviewees felt that the topics were relevant to some degree, and all

found things that were fitting to their own situations. The following sections detail youths'

experiences of the groups on anger awareness, problem solving, and victim awareness in terms

of their application to their own lives.

Anger Awareness

The Anger Awareness groups were considered to be relevant to all four participants,

even though one youth felt that anger was not his most significant issue. One youth spoke about

how learning about anger was timely, given how he was feeling at PYC:

Like in, uh, anger awareness, they told us the beginning stages of anger and, uh,
on the unit when I felt myself getting angry, and how it started in the pit of my
stomach and moved up type thing...like I felt it on the unit...

<u>Problem Solving</u>

Three of the four participants referred to Problem Solving modules when asked about

the relevance of groups. One respondent indicated that "goals and values for problem solving"

resonated for him (W), but did not elaborate, while another individual felt that some of the tools

related to problem solving were not particularly fitting to his life:

> ...things like problem solving...you try to talk but that doesn't work when two
> people are angry and you try to talk to them. So some things do work or are
> helpful, but there is other things that i just don't think will work.

Another youth commented that noticing opportunities for choice was very applicable to

his life, particularly in regards to anger:

> Like you have a choice between certain things so you have a choice whether it's to
> keep going on and snapping, or to stop and calm down and just to take space or
> something, or do something else.

<u>Victim Awareness</u>

The groups on Victim Awareness were also mentioned by three of the four participants.

For two of the respondents, the modules on victim awareness seemed to bring them a

newfound sense of empathy for the victims of their own crimes:

> [Victim awareness] showed me that anything I do, there is always more than one
> victim. I make myself my own victim without even knowing it; it's not just the
> person you harm, it's their family, my family, the community...

> ...[When] they give you an example of a victim you might realize what you've
> done to somebody, what's happening that you didn't realize.

Another participant mentioned that the module on thinking errors was fitting to his own

situation, although he did not provide any more details.

*Helpfulness of groups*

All four of the participants found aspects of the groups helpful. The anger awareness

modules seemed to be particularly useful, and were mentioned at different times by three of the

four youth. Two youth mentioned the utility of learning about the stages of anger, and one of

these young men described how recognizing the signs of anger in himself led to changes in his

behaviour:

> ...If I get mad, it's to the point where I try and inflict pain on myself. When I first got
> here I used to hurt my nose real badly...to the point that sometimes my room looked
> like a pigsty of blood. So now when I get angry, I start time out and usually, if I think
> it's a blow up I just go and take space...

Two youth also referred to the fact that the groups at PYC helped them in ways that

other programs in other facilities were unable to previously. As one participant said proudly:

> ...This is this is the only place that I ever made it to the highest level and been the
> highest level longer than everybody in this whole place. Yeah...[groups] were
> helpful because…now I know, like how to, um, get at solutions and resolutions. So
> yeah, I like these programs. They work – they helped me a lot.

One youth remarked that communicating with others about his problems was the most

helpful thing he learned from groups:

> I feel like I am better to deal and talk things out...even with my family. You can't
> really run away from all confrontations, it's better to work it out and talk it out.

In addition, all participants, when asked about what they would take away from the

groups for use in their lives (both at PYC and in the community), were able to give examples.

Some things were general, such as "walking away" from conflict, but others were connected to

specific modules:

> Crime doesn't pay. I remember this one moment when I was talking to [facilitator]...
> that person who was robbed, they will remember you did this. Lots of people get
> damaged mentally, carry it with them...that made me think.

> There is always a process to consequence...so, process would be like, okay, I fought
> someone, I hurt them. The process is trying to, like, trying to repent.

> You've got choices to use so…you need to choose something.  Say someone wants
> to do a break and enter.  You have that choice – you can do it, you got a choice to
> not do it…or you just got a choice to leave. Now I got those choices.  So me?  I'm
> going to leave and say…no…I'm not doing it.

One youth described the applications of strategies he learned in group in different settings;

namely that what worked in PYC may not work in the community, and vice versa:

> Like I said, you can't get away from your problems [in PYC]...you are forced to live with your problem right? On the outside they start talking shit or whatever or doing something...several times I just turned and laughed it off, you just went the other way [because] you'll never see the guy again, right? In here you're forced to see them everyday...in a sense it's how you use [strategies] [that] can be helpful...

