Stop Now and Plan, SNAP®

In a New Age of School Mental Health

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TheFamilyHelpNetwork.ca   LeReseaudaideauxfamilles.ca

About Us
Hands TheFamilyHelpNetwork.ca

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- ➢ multi-service agency located in Northeastern Ontario.
- ➢ hosts a wide variety of mental health and developmental services for infants, children, youth, families and adults.
- ➢ registered charity, funded through government sources, and all services are available to the public at no cost.
- ➢ employees - over 210 staff.
- ➢ serves over 1400 families/clients annually.

A New Age of School Mental Health
Going Mobile

October 2005

Implementation of a new model of
School Mental Health Services

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What Was?

Co-delivery with 5 School Boards
8 self-contained "Section" classrooms

Going Mobile
Beyond the Classroom 2006 - 2007

New Program Model Overview

• Mobile outreach

• Augment existing school support services

• Joint delivery of service

• Strengths Based – Evidence Based

Why Transition?

• **Integration** – classrooms and students were segregated from the rest of the school

• **Accessibility** – served fewer than 80 students per year

• **Effectiveness/Efficiency** – model provided only one intense level of service

• **High School Culture** – added to stigma of mental illness

Going Mobile
Beyond the Classroom

Three Streams of Service

1. **Consultation and Brief Service** – Functional Behaviour Analysis, 4P's and Brief Counseling

2. **Group Service** – Classroom psycho-education, Child Therapy Groups such as SNAP

3. **Individual Intervention** – Long term support and intervention

New Age – New Results

image: Axel Kilian

The particle spring based modeler allows the study of equilibrium structures. The modeler, developed by Axel Kilian as part of his PhD thesis is about design exploration. It was implemented in the processing environment using a Particle Spring library by Simon Greenwold.

GOALS of New Program: Increased Effectiveness

1. Mobile SMH program for those with **high needs** (CAFAS Total scores $\geq$ 50) (process)

2. **Increased number of clients** served (process)

3. **Decreased amount of time** in the program (process)

4. **Improved emotional and behavioural outcomes** improvement on the Total Rating Scale (outcomes)

5. **Programs and the partnerships are working better** (outcomes and process)

1. High Needs Clients:

Clients whose Total CAFAS Rating reflected Severe Emotional Disturbance (> 50 point threshold)

- Old program: 82%

- New program at inception: 92%

- Continuation of new program: 84%

- High needs clients are still being served

**High Needs Clients:**
Still Being Served Under New Program

Table 1: Comparison of average CAFAS pre-intervention scores in Total Ratings scale, between time periods (date of change: Oct.1, 2005). Higher scores indicate higher level of dysfunction at intake.

CAFAS Total Rating at Intake (>50=SED*)		
Time 1 (2004/2005)	Time 2 (2006/2007)	**2007/08**
67	73	**75-Class** **72-Mobile**

*Serious Emotional Disturbance >50:
Clients on average scoring 73

Comparing Intervention Environment Presentation of Clients at Intake:

[BCFPI Results]
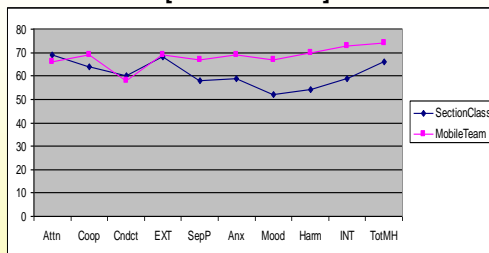
2/3. Increased Numbers/Decreased Time:
"Significantly more clients are being reached by SMH programs under the new model."

Table 5: Comparison of number of clients served and average program duration between *equal* time periods, before and after change date (October 2005)

District	**Number** of SMH cases initiated			Average number of **days** in program per client		
	Time 1	Time 2	2007/08	Time 1	Time 2	2007/08
Aggregate	43	340	**469**	222	96	**90-Class** **128-Mobile**

Notes: Time 1 refers to the 15 months immediately preceding Oct 1, 2005 (old program model) and Time 2 refers to the 15 months immediately after Oct 1, 2005 (new program model).

