In Search of a Healing Praxis

A Quantitative and Qualitative Study
In Context of Attachment Theory,
Positive Psychology and Emotional Intelligence

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Abstract

The central focus of this study was to discover language (words) within a lexicon associated with healing. Several quantitative studies of 417 youth, living in a residential treatment centre, were measured on a range of psychometric tests over a scope of ten years demonstrated good outcomes. The theoretical framework and inner working model are embedded in Attachment Theory. In a quest to understand the praxis of treatment a qualitative analysis assembled a dataset of 11,655 records on five children. The records, focus groups and interviews with the children were analysed using nVivo software. The researchers discovered the practices of the childcare therapist, teachers, family based care providers and clinicians were more complex than anticipated. The themes observed in the transcripts of the focus groups generated support for three established models: Attachment Theory, Positive Psychology and Emotional Intelligence Theory. The attachment model is evident in the language of the daily journals and was observed during interviews with children and from the focus groups with staff. The praxis appears to be infused with language from other theories, predominantly emotional intelligence and positive psychology. The praxis is even more complex when cataloguing the specific interventions used with children. At the intervention level, we observed to a lesser degree applications from applied behaviour analysis, social learning theory, play therapy, cultural integration and psychodynamic psychotherapy.

Description of Service

Bayfield Treatment Centres (Bayfield) provides a full continuum of service to children with severe emotional and behavioural problems. Bayfield's service system includes a campus of residential treatment facilities, community programs and family based care homes with a clinical department and a private school. The clinical department provides assessments of the client population and treatment leadership to the staff. The content of the treatment is evidence based best practice matched to the clinical profile of the client. The clinical department includes psychiatrists, psychologists, social workers and case managers. They provide psychotherapy, group therapy and case consultation.

The private school consists of small classrooms supported by child and youth workers and certified teachers. It is designed to assess the client's educational functioning and the barriers to learning. The school provides evidence based educational instruction to approximately 100 students at any one time.

The main campus provides accommodation and individualized treatment to 40 children in highly structured home environments. In addition, there is a community based home for children with sexual issues that is structured to ensure safety and stabilization. Bayfield also operates a home for aboriginal youth. This program offers cultural integration, including instruction and use of the Cree and Ojibwa languages, sweats, ceremonies and education on flora, fauna, food and traditions of First Nations people. Twenty-six (26%) of the children admitted to Bayfield identify with the culture of aboriginal people.

Bayfield also provides Family Based Care to approximately 40 children. Historically, this placement option occurred after a period in a structured care setting. The current trend is to place

directly into the Bayfield Family Based Care Programs. Presently, the service continuum provides treatment to 110 boys and girls and employs 220 staff.

Clinical Profile and Outcomes

This study examines a decade of service from the years 2000 to 2010; Bayfield has been collecting clinical and service data on a consistent basis since 1998. There are 417 children in this outcome research dataset. These children have been tested every nine months for the past eleven years on a series of standardized, reliable and valid clinical and educational tests. The dataset includes the child's history of adversity, early childhood development, social history, complete Ontario Scholastic Record and all previous and current psychological and psychiatric assessments.

Degree of Adversity and Family Background

The clinical profile of children admitted is dominated by multiple types of adversity that load against the child throughout his early years. This includes years of poverty and dependence on income supports (55%), mother began parenting in her teens (20%), physical abuse (65%), sexual abuse (64%), physically or sexually abused or both (74%), parental history of incarceration (27%), parental history of hospitalization for psychiatric reasons (intellectual deficit) (11%), parental substance abuse disorder (63%), child with a history of substance abuse (11%), close family member who was sexually assaulted (24%) and child with a diagnosis of learning disability (74%). Each one of these distinct variants of adversity exists within the Bayfield clientele at much higher rates than found in society. Children admitted to Bayfield have an average of 4.5 different types of adversity before they reach their teenage years.

Ninety-five percent of children admitted to Bayfield have a close family member with one or more of the following issues with a close family member:

- in jail
- substance abuse disorder
- in psychiatric hospital
- intellectual deficits
- sexually assaulted
- teen parent

The family background and history of adversity leaves the child with minimal support when entering treatment. Not surprisingly, the children present many attachment issues. Bayfield has measured attachment with the Parental Bonding Instrument (PBI). The PBI is an evidence-based assessment measure that is norm referenced. On admission twenty-two percent (22%) of children feel the "closest person in their lives" does not care about them. This is a devastating feeling for a young person to carry. The mean t-score for this group is 34, or 1.5 standard deviations below the norm.

The Caring Scale of the PBI is not correlated with any other measure, except for the Over-protection Scale of the PBI. Its independence makes it a powerful resilience factor. Regardless of the problem the child has experienced, it will not affect whether or not he feels cared for and loved. Feeling cared about improves the child's ability to cope with his problems and can make positive changes (Sanders & Fulton, 2008 and 2010).

Twenty-seven percent (27%) feel their parents did not protect them adequately. Their average standard score on this scale is 40.7. This is 1 standard deviation below the norm. This group of children appear to feel neglected in their own homes.

One third of children admitted to Bayfield feel their parents over-protected them, had too many rules and were treated unfairly. The average standard score for this group was 63.7, or 1.5 standard deviations above the norm.

Research Findings to Date

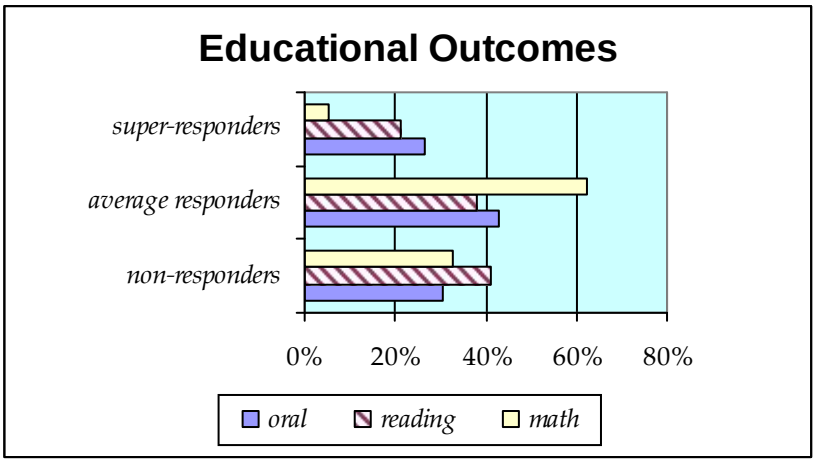
Bayfield has analyzed the changes that occur to the children in their care over the past decade on both educational performance and clinical functioning (Sanders & Fulton, 2010).

Baseline and Educational Outcomes

The dataset demonstrated that:

(1) On admission, the children served are behind in academic skills, specifically, at the 12th percentile in math, the 22nd percentile in reading and the 26th percentile in oral learning.
(2) Conversely, only 5% of children were functioning at the same level as other children in Ontario, i.e., they were above the 50th percentile in math and in reading and oral learning.
(3) The majority of children responded positively to the Bayfield School, advancing faster than their age-related peers in public school.