**Outcome Analysis Findings**

*Acts of aggression following group participation*

Intake and 60 Day Post H.I.T. Score Comparisons

There were only four participants with follow-up H.I.T. data at the time of the evaluation. At 60 days post-intake, these youth (n=4) showed no significant differences ($p < 0.05$) between their intake and 60 day post scores. The intake and 60 day post scores are presented in the table below.

| Scale | Intake H.I.T. Scores | | | 60 Day Post H.I.T. Scores | | | Sign. (p<0.05) |
|---|---|---|---|---|---|---|---|
| | n | Mean | SD | n | Mean | SD | |
| H.I.T. % | 4 | 74.00 | 27.71 | 4 | 76.00 | 25.61 | 0.39 |
| OV% | 4 | 76.00 | 26.68 | 4 | 82.00 | 22.63 | 0.43 |
| COV% | 4 | 74.00 | 27.71 | 4 | 72.50 | 25.99 | 0.21 |
| SC% | 4 | 76.00 | 25.61 | 4 | 74.00 | 27.71 | 0.39 |
| BO% | 4 | 74.50 | 28.30 | 4 | 81.50 | 21.44 | 0.52 |
| MM% | 4 | 76.00 | 25.61 | 4 | 73.50 | 27.15 | 0.28 |
| AW% | 4 | 78.00 | 24.06 | 4 | 81.00 | 22.18 | 0.49 |
| OD% | 4 | 82.00 | 23.15 | 4 | 84.00 | 22.98 | 0.51 |
| PA% | 4 | 76.50 | 26.20 | 4 | 78.50 | 23.23 | 0.71 |
| L% | 4 | 73.50 | 27.15 | 4 | 70.50 | 23.80 | 0.21 |
| S% | 4 | 78.00 | 24.00 | 4 | 75.00 | 25.53 | 0.30 |

Although there were no significant differences found between intake and 60 day post H.I.T. scores, there was some notable fluctuation in the pre-post scores. For example, participants recorded slight decreases in their COV% (-1.5%), SC% (-2%), MM% (-2.5%), L% (-3.0%), and S% (-3.0%). In particular, the evaluation sample's Covert score moved from the lower end of the Borderline Clinical range to the Non-Clinical percentile.

Participants showed mild increases in their H.I.T. % (+2%), OV% (+6%), BO% (+7%), AW% (+3%), OD% (+2%), and PA% (+2%). The sample's Overt score went from being in the lower end of the Borderline Clinical range to the higher end. Participants' mean Blaming Others (BO) score moved from the lower end of the Borderline Clinical percentile to the higher end.

Intake and 120 Day Post H.I.T. Scores

As a point of interest, intake H.I.T. scores were compared to 120 day post H.I.T. scores for three youth from the sample group using data collected during previous stays at the facility outside of the data collection period for this grant. One of these three youth had incomplete 120 day post data.[5]

| Scale | Intake H.I.T. Scores | | | 120 Day Post H.I.T. Scores | | | Sign. (p<0.05) |
|---|---|---|---|---|---|---|---|
| | n | Mean | SD | n | Mean | SD | |
| H.I.T. % | 3 | 82.00 | 27.71 | 3 | 78.67 | 25.79 | 0.52 |
| OV% | 3 | 82.67 | 28.31 | 3 | 80.67 | 26.86 | 0.42 |
| COV% | 3 | 82.00 | 27.71 | 3 | 74.00 | 24.00 | 0.42 |
| SC% | 3 | 84.67 | 23.09 | 3 | 72.67 | 23.01 | 0.24 |
| BO% | 2 | 74.00 | 33.94 | 2 | 69.00 | 26.87 | 0.50 |
| MM% | 2 | 78.00 | 28.28 | 2 | 68.00 | 25.46 | 0.13 |

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[5] This participant did not answer some of the questions, leading to an inability to calculate some of the subscale percentages.

| | | | | | | | |
|-----|---|-------|-------|---|-------|-------|------|
| AW% | 2 | 73.00 | 32.53 | 2 | 68.00 | 25.46 | 0.50 |
| OD% | 2 | 74.00 | 33.94 | 2 | 70.00 | 28.28 | 0.50 |
| PA% | 2 | 78.00 | 28.28 | 2 | 73.00 | 29.70 | 0.13 |
| L%  | 2 | 74.00 | 33.94 | 2 | 64.00 | 19.80 | 0.50 |
| S%  | 2 | 82.00 | 22.63 | 2 | 63.00 | 9.90  | 0.28 |

There were no significant differences ($p < 0.05$) to report between the youths' intake and 120 day post H.I.T. scores. Despite this fact, there were some notable changes worthy of discussion. For instance, At 120 days post intake, seven of the subscale scores dropped out of the Borderline Clinical percentile range into the Non-clinical percentile range (BO, MM, AW, OD, PA, L and S). The SC subscale went from being in the Clinical range to the Non-clinical range.