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4. Improvement at Exit:
Improvement continues with new service delivery model

Table 3: Comparison of average CAFAS score improvements between time periods. A 20 point difference is required for significant difference to be noted between pre and post CAFAS ratings.

Improvement in average CAFAS Total Rating (Difference between initial CAFAS rating and exit CAFAS)		
Time 1	Time 2	2007/08 for NB stats
25 (92)	27 (16) 20 point difference is required	36 (27) 20 point difference is required

Notes: Sample size is indicated in (brackets);
Statistics are for students that had scores for both intake and exit.

4. Emotional and behavioural needs valued:
Nature of Client

3

5. Improved Programming:
Program Delivery

• **Accessibility**

• **Less threatening treatment environment**, SMH Counsellors in the school

• **Ongoing support** for students

• **Improved socialization and reintegration process**

SNAP® results
In a New Age of
School Mental Health:
Mobile and Section Services

Stop Now and Plan, SNAP®
Child Development Institute (Toronto)

• For behavioural difficulties at home, school or in the community, ages 6-12

• Cognitive behavioral, evidence based treatment

• Teaching children and those working with them to stop and think before they act, using their plan at the "snap of their fingers"

Evidence Based Interventions
Stop Now and Plan, SNAP®

• 62 clients completed SNAP at Hands (March 2008 to November 2009)

• Statistically significant positive change for externalizing behaviours (replicating research)

• Internalizing Behaviours and Adaptive Behaviours, based on Teacher/Parent ratings, also improved

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Treatment Groups

4 groups received treatment

- Agency wait list

1. Children with elevated co-operation or conduct scores. Parents brought child to in-agency group

- Teachers identified significant conduct concerns and children were assigned to in-school SNAP groups

2. Children in Specialized Section Classroom
3. Standard SNAP group within Mobile SMH service
4. Modified School group within Mobile SMH service

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Were Treatment Groups Similar?

• Measures pre-treatment
  BCFPI   provincially mandated intake measure
  BASC-2 measure of behaviour

• Groups had similar levels of psychopathology prior to treatment
  – With groups similar at intake, change could be attributed to treatment versus group composition or client profile

School Groups at Intake
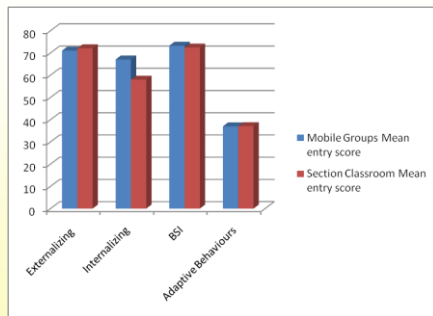

All Groups at Intake
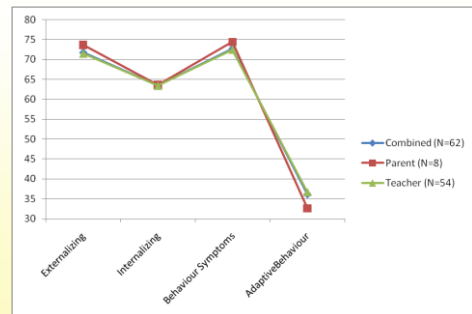

Unpredicted Results

Children receiving School Mental Health services

- No effect from group format
- Gender not a factor
- Internalizing Factor improved significantly
- Attention (Externalizing) improved significantly
- Adaptive Behaviours improved significantly
- Improvement was based on teacher report from a classroom coping perspective