However, there was a variation in response as represented in Graph 1:



Super-responders are defined as a child who improved by 2.0 or more grade levels. *Average Responders* are defined as a child who improved in grade levels from 1/10 of a grade to just under 2.0 grade levels. *Non-responders* are defined as a child who showed zero change in grade levels or fell even further behind.

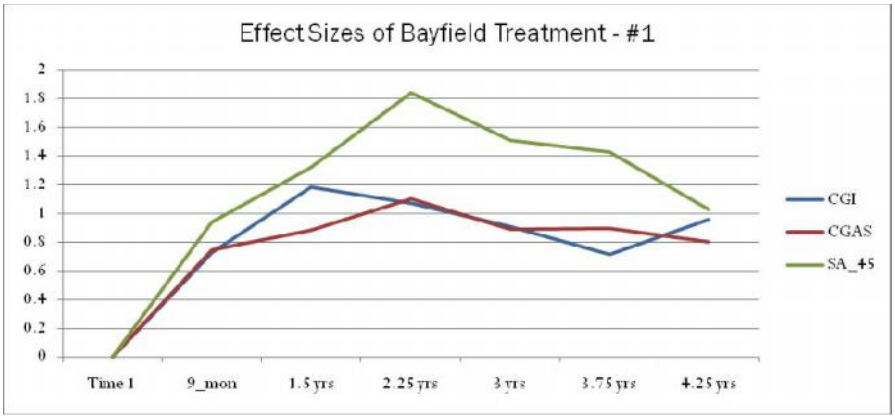
Effect Sizes of Changes in Clinical High Risk Indicators

Clinical high risk indicators are qualities of emotionally disturbed children found in longitudinal studies that determine prognosis. These indicators include hyperactivity and attention

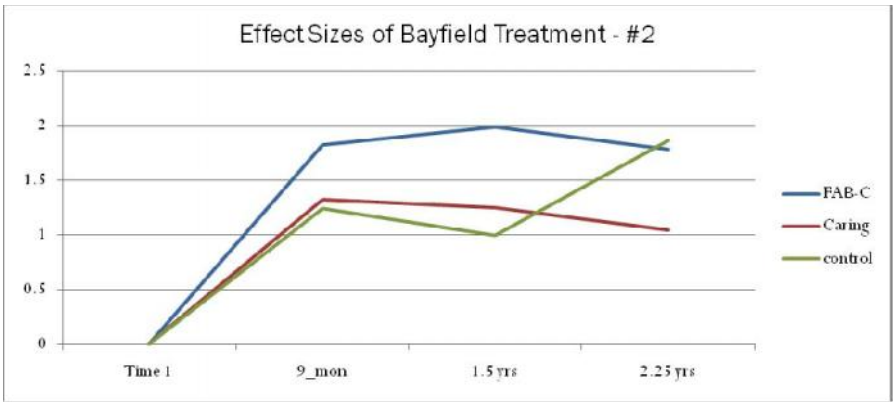
deficits, social functioning, affect regulation, psychiatric symptomatology, stress and the quality of attachment relationships.

Children were tested on admission and every nine months thereafter, using evidence-based instruments for assessing high risk indicators. Year after year, children treated at Bayfield made clinically significant progress as assessed by a standard metric, the *effect size*, (Cohen, 1988).

Graph 2



Graph 3



Graphs 2 and 3 show the average cumulative effect of treatment for children across the number of years of treatment. The data shows that progress reaches an apex after 2.25 years, and this period coincides with the discharge of children who are responding positively.

(1) When discharged, 9% of children were in the clinical range on all variables tested, i.e., attachment, hyperactivity, social functioning and emotional/behaviour issues. This group were identified as *poor responders* to treatment.
(2) Fourteen percent of children were normal on all variables at the point of discharge. Thus, 14% of children are *super responders* post treatment.
(3) 77% of children were *inconsistent responders* on discharge, i.e., they achieved the normal range on some variables and not on others.

Therefore, we know that Bayfield's clinical and academic services are producing positive results overall using gold standard measures on the assets that matter most to their lifespan outcomes.

The Need for Further Research

We are not certain how teachers, care providers and clinical staff facilitate change for the children during their time in treatment. Within the quantitative research, the process of treatment is like a black box that we assess by looking at test scores every nine months. The research does not tell us what is actually inside the black box. We cannot be scientifically confident that what is occurring inside the black box of treatment explains why the children are changing their lives.

The primary purpose of the qualitative study of treatment and education at Bayfield is to open up the black box of service to examine what is actually occurring between children and staff; what is the language of this interaction. This is the praxis of service; exploring the bridge that spans a theoretical framework to the outcomes of treatment.

Secondly, we have asked why some children respond positively to treatment, i.e., *the super responders*. Thirdly, we ask why some children are not responding, i.e., *the poor responders*.

The answers to these three questions will empower care providers, staff and teachers to help all children achieve better outcomes by knowing the language to use and how to implement successful social interactions within their homes and classrooms. In summary, the research questions are:

(I) What is the body of language that characterizes the social interaction between children and their clinical staff, care givers and teachers?

(II) What can we learn from those children who are poor responders?

(III) What can we learn from those children who are good responders?

We turned to qualitative analytical methods to find the answers to these questions from the written notes on the child's Ontario School Record (OSR), the child's clinical record documented in the Bayfield Information System (BIS), focus groups of staff, family based care providers, teachers and interviews with the children.

Research Sample

Five children receiving treatment were selected by the Clinical Department. Children in the selection pool had been in treatment for at least two years. Two children were selected because they were responding well to the treatment and two children were selected because they were not responding well. The fifth child selected showed a mixed pattern of responding that was neither positive nor negative. The electronic clinical record on the BIS was assembled for these five children.

Four of the children were interviewed. When the interviews started one of the children had been discharged. Four groups of staff, family based care providers and teachers were chosen because they were directly involved in the treatment of the four children. Four focus groups with the staff, family based care providers and teachers were conducted. Two sets of questions were prepared for the individual interviews and the focus groups.

Qualitative Analysis of Clinical Records and the OSR

The research assembled a dataset of 11,655 records on five children. The dataset includes:

(1) The complete Ontario Scholastic Record (OSR), from the time the child entered Junior Kindergarten until the present day, representing 806 pages of material.
    - Meaningful[1] material from the OSR
        - the child's report cards from JK to present
        - the teacher reports and assessments from the Individual Placement and Review Committee (IPRC)
        - the child's Individual Education Plan (IEP)

(2) Meaningful material from the Bayfield Clinical Record
    - case notes from the clinical interviews with each child
    - psychiatric consultations, representing 72 records with 7 columns of narrative data including notes on strengths, needs, abilities and preferences
    - Plan of Care comments from residential staff
    - Plan of Care goals
    - Community involvement notes from residential staff
    - Client satisfaction surveys
    - Incident Reports and Serious Occurrences Reports

The meaningful material from the BIS was assembled into 11,415 records on a spreadsheet. The meaningful material from the OSR was gathered into an Excel spreadsheet with 240 records, for a total of 11,655 records. Each record contained one field with narrative script. The size of the narrative script ranged from a few words to a few paragraphs.

The 11,655 records were coded to themes contained within nVivo.

Some of the script was not logically related to this research and was, therefore, dropped:

[1] There is a great deal of boilerplate language in the OSR and the clinical record; this was filtered out in favour of specific information about the individual child.

