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Maltreatment and Adolescent Pathways Feasibility Study Final Report

Christine Wekerle, Ph.D. – Principal Investigator (cwekerle@uwo.ca) Anne-Marie Wall, Ph.D. – Co-Principal Investigator (amwall@yorku.ca) Harriet MacMillan, MD. – Co-Investigator (macmilnh@mcmaster.ca) Nico Trocme, Ph.D. – Co-Investigator (nico.trocme@utoronto.ca) Michael Boyle, Ph.D. – Co-Investigator (boylem@mcmaster.ca) Eman Leung, M.A. – Co-Investigator (eman\_leung@camh.net) Randall Waechter, M.A. – Project Manager (randy\_waechter@camh.net)

Correspondence / Principal Investigator Address: Chris Wekerle, Ph.D. Associate Professor, Education, Psychology, and Psychiatry Faculty of Education The University of Western Ontario 1137 Western Road London, Ontario, Canada N6G 1G7

#### **MAP Feasibility Study Final Report**

#### Purpose of the Study

Child maltreatment may be one of the most preventable and modifiable contributors to child and adult mental illness (DeBellis, 2001). A recent survey of adolescents found rates of a history of maltreatment ranging between 16% and 25%, depending on the type of maltreatment (Brooker, et al., 2001). As a maltreatment event may constitutes a traumatic stressor, developmental traumatology theory and the diathesis-stress model highlight the increased likelihood for impairment across developmental domains in maltreated youth (Cicchetti & Walker, 2001; DeBellis, 2001). Impairment associated with a maltreatment history includes: increased likelihood of psychiatric disorder (e.g., depression, posttraumatic stress, substance abuse), suicidal ideation, risky sexual practices, early pregnancy, revictimization, and involvement in violent teen dating partnerships. Research on protective factors mitigating negative outcomes among maltreated youth is very limited, and has indicated residential stability, academic achievement, and sports involvement as potential buffers. In the only prospective, longitudinal study on resilience in child welfare-involved youth, only 22% were deemed resilient in adulthood (e.g., no period of homelessness, consistent employment, and no juvenile or adult arrests), which significantly differed from matched controls (McGloin & Widom, 2001). Limited prospective work exists that identifies potential pathways regarding continuity with or amplification of early risk, as well as discontinuity or resilience from a point of earlier high-risk, especially in regard to adolescent adjustment. Also, very limited work directly assesses child welfare-involved youth.

Adolescence is a difficult period of adjustment for maltreated youth, as it is a time of resurgence of trauma-related symptoms and issues, provoked by the developmental tasks of identity and romantic relationship-formation which involves maltreatment-similar cues (i.e., physical proximity, relationship-based conflict) (Wekerle & Wolfe, 1998). The event and context of maltreatment may combine to compromise healthy development, and promote conflicting ways of relating, especially with intimates; maladaptive efforts in affect regulation, and episodes of heightened psychiatric problems or onset of disorder. Thus, adolescent health is an important domain of inquiry in terms of the theoretical models of maltreatment outcomes, as well as implications for child welfare practice, mental health service delivery, and prevention programming.

The MAP project targets mid-adolescence (age 14 to 17) as the period of inquiry. The MAP project considers 4 main health risk outcome domains (psychiatric problems/disorders; substance abuse; risky sexual practices; dating violence), selected resiliency factors (interpersonal competence, sports involvement etc.), and potential mediators (e.g., alcohol and violence outcome expectancies) and moderators (e.g., maltreatment characteristics including severity, type) of the child maltreatment – adolescent outcome relationship. The MAP feasibility study is the first step towards being able to track teen health risk over time to consider onset, cross-lagged relationships, and co-morbid issues.

Most research in child welfare considers foster children or children in placements (typically long-term care/crown wards). Community families representing differing levels of child welfare involvement (investigation only; short-term care/reunification or termination, on-going "supportive" involvement) is the largest subpopulation within the Children's Aid Society

(CAS), but not empirically well studied (e.g., Toronto CAS statistics indicate that in any given year, about 21,000 families are on the CAS caseloads, with 17,000 classified as community families). The MAP project is a random sampling of the CAS population situated to be able to draw conclusions about all CAS subpopulations. The first leg of the feasibility study was a necessary step to determine the optimal recruitment strategy and methods for improving retention empirically in this challenging and significantly under-researched population. No significant difficulties were noted in achieving acceptable recruitment and retention rates suggesting that a representative sample of CAS in-care youth, and a reasonable recruitment of community families can be obtained. Further, high retention and low youth participation distress has been demonstrated. Finally, youth have demonstrated tolerance for the length of the MAP assessment as evident in the pre-post questionnaire ratings.

The outcome of the MAP feasibility study has lead to a positive recommendation for a longitudinal study. Current grant applications are underway to carry out the longitudinal study. It will access families at random from the active caseloads of Toronto CAS's. Given the challenges in recruitment, feasibility youth will be offered enrolment into the longitudinal arm and new CAS youth participants will be entered directly into the longitudinal study.