Finally, the COV percentile dropped from the upper end (82.00) of the Borderline Clinical range to the lower end (74.00) of the Borderline Clinical range. Despite there being no significant change to report, youth did lower their scores in all categories at 120 days post intake.

Changes in Serious Occurrences (SO) Post-Groups

During the evaluation period, data was collected from the Serious Occurrence Log detailing incidents involving aggressive behaviour. The date and details of the incident were recorded along with the individual(s) involved. Two types of aggression were tracked: assault on staff, and peer on peer altercations.

There were eight serious occurrences reported, of which four involved youth who had completed all of the CBT modules. One youth was involved in an assault of a staff member two days after participating in his first module. There were no more SO entries for this youth after his initial infraction. The second youth that was included in the SO data was involved in three

incidents. The first was an assault on a staff member that occurred six days after completing his

first module, the second SO was a peer-on-peer altercation midway through the CBT groups,

and the final incident was another peer-on-peer altercation that occurred thirteen days prior to

completing the modules.

Qualitative Interview Data

The last question of the interviews asked participants to comment on the role of the

groups in their current level of aggression, and to give an illustrative example. This question

seemed particularly difficult for youth to understand, and most respondents referred to 'anger' (a

feeling) as opposed to aggressive behaviour (an action). However, all of the youth felt that the

groups did help them to learn some skills, as demonstrated by the following quotations:

> At first when I came in, my aggression was at a 2 or 3...it was low...when I
> came here little things would get at me, I never talked to myself or calmed
> myself down...now I've learned new skills to deal with my anger. I remove
> myself and think, is it worth it or not?

> Um...if I don't want to be around other kids, I just go to my room, if there's a
> lot of stuff in my head I write it down on paper, so I just try to get it out, or I
> go and talk to a youth counsellor, so...that kind of stuff.

*Cognitive distortions following group participation*

Self-serving cognitive distortions are measured by responses in which an individual

interprets another person's intent as hostile or confrontational. It is captured in the following

subscales of the H.I.T.: Self-centered (SC), Blaming Others (BO), Minimizing/Mislabelling (MM),

and Assuming the Worst (AW).

Paired t-tests were conducted to compare participants' intake and 60 day post H.I.T.

scores on the subscales representing cognitive distortions. At intake, the sample (n=16) scored

in the middle to high end of the Borderline Clinical percentile (SC=79.00, sd 21.63, BO=75.88,

sd 20.31, MM=78.50, sd 21.52, AW=81.13, sd 21.09). As presented earlier, by their 60 day post

H.I.T., the sample (n = 14) scored similarly (SC=76.71, sd 22.60; BO=79.43, sd 17.91;

MM=77.86, sd 21.00; AW=79.00, sd 18.86). None of these differences in scores were significant

(p<0.05).

**Conclusions & Recommendations/Next Steps**

*Conclusions*

Although none of the results are statistically significant due to the small sample size, interesting and noteworthy trends were identified.  On average, the youth included in the evaluation sample stayed at the facility long enough to complete half of the modules in Anger Awareness, Problem Solving, and Victim Awareness.

Overall, the sample found the groups to be youth-friendly and appreciated the varied and interactive ways in which information was presented such as through game shows and discussion.  Similarly, results were favourable indicating that the cognitive behavioural groups offered at PYC promote youth participation.  Results reflected 100% youth participation in group discussions for Anger Awareness and 100% participation in group activities for Problem Solving. Average participation scores in all groups were at a moderate level.  In particular, modules 2 and 8 (Anger Wave and Cost/Gain Analysis, respectively) scored the highest levels in discussion and activities in Anger Awareness.  Module 11 (roadblocks to problem solving) reflected the highest levels of participation in discussion and activities for Problem Solving. Interestingly, module 10 (introduction of a problem solving sequence) in Problem Solving showed the highest rate of non-participation for any group module in the whole program.  Of noteworthy importance, the activity component for Anger Awareness and Problem Solving encouraged greater participation than the discussion component.  The Victim Awareness group was unique in that overall it encourages equal participation levels for the discussion and activity components; although results indicated greater levels of discussion and activity for module 16 (empathy), and levels of low participation for module 15 (thinking errors).  Based on these findings, we are encouraged to continue delivering group curriculum through varied, interactive activities while maintaining discussion however perhaps to a lesser degree.