1. 957 records coded as "medication review". This included notes when the child was administered the medication and observations about the side effects or treatment effects.
2. 5,345 records coded as "instrumental events". This included statements such as child "A" went on home visit, child returned, child went into community, etc.

This left 5,353 records containing narrative script that was meaningful to this research.

Clinical Profile

The OSR includes notes written by teachers starting when the child was in Junior Kindergarten. These early records clearly document the severe family adversity. The Children's Aid Society (CAS) was involved in all cases before the child was in grade one. The children were identified by the Kindergarten teacher as being unable to function in school due to aggression and special needs. Three of the five children were suspended in either kindergarten or grade one.

School support staff and medical consultants at local hospitals diagnosed four out of the five children with developmental disorders before grade one including FASD, mild intellectual deficits, memory deficits and speech and language delay. All children displayed high risk behaviour including self-harming behaviour, animal cruelty and aggression. All of the children experienced multiple placements before being admitted to Bayfield.

Psychiatric and/or Psychological Opinion

Four of the children had been admitted to a hospital because of dangerous behaviour before entering the fourth grade. They were admitted to Bayfield at an average age of 11.6 years. On admission, four of the children exhibited severe conduct problems including arson, sexual assault, assault with a deadly weapon, suicide attempts, glue sniffing and assaults directed at teachers, adult caregivers and peers. They were diagnosed with ADHD (1 child), mild intellectual deficits (2 children), FASD (2 children), early onset bi-polar disorder (1 child), early onset schizophrenia (1 child) and complex trauma (1 child). Two of the children were aboriginal youth from remote communities.

In summary, these children were admitted to Bayfield at high risk of bodily harm and mental illness. Their prognosis was very poor in the context of evidence-based criteria.

Outcomes Based on Group and Single Case Designs

The quantitative research described in this paper was based on a number of tests administered repeatedly to all children treated at Bayfield. The effect sizes represent the average change in scores divided by the pooled standard deviation. When outcomes are measured in this way, the findings apply to the whole group. There are individual children who do not improve and others become super-responders, but this variation is hidden beneath the overall group profile. The quantitative analysis is an evidence-based approach to assessing outcomes. It is a robust methodology that ensures conservative findings grounded in science. The results are very positive for the children treated at Bayfield in both academic performance and clinical indicators.

In contrast, the single case design gathers a large amount of detail on a small number of children. In the qualitative study of outcomes conducted at Bayfield, we collected data from the

clinical record for each day the child was in treatment. This strategy results in a portrait of the personal journey taken by the child in treatment. The text below describes one journey taken by one of the children studied, referred to as *Child A*.

Seventy-nine percent of entries on the BIS for *Child A* are about events that happened at school or in his home. This includes all of the serious occurrences and restraints as well as the day-by-day summary from the direct caregivers. These "events" were coded as positive or negative. They were given a second level of coding according to whether they were obviously significant, in other words a tipping point event.

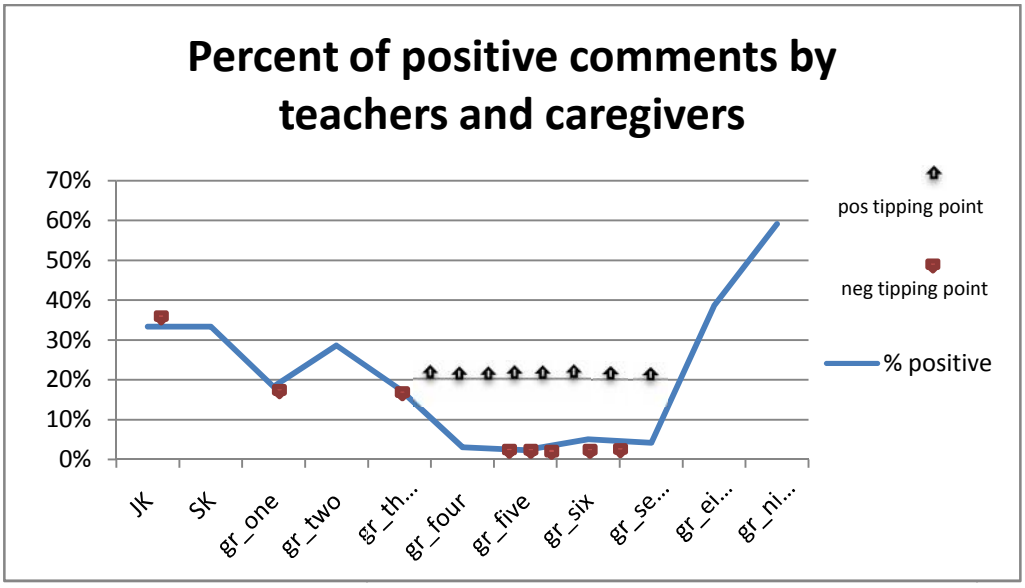
Prior to admission to Bayfield, there were three points in *Child A*'s history as recorded in the OSR when the school staff commented on a serious deterioration, characterized by a burst of aggression, anger and non-compliance.

Shortly after admission to Bayfield, *Child A* experienced a honeymoon period; a time when his presenting issues were manageable. Six months after admission, his mother gave birth and coincidently Bayfield admitted a new boy to the residence. These two events appeared to set off a series of aggressive outbursts. After this deterioration, there were two positive tipping points characterized by a significant reduction in aggression.

During 1,935 days of treatment at Bayfield, there were six discrete cycles of deterioration that occurred every six to nine months. Each period of significant deterioration was corrected by a positive turnaround that occurred three months after the negative tipping point. These cycles stopped in grade seven after 40 months of treatment. From this point on, *Child A* made steady progress, with little evidence of the aggression and dramatic mood swings. For example, there were no restraints after May 7, 2009. Prior to this date, *Child A* had been restrained 102 times. Throughout treatment, there is a steady stream of non-compliance, rude and disruptive behaviour, although the rate of low risk behaviour decreased in the last two years of treatment.

There are 208 records of events that could not be coded as positive or negative. These records report just the facts without explanation about how the child behaved. Graph 4 displays the percentage of positive comments within each time period. The positive tipping points were identified by staff as a change in the quality of his behaviour characterized by a reduction in aggression but a continuation of being rude and non-compliance. In grade seven, when his behaviour improved dramatically, the degree of rude and non-compliant behaviour also decreased. His episodes of aggression disappear completely. The cyclical pattern of positive and negative tipping points are apparent on Graph 4.

Graph 4



There are similar portraits of the process of treatment for the other four children. All of them show a cyclical pattern of positive and negative comments, positive and negative tipping points and a gradual increase in the percentage of positive comments toward the end of treatment. All of the children studied appear to be achieving positive outcomes in their daily behaviour. The record also includes detail on family visits, indicating they all experienced positive visits with at least one family member. All of the children in this study are functioning in a normal range within the limits of their developmental potential. The children in this study did not progress with their age-related peers in academic performance, due to their respective developmental disorders.

Conclusions from the Clinical Record

Each child suffered significant adversity during the first five years of their lives with evidence of physical and sexual abuse beginning at an early age. In each case, serious behaviour problems were evident in kindergarten. By grade two, the children were either in a segregated classroom operated by a children's mental health centre or were provided with one-to-one educational assistants by the school.