Significant Change Post Treatment: All Clients
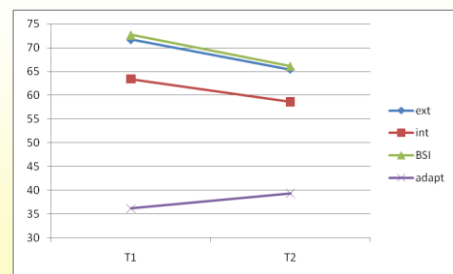
Significant Change Post Treatment: Teacher Ratings
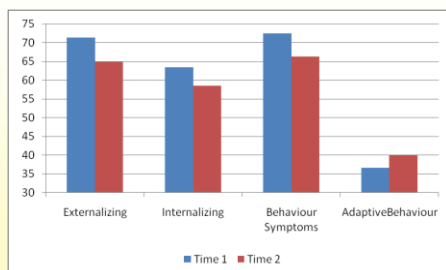
Regression Analysis Predictor Variables

- 52% of variance in Externalizing variable (on the BASC-2) was predicted by co-operation, conduct and attention (on the BCFPI)

- Of that variance, only **attention** was predicting significant change (B=.715, p <.001)
  - For every standard deviation of change on attention, the externalizing change score adjusts .715 of a standard deviation
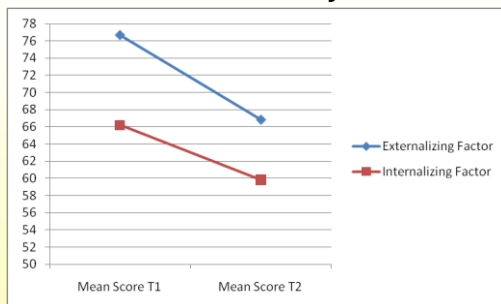
Specialized Sample Analysis

- Inclusion criteria: BCFPI co-operation or conduct scores $\geq$ 70 at intake

- Confirmed similarity of groups prior to T1
  1. Children in Specialized Section Classroom
  2. Standard SNAP group within Mobile SMH service
  3. Modified School group within Mobile SMH service

Specialized Sample Analysis

- Children benefited from the treatment

- Externalizing factor changed significantly post treatment (t=5.49, p <.001)

- Internalizing factor changed significantly post treatment (t=3.32, p <.01)
  - **Diagram next page**

Specialized Sample Outcome Analysis

Increased Improvement for Specialized Sample

Section Classroom-specialized sampling
   BCFPI criteria met and
   outliers removed from the specialized sample

- There was a mean difference between groups (Section vs Mobile groups) p < .05,
- **Increased improvement** for Externalizing Behaviour change score only
- **for a select group** of students in the Section Classroom

Exploratory Research Questions

- Controlled environments
  - Section classroom has an ability to follow up
    - Does this promote previous system of delivery?
      - Almost ¼ of Section sample removed to achieve these results
      - When examining impact on full Section Classroom group
        » Similar levels of outcome regardless of grouping!
      - Doesn't recognize breadth of "most in need"

Exploratory Research Questions

New SNAP group curriculum for classrooms!
- Permits follow up-shared benefits of Section Class
- Increased reinforcement
- Increased generalization for children receiving mobile services

Need for longitudinal analysis
- SNAP intervention provides skills enhancement for managing attention concerns, internalizing concerns and adaptive behavioural responses. Further analysis of these interactions is needed.

Exploratory Research Questions

- Interaction effects
  - Increased numbers in mobile service delivery groups had elevated internalizing scores
- Self harm ratings (BCFPI) were positively correlated with scores >70 for co-operation and conduct
- Self harm ratings predicted improvement in Internalizing Change Factor and Adaptive Behaviour Change following treatment, based on regression analysis

Are There Still Gaps?

- Not every program is an absolute solution
  - Increased effectiveness is paramount

- Evidence Based Interventions are key
  - Understanding local client profiles and their interaction with EBP's is our responsibility

- Ongoing evaluation and research is necessary

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We highly recommend
✓Going MOBILE
✓With EBP's
✓Supported by agency evaluation

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DISCUSSION