The four youth who completed qualitative interviews ranged in age from 15 to 18 years old.  Due to the small sample size and to the narrow age range, it was difficult to comment on group relevance and age specifically, although this should become clear with a larger sample. Questions relating to relevancy as a part of the qualitative interview proved to be somewhat abstract to the four participants, and nearly all of them requested clarification on word definition. As a result, responses regarding the relevance of groups (Goal #3) overlapped with youths' responses about their helpfulness (Goal #4), making it somewhat difficult to extract accurate information.  Despite this, all interviewees felt that group topics were relevant to some degree, and all found things that were fitting to their own situation.

All four of the participants found aspects of the groups helpful. The anger awareness modules seemed to be particularly useful, and were mentioned at different times by three of the four youth.  Two youth also referred to the fact that the groups at PYC helped them in ways that other programs in other facilities were unable to previously.  In addition, all participants, when asked about what they would take away from the groups for use in their lives (both at PYC and in the community), were able to give examples. Some things were general, such as "walking away" from conflict, but others were connected to specific modules such as victim empathy and opportunity for choice.

Unfortunately due to the small sample size, there were only four participants with follow-up H.I.T. data at the time of the evaluation. At 60 days post-intake, these youth (n=4) showed no significant differences (p<0.05) between their intake and 60 day post scores, including use of cognitive distortions. However, the sample's Covert score moved from the lower end of the Borderline Clinical range to the Non-Clinical percentile. The sample's Overt score went from being in the lower end of the Borderline Clinical range to the higher end. Participants' mean Blaming Others (BO) score also moved from the lower end of the Borderline Clinical percentile to the higher end.  At this point, the evaluation team speculates that these negative findings may

be a reflection of youth either carelessly completing the HIT questionnaires or youth who require greater support in completing the tool due to learning difficulties etc.  Recommendations to address this are outlined in the next section of this report.

There were eight serious occurrences reported during the time span of this grant, of which four involved youth who had completed all of the CBT modules.  This is not overly surprising given that approximately half of the sample reported a baseline history of aggressive behaviour upon intake.  Our evaluation team looks forward to moving onto the *Evaluation Doing Grant* which will afford us a larger sample size and data collection phase which will help to identify stronger trends towards this evaluation question.

Again, youth struggled with the language and phrasing of the question during the Qualitative Interview when asked about their perception on their current level of aggressive behaviour.  Despite comprehension difficulties, youth indicated that the groups had a role in helping them to learn new skills to better manage their anger.

In conclusion, youth appear to be actively engaged in the cognitive behavioural programs being offered at PYC and find the discussions and activities to be youth-friendly, promote participation, helpful, and relevant to their own experiences.  Data is not as rich for the two outcome evaluation questions.  Although this may be reflective of the effectiveness of the cognitive behaviour programs, it is too early in the evaluation process to make such conclusions.

*Recommendations*

There were several limitations to the scope of this project; some were within the control of the facility, and some were not. The unpredictability of number of intakes, as well as unknown and often short court dispositions presents a challenge to collecting data.  Although the evaluation team has discussed shortening the number of modules needed to complete each of

the cognitive behavioural groups, the risk of jeopardizing the integrity of the content outweighs the possibility that youth will receive a short disposition and leave the facility before completing all three groups. There is also the option of increasing program exposure; however the evaluation team prefers to maintain the current model of two group sessions per week which allows youth the opportunity to apply and practice content discussed before introducing and layering new curriculum.

The following are some recommendations to improve the quality of both the project implementation and the evaluation process.

1) Use multiple sources of data to answer the evaluation questions.

The process piece of this evaluation was based almost entirely on qualitative interviews, which was challenging when only four were completed in the funded time period. By having more than one data source associated with the evaluation questions, we will have more data to work with and will be able to draw more robust conclusions. For example, a brief questionnaire (perhaps three questions using a 5-point Likert scale) administered to youth following each module could track their level of motivation to participate, how useful they found the session and how applicable the topics were to their own situation. This questionnaire will be piloted with a small sample to determine whether the language and content is accessible.

2) Provide training and/or 'cross-checking' for data entry.

It can be challenging for even the most seasoned experts to avoid data entry errors and/or inconsistencies when working with multiple databases involving large samples. Although program staff are understandably challenged with the demands of service provision and/or with access to minimal resources, it is recommended that some means of data checking be instituted.

For instance, after a hard copy questionnaire has been completed, checking to ensure completeness can prevent data spoilage. Double checking prior to entering it into a database can also prevent confusion and errors when it comes time to conduct analyses.

3) Ensure language is "youth-friendly"

During the qualitative interviews in particular it was noted that there were words that were abstract and confusing to youth such as "relevancy" being confused with "helpfulness". Moving forward, the Qualitative Interview Guide will be reviewed and modifications will be made to create questions that can be understood at a grade 4 level.