The children were admitted to Bayfield between 8 and 14 years of age. All of the children presented with neurological symptoms or a medical diagnosis of a brain related disorder. They all performed behind their age-related peers academically. All children had a psychiatric diagnosis and a history of dangerous behaviour. The prognosis for successful re-integration to public life was very poor for all of the children in the study. The detailed examination of the clinical record, including daily behaviour reports found that all five children responded positively to the treatment.

Three of the five children have been or planned to be discharged home with no occurrence of dangerous behaviour, improved academic performance and stable emotional and psychiatric functioning. The detail analyzed in the clinical record, of over 11,000 entries, is comprehensive evidence of the therapeutic power of the treatment strategies that have transformed the lives of

children with a combination of neurological impairment, trauma, adversity, psychiatric illness and longstanding severe behaviour problems.

Treatment Interventions

The clinical record has little detail about what was done with the children therapeutically to bring about this transformation. Except for psychotropic medication, the interventions represent about 7% of the entries in the BIS. The table below summarizes the interventions listed in the BIS.

Table 1

Interventions	child A	child B	child C	child D	child E	average
providing comfort in times of distress	1%	4%	9%	2%	3%	4%
cultural integration	2%	2%	13%	2%	20%	8%
positive behavioural supports	9%	4%	0%	0%	0%	3%
point & level programs	4%	0%	7%	0%	9%	4%
accepting/talking about feelings	6%	30%	20%	12%	20%	18%
play therapy	4%	0%	0%	6%	0%	2%
teaching self-reflective skills	13%	21%	22%	22%	12%	18%
teaching social skills	57%	32%	20%	33%	26%	34%
working on trust	0%	0%	0%	2%	4%	1%
working on sexual issues	7%	4%	13%	20%	3%	9%
working on suicidality	0%	0%	9%	0%	3%	2%

The data shows the percentage of "intervention notes" dedicated to each of the 11 interventions mentioned in the clinical record. The last column is the average percent. The data indicates different interventions to different children in different degrees. The range of treatment provided to *child A* was dominated by instruction on social skills (57%) and less talking about feelings (6%). In contrast, other children were provided with talking about feelings and teaching self-reflective thought more frequently than *child A*. The limitation of this analysis is staff may have applied other interventions that were not recorded. The recording protocol tends to favour incidents that children were involved in rather than the actions, thoughts and feelings of staff.

Interviews and Focus Groups

We asked the children in this study about the positive and negative tipping points of their life before admission to Bayfield and during their placement. We anticipated hearing words staff used that were meaningful to the child and may have tipped the balance in favour of greater social and emotional intelligence.

The central focus of this study was to discover language (words) within the Bayfield lexicon and to uncover the praxis associated with healing.

Four focus groups consisting of the child care therapists, family based care providers, teachers and clinicians working with each child were interviewed. We asked them to talk about events or interactions when they noticed changes in the child's behaviour or attitude (the tipping point

moments). Both the interviews and focus groups were semi-structured with standard questions. The interviews and group meetings were recorded and then transcribed.

The transcriptions were coded using nVivo. The coding method was inductive; the researchers invented codes to isolate common themes and common use of language. The same method was used to code the clinical record.

During the coding exercise, a pre-existing coding framework was employed from a qualitative study of how parents communicate with and teach emotional intelligence to their children. The sociological theory underpinning the research by Kehoe is called Meta-Emotion Philosophy (Kehoe, 2006). This theory has been used to explain how attachment theory works in adolescents and was applied to this study.

The children were easily matched to the Meta-Emotion coding framework. We anticipated the children would tell us what their staff said and did to help them. Instead, we were told how the child felt about life before and while at Bayfield. The children were able to communicate very clearly what they liked and disliked about Bayfield, including the staff, teacher or family based care providers who helped them the most. Listening to the individual interviews it became obvious, based on the Meta-Emotion coding framework, that each of these children had become emotionally competent during their treatment. We suggest that acquiring emotional intelligence is the nature of the positive tipping points in the process of treatment.

This insight still leaves the question open to what actions and words of staff, teachers, and family based care providers promote emotional intelligence?

Criteria of Emotional Intelligence

The individual interviews and staff focus groups were analyzed to identify any words that match the coding framework employed by Kehoe. The Kehoe framework includes words used by the child that indicates emotional intelligence.

Table 2

Thematic code	Definition	Exemplar of words used
Emotional Recognition in Self	ability to recognise, identify, and understand emotions in the self	'My moods and emotions help me generate new ideas'
Personal Expression	ability to express emotions clearly and accurately to others	'I have trouble finding the right words to express how I feel'
Understanding Emotions External	ability to recognise, identify and understand emotions in others and the environment	'I can tell how others feel by the tone of their voice'
Emotional Control	ability to maintain concentration and function effectively while experiencing strong emotion	'I can be upset and still think clearly'
Emotional Management of Self	ability to repair negative mood states and generate and maintain positive ones	'I find it easy to control my anger'

Thematic code	Definition	Exemplar of words used
Emotional Reasoning	ability to use emotional information in decision-making	'Examination of feelings is useful in solving problems'
Emotional Management of Others	ability to repair negative mood states and generate and maintain positive emotions in others	'I find it easy to comfort others when they are upset about something'
Competency in Self Reflective Thought	Ability to think about your emotional reactions objectively as they exist outside of you	'I think that I felt very angry towards my mother, when I was really angry with my Dad'
Refusal Skills	Ability to say no to your peers when invited to act inappropriately	'My friends wanted to runaway and I said no; I don't want to get in to trouble'
Sense of Humour	Ability to laugh at oneself	☺

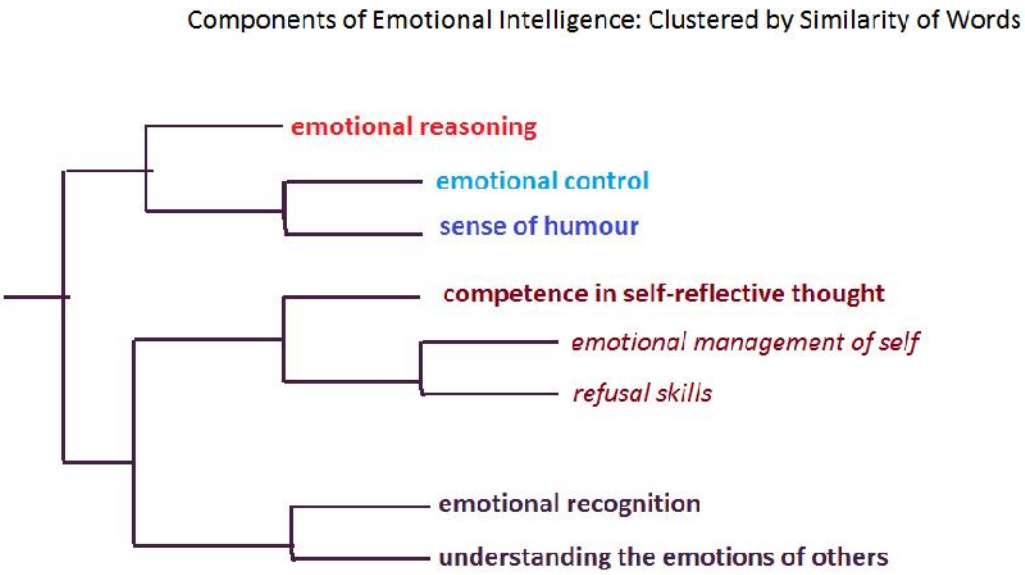
The last three components of emotional intelligence were added after the fact through the inductive process. Our research hypothesis is that a child who shows evidence of these emotional skills during the individual interviews has developed emotional intelligence. This is one of the expected outcomes of a secure attachment.

Signs of Emotional intelligence

The words used to signify the codes for emotional intelligence were analysed for word similarity. A Pearson correlation ratio was calculated to measure the degree of similarity. If two themes were defined by the same words, they would have a Pearson correlation ratio of r = 1.0. The highest correlation achieved for the codes signifying emotional intelligence is very low (r = .34). This means concepts used to define emotional intelligence are independent and distinct from one another. The cluster diagram below illustrates the correlation matrix. The word pairs to the right in Graph 5 have the highest correlation.

Graph 5 shows the words used in the individual interviews to signify "emotional management of self" are similar (r = .34) to the words used to signify refusal skills. The graph displays relationships that appear logical at face value, and support the basic validity of this measure of emotional intelligence.

Graph 5



Comparison of the Children by Emotional Intelligence

The data shows that all children display emotional intelligence in different ways.

- *Understanding the emotions of others*, shown by Child A, B and D
- *Sense of humour*, shown by C and D
- *Refusal Skills*, shown by Child B
- *Emotional Recognition of One's Own Feelings*, shown by Child A,B,C and D
- *Emotional Reasoning*, shown by Child A
- *Emotional Management of Self*, shown by Child A and C
- *Emotional Control*, shown by Child A
- *Competency in Self Reflective Thought*, shown by Child A

The data on emotional intelligence confirms the findings of the qualitative analysis of the clinical record, indicating all children made significant progress.

Staff Focus Groups

This phase of the study was designed to uncover what the teaching and treatment staff said or did with the children around those moments of positive tipping points in the child's life at Bayfield. The research study was designed to discover language (words) that appeared to trigger the clinical turnaround. Subsequently, we could prescribe those words earlier and more frequently to affect positive change.

The research process was inductive. The staff talked about what they said or did with the children. Their responses were coded. Since the interviews with the children were productive in

demonstrating their emotional intelligence, we decided to search the transcript of the staff focus groups for validation of the emotional intelligence. We also looked for words and actions known to promote emotional intelligence.

Validation of the Emotional Intelligence of Children Studied

Staff, teachers, family based care providers and clinicians talked about the same children we interviewed separately. We did not prompt the staff to validate the child's perspective. We were unaware of the emotional intelligence issue until the transcripts were coded. Therefore we concluded the data that validated the child's perspective was completely independent. The coding exercise found that the this focus group made the same observations about the child's emotional intelligence in regard to understanding the emotions of others, refusal skills, emotional recognition of one's own feelings, emotional management of self and competency in self-reflective thought. These qualities of the child appear to be apparent both to the staff and the child. However, we suggest an objective, valid and reliable measure of emotional intelligence may offer greater precision than unguided comments by staff reflecting on tipping points in the life of a child.

Determinants of Emotional Intelligence in Youth

The Meta-emotion theory provides a qualitative framework for identifying the actions of parents and caregivers that promote emotional intelligence or suppress the child's development of these attributes.

Thematic code	Definition	Exemplar of words used
Punitive Practices	the degree to which parents respond with punitive, controlling responses that decrease their exposure or need to deal with the negative emotions of their children	'told my child that if he starts crying then he'll have to go to his room right away'
Minimizing Practices	the degree to which parents minimize the seriousness of the situation or devalue the child's problem or emotional response	'told my child that (s)he is overreacting'
Distress Reactions	the degree to which parents experience negative emotional arousal when children express negative affect	'felt upset and uncomfortable because of my child's reaction'
Expressive Encouragement	the degree to which parents encourage children to express negative affect or the degree to which they validate child's negative emotional states	'it's ok to feel sad.'
Emotion-Focused Practices	the degree to which parents respond with strategies that are designed to help the child cope	'comforted my child and tried to get him/her to forget about the accident'

	with negative feelings and manage their own negative affect	
Problem-Focused Practices	the degree to which parents help the child solve the problem that caused the child's distress	'helped my child think of places he/she hasn't looked yet'

There are six themes proposed by the Meta-Emotion theory that have an impact on the child's development of emotional intelligence. The six themes are divided into positive and negative practices. We searched for words that map to this coding structure in both the individual interviews and the focus groups. The first observation was that the childcare therapist, teachers, family based care providers and clinicians did not use any words that could be mapped to the negative practices.

When we applied the same coding framework to the individual interviews with children, we observed that 9% of themes coded were mapped to the negative practices defined above:

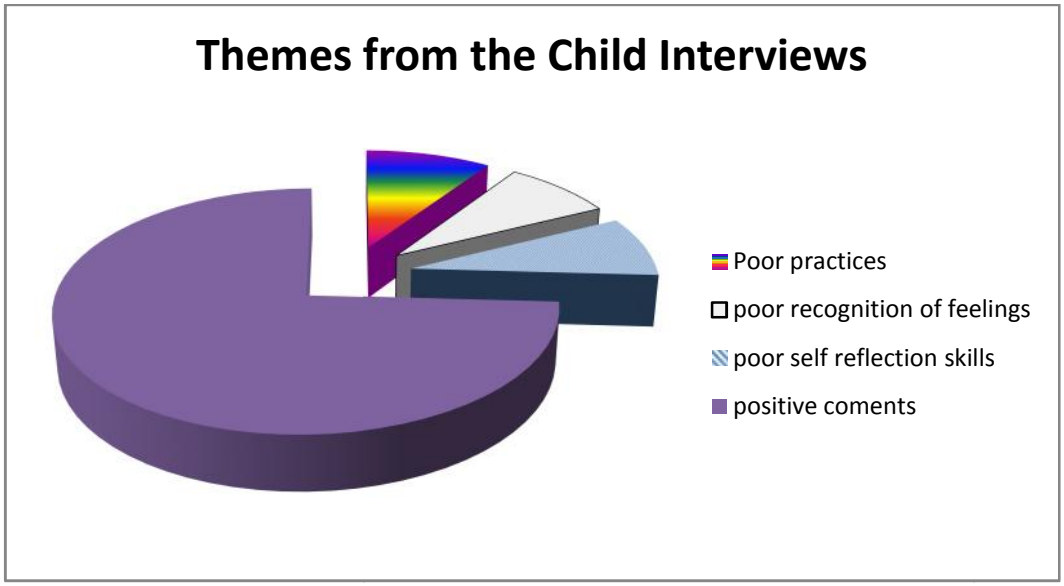
- Punitive practices
- Minimizing practices
- Distress reactions

The transcript of the child interviews revealed difficulties the children were having with:

- Recognition of their feelings
- Capacity for self-reflective thought

The majority of themes coded from the transcript of the child interviews were positive (74%).