4) HIT Questionnaire Process

In a select number of cases the residents were observed to be filling out the HIT questionnaire with little interest or failing to read each question. As we proceed with the evaluation process the Program Facilitator or Social Worker will directly supervise the youth who are completing the questionnaire. This will ensure that the residents are filling out the questionnaire properly and are given support when they are uncertain of the material.

*Next Steps*

As an organization, Peninsula Youth Centre has gained some insight into how to more effectively provide and offer meaningful and impactful programming to the youth we serve. PYC is committed to challenging the entrenched belief system of the youth in our care. Having a captive audience of youth who are not afraid to challenge the material being presented provides an opportunity to push past pre-conceived notions of what is effective from the clients' perspective.  Our hope and aim of offering the cognitive behavioural programming is to expand youths' skill set when dealing with difficult situations while in custody and more importantly when they return to the community.   As for the staff involved in leading the group modules, they have

been encouraged by the feedback and positive interactions in the group settings and are eager to continue with the project.

We intentionally designed a sustainable evaluation plan that will continue beyond the grant period.  Results from our evaluation process will be incorporated into the betterment of our cognitive behavioural program curriculum and design.  Our team is excited to continue our evaluation process into the *Evaluation Doing Grant*.  From the *Evaluation Implementation Grant*, we have learned many lessons and continue to modify our evaluation plan to promote sustainability of the evaluation process at PYC and to continue yielding useful data to gain insight into the effectiveness of our cognitive behavioural programs.  We anticipate yielding richer data through the *Evaluation Doing Grant* by creating a larger and more diverse sample group through an extended data collection period.

We are also looking forward to working in partnership with Brock University as we begin the *Evaluation Doing Grant*.  The identified student who will assist with our evaluation project currently works in a community organization with at-risk youth and has a keen interest in providing a continuum of programming for youth upon release from custody and re-integration back into the community.

**Knowledge Exchange Plan**

Overview of knowledge exchange activities:

1)  The Board of Directors fully supported our involvement with the *Evaluation Implementation Grant* and understands the value of it as it relates to programming and evaluation throughout the organization.  They are kept apprised of our progress via reports given at monthly board meetings.

2) Our evaluation team continues on-going dialogue with the open and secure detention programs within our organization (Arrell Youth Centre and George R. Force) who are observing our activities in thought of building their own capacity for evaluation based upon our experiences and framework.  In addition, we will expand information sharing and partnerships with other Banyan programs that our youth may be involved in such as the Youth Justice Intervention Program, Youth Mental Health Court Worker Program, and Clinical Services.

3) Our involvement with the *Evaluation Implementation Grant* was communicated to the Ministry of Children and Youth Services and community partners who in turn expressed full support and requested to be informed of updates and outcomes.  Community partners such as the police, probation services, the John Howard Society, the school board, youth mental health agencies, YMCA, Public Health, Native services, and Settlement services are interested in gaining a better understanding of the opportunities youth are exposed to within our facility, and have also discussed how to use the program design and evaluation at PYC to assist with the continuum of care and programming once a youth is released back into the community.

4) Our evaluation team contacted Brock University and began communication with an Assistant Professor in the Department of Sociology at Brock University who has expressed a keen interest in partnering with PYC.   As we have been successful in being

awarded the *Evaluation Doing Grant*, Professor Tamari Kitossa has agreed to provide PYC with a student knowledgeable in research practices to assist with data collection, input, and analysis.  In exchange, the university is interested in having access to data collected for their own research purposes.

5) After completing a site visit and gaining a better understanding of the programming structure and evaluation process at PYC, Professor Kitossa put PYC in contact with a PhD candidate from the University of Toronto whose area of research focuses on at-risk youth in detention/custody facilities.  The PhD candidate is interested in working with our evaluation team to further our cognitive behavioural program content and delivery to promote youth engagement and program impact.  We are excited about the fore coming knowledge exchange activities that will occur as a result of this new partnership.

6) Our evaluation activities and involvement with The Centre will be posted on the Banyan Community Services website.  Community partners as well as staff within Banyan programs will be able to gain background information and current status of our evaluation project.  In addition, youth who are a part of the evaluation sample have been informed that they can view results through the organization website.

7) Staff and Board Members are also kept apprised of the evaluation activities occurring at PYC due to articles submitted to the organizational newsletter that is produced quarterly.