Graph 6



Theoretical Models

As noted, we began the exercise of coding the staff focus groups using the themes identified by the Meta-Emotion Theory as determinants of emotional intelligence. The child interviews had

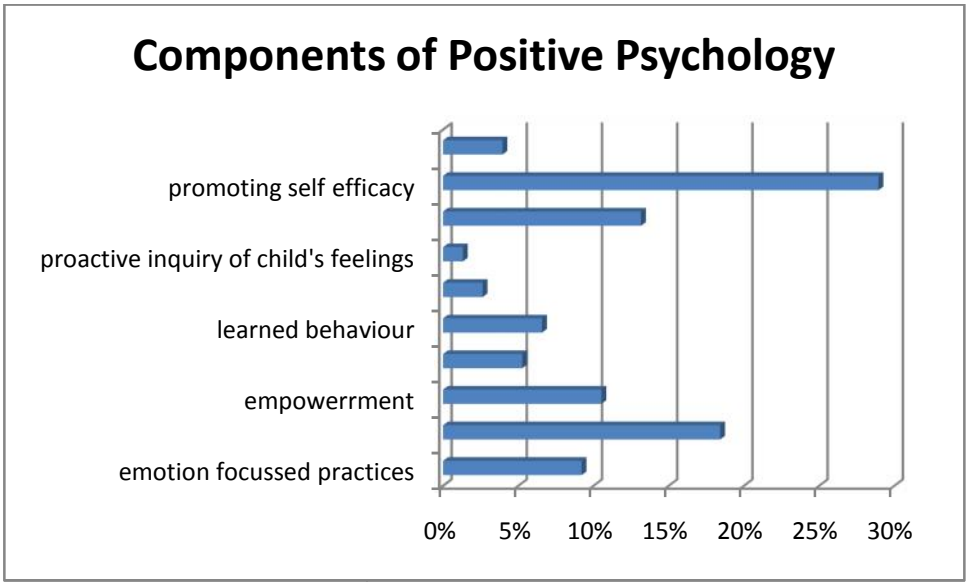
revealed the finding that these children were emotionally competent and their emotional intelligence was related to the positive tipping points.

We discovered the practices of the child care therapist, teachers, family based care providers and clinicians were much more complex. The themes observed in the transcripts of the focus groups were organized into three broad models:

- Positive Psychology
- Emotional Intelligence Theory
- Attachment Theory

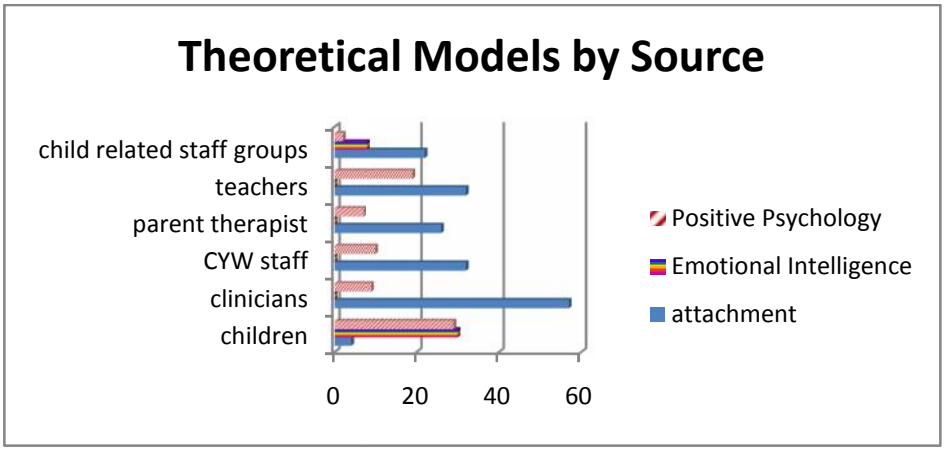
The components of positive psychology and their prevalence in the transcripts are displayed in Graph 7. These components were assembled inductively. We observed several practices and sets of words that were used. The themes grouped under the model of positive psychology include the three positive practices of the Meta-Emotion theory and other practices that appeared to be directed at building capacity in the youth.

Graph 7



The other theoretical model that comes through in their words is Attachment Theory. Attachment theory was reflected in 20 themes. Each theme, within the model of attachment theory, was derived from an article by Patricia Crittenden(2001). The article was analyzed within nVivo and coded inductively. These codes and the word pattern used within the Crittenden article became the basis for mapping attachment theory to the language recorded in child interviews, house logs and staff focus groups. Graph 8 shows the theoretical models disclosed by source.

Graph 8

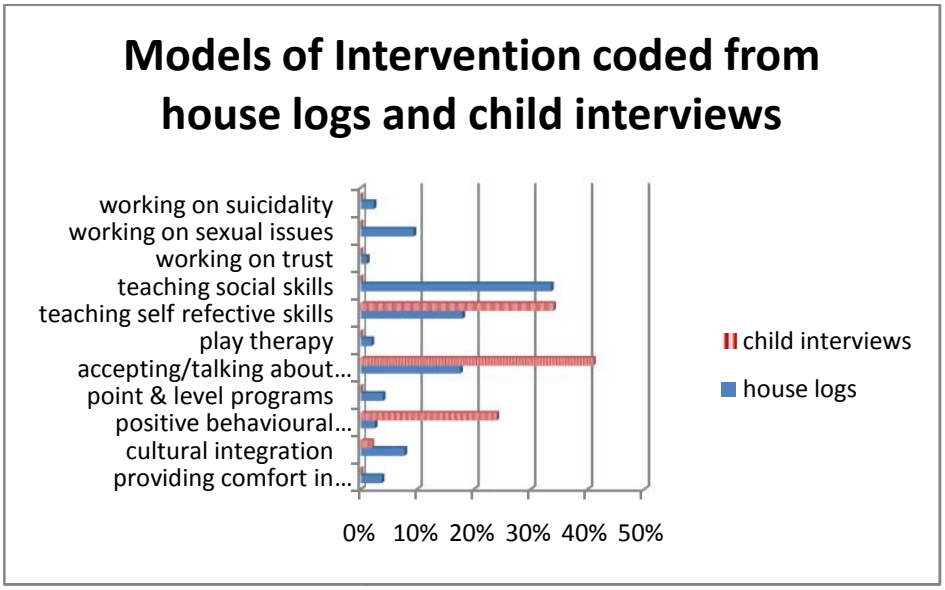


The horizontal axis refers to the number of times a component of the model was coded at the source. The clinician's focus group has the highest number of references to the model of attachment theory. The children most frequently identified the themes from emotional intelligence and positive psychology when they reflect on their interactions with staff.

Interventions used by child care therapists

The house logs provided a different view of the interventions used with children. We were able to code some of these interventions within the transcripts of the child interviews. This revealed a slightly different picture of the praxis of treatment.

Graph 9



Eleven different interventions were noted as recorded by staff in the house jounals. Four of these interventions were also identified by the children as they reflected on their experience at Bayfield. The types of interventions recognized by both the children and house journals are:

Teaching Self-reflective Skills

One of the interventions described by the children was coded as "problem-solving practices". This is an example of one such comment:

> "*When someone tries to get me into trouble, they say "just say no, turn away". If I am angry, they say "take deep breathes"; I was just angry because everyone else would pick on me*"

This type of intervention described by the child is an example of teaching self-reflective skills. Thirty four percent of the interventions the children talked about in the individual interviews were considered to be self reflective.

Positive Behavioural Supports

Twenty four percent of the interventions described by the children were coded with the theme "empowerment". The children identified several situations when they felt the staff helped them to achieve something important to them. Forty-one percent of the interventions recalled by children were coded as treatment staff accepting or talking about feelings. Eighteen percent of the interventions recalled by staff were coded under the theme, accepting or talking about feelings.

Cultural Interventions

Treatment staff implement cultural interventions in their work with children. This appears throughout all programs at Bayfield. The cultural interventions include bringing in pictures of the child's home community to provide an anchor for children placed away from home. The cultural interventions include participations in ceremonies, discussions about the meaning of life, learning about nature and instruction in the Cree and Ojibway language. One child recalled this type of intervention as a significant factor in his positive tipping point.

Other Types of Interventions

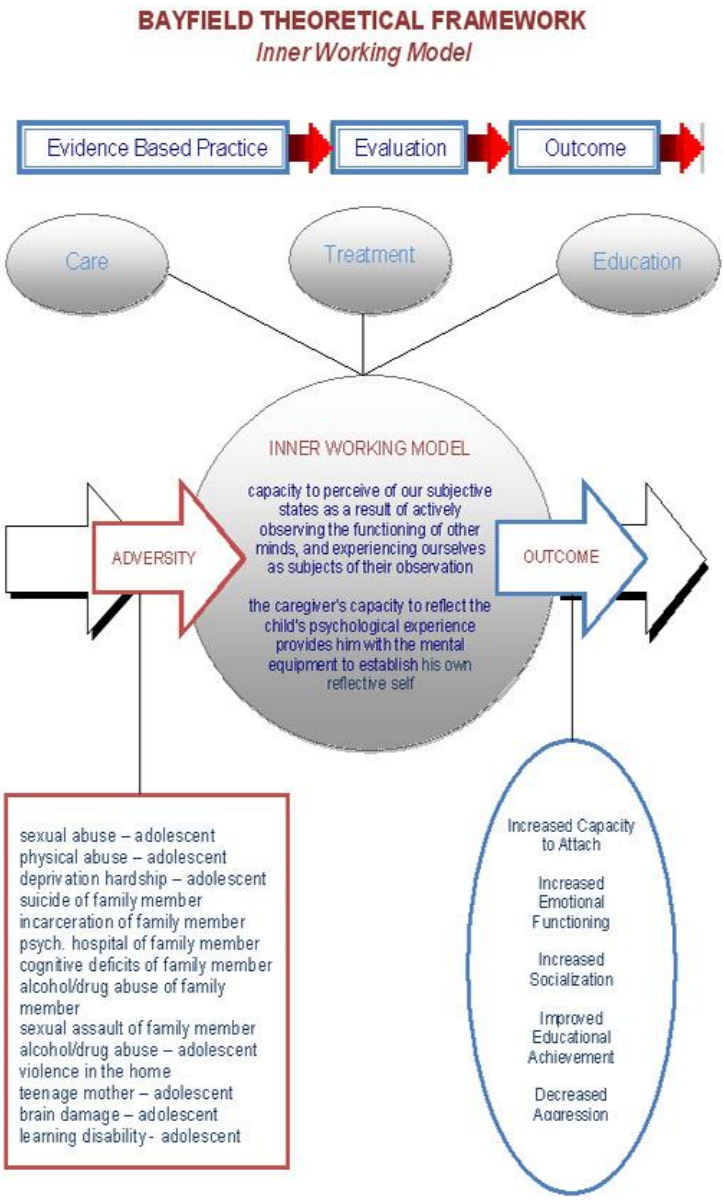
There are other types of interventions described by staff in the house journals that were not mentioned by the children as they reflected on their experience at Bayfield. Treatment staff use point and level systems from applied behaviour analysis, teaching social skills, working on sexuality, working on suicidality, working on trust, and play therapy.

The house journals hold records for the five children selected for this study. The record for each child has a unique distribution of interventions used. The study did not include the effect of psychotropic medication that has a significant impact on the outcomes and will be considered in future research.

Findings and Recommendations

Bayfield developed a theoretical framework to guide its treatment strategy and implements the model diligently through continuous staff training and supervision. The Inner Working Model forms a central Attachment Theory philosophy of all the programs delivered (Sanders, 2003). One of the objectives of this study was to discover if the language associated with the treatment model was evident on the front line.

Chart 1



The qualitative record confirmed many aspects of the Bayfield Treatment Model. We confirmed the level of adversity and the outcomes achieved. The study found the children developed a self-reflective capacity. The findings, however, are much more complex than we had anticipated. It appears the treatment process is more eclectic. The Bayfield Treatment Model might be more accurately described as differential treatment.

The qualitative research studied five children selected on the following criteria:

1. they had been treated at Bayfield for at least two years
2. they had been tested using the Bayfield outcome measures
    a. two were responding positively according to these measures
    b. two were responding poorly according to these measures
    c. one child could not be classified as positive or negative

Finding 1

The children had a very poor prognosis in terms of their potential to return home and function successfully in public life as independent young men. This prognosis was because the children:

1) displayed serious behaviour problems by grade one as indicated by suspensions and one to one staffing
2) were diagnosed with developmental and neurological challenges at an early age
3) were physically abused in addition to being exposed to multiple trauma and adversity
4) were admitted to Bayfield at high risk of bodily harm, as indicated by a prior history of hospital admissions on form 1 and serious chronic behaviour problems
5) were admitted to Bayfield with neurological and psychiatric diagnoses

Finding 2

The proportion of positive to negative comments in the daily house journals demonstrates a trend towards increasing positive comments. The journals show aggression and self-harming behaviour cease at some point for all children. Three of the children who were discharged or in the process of being discharged home appear to be stable and positive. The child's own voice attests to emotional intelligence and positive feelings about themselves and the services they received. The qualitative data demonstrate strong positive outcomes for all children despite the poor prognosis.

Finding 3

For twelve years, Bayfield has been collecting test scores on the determinants of life span outcomes with all the children they serve. The tests are evidence based measures in wide use throughout the world and include: (a) the WIAT, measuring academic performance, (b) Conners' GI, measuring hyperactivity and inattention, (c) CGAS, measuring social adaptation, (d) FAB-C measuring affect regulation, (e) SA-45, measuring psychiatric symptomatology and (f) PBI, measuring attachment.

The children treated achieved modest to very large treatment effects on all measures. Bayfield has amassed strong quantitative evidence demonstrating treatment is effective and the prognosis is positive despite the children's high risk status and poor prognosis on admission.

Finding 4

Different types and combinations of interventions were used with each child; this demonstrates staff and family based care providers practice a differential treatment approach.

Finding 5

Three distinct theoretical models map to the words in the house journals and to the transcripts of child interviews and focus groups:

1) positive psychology
2) emotional intelligence
3) attachment theory

Recommendations

The primary objective of this study was to identify the activity on the front line of treatment and to discover the language in the interactions between childcare therapists, family based care providers, clinicians and teachers and the children they treat. This activity occurring between the theoretical model used and the outcomes achieved is called praxis.