8) In an effort to further examine other agencies involved in similar work and evaluation practices with The Centre we had the opportunity to visit Talitha House in Ottawa this past spring and were encouraged at the professionalism and dedication displayed by their organization. We discussed strategies and hurdles that both facilities encounter working with at-risk youth in custody facilities and openly shared conversations that lead to a greater understanding of the work being done to further our goals of providing meaningful and effective programs to the youth in our care.

9) On January 22, 2010 our evaluation team attended the Hamilton-Niagara Regional Annual Conference for the Provincial Centre of Excellence for Children and Youth at CHEO.  Our team created a poster displaying our program logic model and evaluation matrix.  In addition, pamphlets were created and distributed providing an overview of our program, involvement with The Centre, and evaluation project.

## References

Baker, L., & Scarth, K. (2002). Cognitive behavioural approaches to treating children & adolescents with conduct disorder. Toronto: Children's Mental Health Ontario.

Barrriga, A., Gibbs, J., Potter, G., & Liau, A. (2001). How I think (HIT) questionnaire manual. Champaign, Illinois: Research Press.

Gibbs, J., Barriga, A., & Potter, G. (2001) How I think (HIT) questionnaire. Champaign, Illinois, Research Press.

Goldstein, A., Glick, B., & Gibbs, J. (1998). Aggression replacement training: A comprehensive intervention for aggressive youth (revised edition). Champaign, Illinois: Research Press.

Landenberger, N. & Lipsey, M. (2005). The positive effects of cognitive-behavioral programs for offenders: A meta-analysis of factors associated with effective treatment. *Journal of Experimental Criminology*. In press. Retrieved February 9, 2009 from

http://www.vanderbilt.edu/VIPPS/ER&M/Landenberger_Lipsey.pdf

Lipsey, M. (1995). Chapter 3: What do we learn from 400 research studies on the effectiveness of treatment with juvenile delinquents? In McGuire, J. (Ed), *What works: Reducing reoffending – Guidelines from research and practice* (pp.63-78). John Wiley & Sons Ltd. Retrieved February 9, 2009 from

http://www.vanderbilt.edu/VIPPS/ER&M/Four_hundred_research.pdf

Lipsey, M., Chapman, G., & Landenberger, N. (2001). Cognitive-behavioral programs for offenders. *The Annals of the American Academy of Political and Social Science* 578(November). Retrieved February 9, 2009 from

http://www.vanderbilt.edu/VIPPS/ER&M/Annals_Cog-Behavioral.pdf

Lipsey, M. & Wilson, D. (1998). Chapter 13: Effective intervention for serious juvenile offenders: A synthesis of research. In R. Loeberg & D.P. Farrington (Eds.). *Serious and violent juvenile offenders: Risk factors and successful interventions.* (pp. 313-345). Thousand Oakes,

CA: Sage. Retrieved February 9, 2009 from

http://www.vanderbilt.edu/VIPPS/ER&M/Lipsey&Wilson_SVO_chap.pdf

Ministry of Children and Youth Services (2006). Youth Justice Services Manual.

Ontario.

Tolan, P., & Guerra, N. (1994). What works in reducing adolescent violence: An

empirical review of the field. Regents of the University of Colorado: Institute of Behavioral

Science. Retrieved February 9, 2009 from

http://www.colorado.edu/cspv/publications/papers/CSPV-001.PDF

Statistics Canada. (2006). *Youth Crime: The Daily, Friday May 16, 2008.* Retrieved

January 19, 2009 from http://www.statcan.gc.ca/daily-quotidien/080516/dq080516a-eng.htm

Shaw, M. (2001). Investing in youth: International approaches to preventing crime and

victimization. Montreal: International Centre for the Prevention of Crime. Retrieved February 9,

2009 from http://hei.unige.ch/sas/files/portal/issueareas/perpetrators/perpet_pdf/2001_Shaw.pdf

**Program Logic Model**

| INPUTS<br>(resources e.g. $, staff, equipment) | *ACTIVITIES*<br>*(services e.g. Counseling, outreach, support groups)* | OUTCOMES<br><br>*(Impact or Effectiveness of the program)* | |
|---|---|---|---|
| | | SHORT-TERM<br><br>(internalized changes) | INTERMEDIATE<br><br>(behavioural changes) |
| 1 social worker<br>1 program supervisor<br>1 program facilitator<br>4 child and youth workers<br>1 classroom<br>% of core funding<br>AV equipment<br>Administrative material | CBT therapeutic group<br><br>Daily monitoring<br><br>Session Topics:<br>Youth's past experiences with anger<br>Anger build up/blow up wave<br>Role of self-talk<br>Anger as a secondary emotion<br>Assumptions<br>Communication<br>Cost/gains Analysis<br>Values & Goals – how they<br>influence decision making<br>Short term/long term goals<br>Problem Solving Sequence<br>Individual choices and impact of<br>victimization<br>3 Stages of victimization<br>(application exercise of discussing<br>personal experiences of<br>victimization)<br>Eight critical thinking errors or<br>irresponsible and criminal behaviour<br>Life goals, self-esteem, & attitude –<br>how these influence empathy<br>towards others | ↑ sense of responsibility<br><br>↑ empathy<br><br>↓ mistaken beliefs/<br>cognitive distortions<br><br>↑ coping with stress<br><br>↑ values (ethical?)<br><br>↑ emotional awareness<br><br>↑ self-awareness<br><br>↑ judgement<br><br>↑ decision making<br><br>↓ impulsivity | ↓ aggression<br><br>↓ bullying/ victimization<br><br>↓ reactivity/ ↑ impulse control<br><br>↑ leadership<br><br>↑ ownership of behaviour<br><br>↑ social skills<br><br>↑ open relationships<br><br>↑ social acceptance |
| **OUTPUTS**<br><br>(Products e.g. # of classes, # of sessions)<br><br># of participants/ time period<br><br>8 anger management<br>sessions<br><br>4 problem solving sessions<br><br>4 victim awareness sessions | | | |

**Evaluation Matrix**

| Evaluation Question?<br><br>*What do we want to know about the evaluation?* | Indicator?<br><br>*What will tell us the answer to this question?* | Source of Data/ Measure?<br>*Where do we find the answer to this question?* | Who will collect the info? | When/How often will info be collected? |
|---|---|---|---|---|
| PROCESS | | | | |
| Are the cognitive behavioural groups offered at PYC youth friendly? | Youth report engagement | Qualitative youth interview | Social Worker | The qualitative youth interview will be completed one time after  Anger Awareness, Problem Solving, and Victim Awareness are completed |
| Do the cognitive behavioural groups offered at PYC promote youth participation? | Observations of Program Facilitator and group leaders | Progress Notes | Program Facilitator | Program Facilitator will complete a progress note for individual group participants after each group session attended |
| Is the curriculum relevant  to all ages? | Youth report relevance  of the program | Qualitative youth interview | Social Worker | The qualitative youth interview will be completed one time after  Anger Awareness, Problem Solving, and Victim Awareness are completed |

| | | | | |
|---|---|---|---|---|
| Do youth perceive the cognitive behavioural groups as helpful? | Youth report helpfulness of the program | Qualitative youth interview | Social Worker | The qualitative youth interview will be completed one time after Anger Awareness, Problem Solving, and Victim Awareness are completed |
| OUTCOME | | | | |
| Do youth show decreased acts of aggression after completing Anger Awareness, Problem Solving skills, and Victim Awareness? | Number of Serious Occurrences aggression related | Facility Serious Occurrence Log | Program Supervisor | Program Supervisor will collect data throughout the youth's participation in Anger Awareness, Problem Solving, and Victim Awareness, and two weeks upon completion of group. |
| | Youth perception of aggressive Behaviour | Qualitative youth interview | Social Worker | The qualitative youth interview will be completed one time after Anger Awareness, Problem Solving, and Victim Awareness are completed |
| | Scores on Overt Scale of the HIT questionnaire | How I Think Questionnaire | Social Worker | Youth will complete the How I Think questionnaire upon intake and every sixty days thereafter |
| Do youth show a decreased use of self-serving cognitive distortions? | Youth scores on the How I Think Questionnaire | How I Think Questionnaire | Social Worker | Youth will complete the How I Think questionnaire upon intake and every sixty days thereafter |

*Appendix C*

## Youth Group Progress Note

Client ID: _____  Age: ____

| Anger Awareness | | | | | |
|---|---|---|---|---|---|
| **Module No.** | **Date** | **Attendance** | **Discussion** | **Activities** | **Comments** |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |
| 5 | | | | | |
| 6 | | | | | |
| 7 | | | | | |
| 8 | | | | | |
| Average Score | | | | | |

| Problem Solving | | | | | |
|---|---|---|---|---|---|
| **Module No.** | **Date** | **Attendance** | **Discussion** | **Activities** | **Comments** |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |
| Average Score | | | | | |

| Victim Awareness | | | | | |
|---|---|---|---|---|---|
| **Module No.** | **Date** | **Attendance** | **Discussion** | **Activities** | **Comments** |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |
| Average Score | | | | | |
| Grand Average | | | | | |

## Scoring Key:

*Remained in Group:*        0 = Removed from group / Refused to attend
        1 = Attended entire session
        2 = Did not attend for other reasons

*Discussion / Activities:*        1 = No participation
        2 = Minimal participation; Requires much staff support
        3 = Moderate participation; Youth meets basic expectations with little
           staff support
        4 = Full participation with minimal or no staff support
        5 = Exceptional participation; Demonstrates leadership skills;
           Appropriately challenges and encourages other youth to
           participate in the group process

*Appendix D*

**Qualitative Interview Guide**

Questions regarding Engagement

1) How motivated were you to attend group and participate? What do you think influenced your level of motivation?