Bayfield actively promotes a specific lexicon embedded in attachment theory for all staff to use when interacting with children. Bayfield ensures implementation of this model through direct communication between management and staff from the point of orientation to annual personnel evaluation, and supported by frequent supervision and intensive training.

The attachment model is evident in the language of the daily journals and can be observed during interviews with children and from the focus groups with staff. However, the praxis appears to be infused with language from other theories including emotional intelligence and positive psychology. The praxis is even more complex when cataloguing the specific interventions used with children. At the intervention level, but to a lesser extent, we observed applications from applied behaviour analysis, social learning theory, play therapy, cultural integration and psychodynamic psychotherapy.

The language about interventions came from daily journals and case notes written by the clinicians. Comments about interventions represent 7% of the content of the house journals and case notes.

Recommendation #1

To develop and implement a template to encourage staff, family based care providers and teachers to report significant interactions with children in simple factual language. Accurately documenting a child's presentation is a requirement to effectively reiterate what has occurred and to track progress.

The SOAP documentation method focuses on four points: Subjective, Objective, Assessment and Plan.

Subjective: gather information from the child about feelings, plans, concerns, goals, thoughts, the situation and how it affects him/her and others.

Objective: document factual observations about the child. Write about what you see, hear, measure or count.

Assessment: Interpretation of the Subjective and Objective information noted, any formulations or reflections. This section includes information to assist others reading your notes to understand your findings.

Plan: document the action plan to treat the child's current situation, set a date to follow up or set an appointment date, interventions, progress, treatment plan.

The individual interviews with children revealed they developed signs of emotional intelligence. Although the child's words attested to their competence, it was not possible to measure

the degree of emotional intelligence they possessed. Emotional intelligence is a very important indicator of wellbeing that we should be tracking with all children.

Recommendation #2

Bayfield initiate a program of repeated testing of emotional intelligence, using an evidence-based instrument.

The quest we pursued through this research was to expose the praxis of service. Bayfield invests significantly in staff training, and it is critical to assess the effect the training had on the language and treatment approach of staff, educators and family based care providers when interacting with children.

We have found robust and multi-faceted evidence that Bayfield is providing an effective treatment service to children with severe emotional, behavioural and mental health problems. These results are achieved with a multi-disciplinary team providing evidence based best practice. Burns and Hoagwood (2002) proposed four criteria of EBBP:

(1) a theory to relate a hypothesized mechanism to the clinical problem

(2) basic research to assess the validity of the mechanisms

(3) preliminary outcome evidence to demonstrate that a therapeutic approach changes the relevant outcomes

(4) process-outcomes connections that display the relationship between process changes and clinical outcomes

We rely on evidence in the literature to meet the first two criteria. We met the third criteria through a twelve year program of outcome measurement and reports. In order to meet the fourth criteria of evidence based practice, Bayfield began a program of qualitative research outlined in this paper.

Evidence based best practice requires an organization to demonstrate the connection between services delivered and the impact on children. This requires deconstructing the treatment environment to identify core potencies and recognize counter productive elements (Chambless, 1996).

Recommendation #3

All children be interviewed at regular intervals using a standardized semi-structured interview designed to identify healing language in the context of uncovering the praxis.

Recommendation #4

This design of qualitative research be extended to other agencies who are conducting quantitative outcome assessment and are prepared to examine language and practices that mediate the relationship between the child's adversity and diagnostic conditions on admission and the outcome of treatment.

Conclusion

Bayfield and many other agencies in Ontario aspire to implement evidence based best practice. We have discovered in this study that the practice implemented is far more complex than our stated intentions. It appears to be organized around several different theories and to consist of interventions from a range of treatment models.

Bayfield is positioned to study a range of treatment approaches embedded in attachment theory, positive psychology and emotional intelligence and how they translate into the language between treatment staff and children. An implementation study as proposed has the potential to increase the accuracy and potency of service. Our search for a healing praxis will help more children to benefit from a meta-model of treatment interventions and decrease the time for children to realize improvement.

The quantitative research in this study clearly indicates the children achieved exceptional outcomes as measured by psychometric and sociometric instruments. The qualitative research demonstrates the complexity of relationships through our analysis of the language used by staff and children. The importance of acknowledging the unique presentations of the population studied hold implications for shifting the theoretical framework of attachment to include approaches based in positive psychology and emotional intelligence. Clearly our findings invite continued research evaluating the models and may eventually lead to an empirically confirmed understanding of the praxis of treatment.

References

Chambless, D. L., Sanderson, W. C., Shoham, V. Bennett Johnson, S., Pope, K.S.., Crits-Christoph, P., Baker, M., Johnson, B., Woody, S. R., Sue, S., Beutier, L., Williams, D. A., & McMurtry, S., 1996, "An update on empirically validated therapies", *The Clinical Psychologist*, 49, 5-18

Cohen, Jacob (1988). *Statistical Power Analysis for the Behavioral Sciences* (second ed.). Mahwah, NJ: Lawrence Erlbaum Publishers

Community Treatment for Youth, Evidence-Based Interventions for Severe Emotional and Behavioural Disorders (2002), Barbara J. Burns & Kimberly Hoagwood, (eds), New York: Oxford University Press

Crittenden, Patricia M. (2001), "Transformations in Attachment Relationships in Adolescence: Adaptation Versus Need for Psychotherapy", Published on the web at: http://www.soton.ac.uk/~fri/publicat.htm

DeOliveira, Carey Anne, Moran, Greg & Pederson, David R. (2005), "Understanding the link between maternal adult attachment classifications and thoughts and feelings about emotions", *Attachment & Human Development*, 7(2), 153-170

Fulton, R.J. (1999), *Sociodemographic Checklist,* sociometric measurement of adversity.

Gottman, John M., Kartz, Lynn Fainsilber & Hooven, Carole (1997), *Meta-Emotion: How Families Communicate Emotionally*, Mahwah, NJ: Lawrence Erlbaum Publishers

Kehoe, Christiane Evelyne (2006), "Parents' Meta-Emotion Philosophy, Emotional Intelligence and Relationship to Adolescent Emotional Intelligence", *dissertation*, Australia: Swinburne University of Technology

Sanders, L.S. (2003), *Attachment of Adolescent Males in a Residential Treatment Setting,* UMI Publication, Ann Arbor, MI

Sanders, L.S., Fulton, R.J. (2008), *The Bayfield Way, The Making of a Lexicon for Effective Residential Treatment of High Risk Adolescent Males,* Published on the web at: www.bayfield.net

Sanders, L. S., Fulton, R J. (2010), *Evidence Based Outcomes, A Decade of Treatment Based on a Theoretical Framework of Attachment,* Published on the web at: www.bayfield.net

Stuart, C., Sanders, L.S., (2008), *The Role of Child and Youth Practitioners in Evidence-Based Practice in Group Care,* Ontario Association of Children's Aid Societies Journal, Volume 52, No. 4

Stuart, C., Sanders, L.S., Gurevich, M., Fulton, R.J., (2011), *Evidence-Based Practice in Group Care: The Effects of Policy, Research, and Organizational Practices,* Child Welfare Journal of Policy, Practice and Program, Vol 90, No. 1