2) What do you think added or took away from how engaged you felt in the group?

Question regarding Relevancy

1) How connected did you feel to topics discussed in group? Could you find it fitting to your own situation? Please explain why or why not?

2) How meaningful did you consider the group experience to be?

Question regarding Helpfulness

1) Were the topics, discussions, and activities helpful to your personal situation? Please explain.

2) What have you been able to take away that you can use either at PYC or when back in the community?

Questions regarding Youth's Perception on Aggressive Behaviour

1) What role do you think that attending Anger Awareness, Problem Solving, and Victim Awareness may have played in how you rank your current level of aggression? Can you tell me a story or give me an example that explains your answer?

Question to Extend and Conclude the Interview
Is there anything else that you would like to add about your experience of participating in (Anger Awareness, Problem Solving, or Victim Awareness)?

**Program Module Overview**

**ANGER AWARENESS**

Module 1 - Definitions
An exploration into the definitions of anger and aggression. The feeling component of anger and the behaviour component of aggression. Continuum of aggressive behaviour with the definition of violence being the most extreme form. Discussion of the functions of anger including the positive role of anger. Work sheet and discussion on youth's past experiences with anger, in particular what they witnessed from their family and during their childhoods. Help youth make connections between what they learned from past experiences with anger to how they currently view and express their own anger.

Module 2 – The Wave
Introduction to the concept of the Anger Build-Up/Blow Up Wave. A practical illustration that identifies for youth the pattern that anger often takes, anger triggers, physiological and behavioural indicators of anger, and the ability to choose appropriate responses. Exercises for this module include completing a personal Anger Build-Up/Blow Up Wave in a time line format.

Module 3 – Coping Strategies
Coping strategies with a focus on self-talk as an anger escalator or de-escalator. Youth will practice self-talk by participating in an application group exercise.

Module 4 – Secondary Emotion
Introduction to anger as a secondary emotion. Identifying and learning to deal with the feelings disguised behind anger. Group challenge activity.

Module 5 - Jeopardy
Application Workshop: How thoughts and feelings affect behaviours.

Module 6 - Assumptions
Application Workshop: Effects of assumptions, past experiences, and mis communications on thoughts that lead to feelings that lead to behaviours.

Module 7 – Communication
Communications Styles Workshop: Who Am I, What Is My Anger Style. This workshop includes the completion of a personality inventory to identify assertive, aggressive, and passive traits, and how they apply to chosen styles of anger expression.

Module 8 – Cost/Gains
An examination of a Cost / Gains Analysis of aggressive behaviours. Explore how to use it, and how to apply it when building strategies for dealing with the anger of others.

**PROBLEM SOLVING**

Module 9 – Goals and Values
Identifying how values and goals influence decisions.  Youth will participate in exercises that will assist them in ranking their personal values, and identifying short-term and long-term goals.  Challenge connections between current action plans to future goals.

Module 10 – The Process
Introduction to the problem solving sequence.  Hands-on group activity in applying and practicing the sequence.

Module 11 - Roadblocks
Gathering information and weighing pros and cons of options.  Navigating problem areas such as procrastination, assumptions, impulsivity, peer pressure, and expectations of others.

Module 12 – Opportunities for Choice
Generating solutions and noticing the opportunity for choice to enable youth to make independent decisions.  Applications stem from role plays involving practical life situations from schooling, family, peers, and community.


**VICTIM AWARENESS**

Module 13 - Impacts
Definition of victim and the impacts of victimization.  Assist youth in making connections between individual choices they make and the scope of effects these decisions can have on family, community, etc.

Module 14 - Stages
The three stages of victimization and victim's rights under Canadian legislation.  Assist youth through empathy-based activities in applying content learned to their own experiences of victimization.

Module 15 – Thinking Errors
Identifying the eight critical thinking errors of irresponsible and criminal behaviour.  Youth will be challenged to take ownership of thinking errors that they engage in and create strategies to restructure cognitive patterns.

Module 16 - Empathy
Explores life goals, self-esteem, attitude and how these can influence empathy towards others