## Population

The study involved the participation of greater Toronto area youth between the ages of 14 and 17 who were randomly selected from Toronto CAS (TCAS), and Catholic CAS (CCAS) active files. All CAS youth were included in the study regardless of their status (e.g. crown ward, society ward, temporary/interim care, community family involvement, voluntary care). Lists of case ID numbers, as opposed to youth names, in the appropriate age range were provided by each agency in order to maintain confidentiality. Random numbers tables were then used to randomly select youth from each of the agencies. These lists of randomly selected youth ID numbers were returned to the appropriate CAS workers at each agency, who then determined whether the youth was eligible for the study. If eligible, the CAS worker initiated contact with the youth regarding potential participation in the study. Youth were otherwise considered ineligible for the study by the CAS worker. This included the following circumstances:

- Youth is discharged from CAS care
- File is closed / youth outside of 14 17 year age range
- Youth is experiencing serious self-harm issues
- Youth is severely developmentally delayed
- Youth is in a drug treatment program
- Youth referred is not the identified client (e.g. brother or sister of youth receiving care)
- Youth is in secure custody
- Youth is AWOL
- Youth is experiencing serious psychiatric issues

Written informed consent was obtained from all youth who participated in the study and substitute consent was obtained from legal guardians for those youth who were under 16 years of age. Confidentiality was given paramount consideration in the design of the study. All data was identified with a self-generated ID numbers produced by the youth. This self-generated ID number was used to identify the data and could not be used to identify the youth after the data was collected. Files with youth name identifying information, and consent forms were kept

separate from raw data. The study received ethical approval from the research ethics office of the Centre for Addiction and Mental Health, the site of the MAP feasibility study. The majority of youth were tested in their homes and were paid \$28 for each session of the study. Those youth who traveled to the researcher's office for testing were also reimbursed for their travel costs.

#### Length and Intensity

During the first year of the feasibility study the CAST was involved in: 1. Obtaining ethical approval for the study from participating child welfare organizations (CAST, CCAS). 2. Establishing the MAP research advisory group for the feasibility study in the CAST and CCAS. 3(a). Development of the MAP questionnaire. 3(b). Development of MAP study protocols such as consent forms, distress forms, and help sheets, together with the MAP research advisory group. 4. Field testing the MAP questionnaire with youth focus groups. 5. Training around research protocols and methodology. 6. Obtaining institutional ethical approval.

Youth data collection in the feasibility study was conducted over a period of approximately 18 months. During that time, 189 youth were referred from both CAST and CCAS. Of those, 59 were ineligible for the study and 130 were eligible. Of the 130 eligible referrals, 38 refused participation in the study and 4 were unable to be contacted. In the end, 88 youth participated in the feasibility study, for a 68% eligible recruitment rate (see table 1). The study will move on to the longitudinal stage, in which participants will be tested every 6 months over a two-year period. Feasibility recruitment rates at 6 months and 1-year follow-up testings stand at 89% and 90%, respectively.

#### **Program Structure**

The MAP Feasibility study was designed around a community agency / research institute partnership between The Children's Aid Society of Toronto (CAST), Catholic Children's Aid Society (CCAS) and The Centre for Addiction and Mental Health (CAMH) as the lead academic institution. The study was designed and advised by advisory panels from TCAS and CCAS, and was carried out by researchers in the Child, Youth, and family Program at CAMH. CAS workers also provided invaluable support in carrying out the study via the recruitment of youth participants. The CAS advisory panels advised with the selection of the measures used in the study, as listed below.

MAP researchers met with an advisory panel from both TCAS and CCAS on an approximately bi-monthly basis. The purpose of these meetings was to review participant recruitment status, obtain feedback from workers around study methodology, review research questions or issues that had arisen during the course of data collection, and obtain CAS worker feedback on the community agency / research institute partnership.

Feedback was gathered with the use of a proprietary survey called the CAS Worker Participatory Action Questionnaire, which measured relevance of the research, collaborative effort, contributions, and support. CAS workers generally reported positive results on this questionnaire, indicating that the research was relevant (mean = 5.7 of a possible range from 0

## Table 1

CAS Status	Total Referrals	Ineligible Referrals	Eligible Referrals	Participation Refusals	Waiting for Testing	Tested July 15 / 04
Crown Ward	52	9	43	9	1	33
Society Ward	49	11	38	3	2	33
Temporary / Interim Care	17	10	7	3	1	3
Community Family / Voluntary	71	29	42	23	0	19
Male	92	25	67	26	2	39
Female	97	34	63	12	2	49
TOTAL	189	59	130	38	4	88

# MAP Feasibility Study Youth Recruitment Statistics-July 15/2004

[no relevance] to 7 [extremely high relevance]) and the workload was not too heavy (no = 90%). See attachment 1 for a copy of the questionnaire and CAS Worker responses. CAS workers were not paid directly for their involvement in the MAP study, but each branch of TCAS and CCAS did receive a \$500 honourarium once research staff at CAMH had received 10 eligible participant referrals.

# Methods

# Participants

The study involved the participation of greater Toronto area youth between the ages of 14 and 17 who were randomly selected from Toronto CAS (TCAS) and Catholic CAS (CCAS) files. All CAS youth were included in the study regardless of their status (e.g. crown ward, society ward, temporary/interim care, community family involvement, voluntary care).

### Measures

Participants in the study completed the following surveys and instruments:

I. Commercially-available Published Instruments

- The Childhood Trauma Questionnaire (CTQ): (Bernstein et al., 1994)
- The Trauma Symptom Checklist for Children (TSCC): (Briere, J., 1996)
- The Brief Symptom Inventory: (BSI): (Derogatis, 1994)
- Kaufman Brief Intelligence Test (K-BIT): (Kaufman, A. S. & Kaufman, N. L., 1990).

II. Empirically Developed/Published Questionnaires

- History of Child Maltreatment (CEVQ): (Walsh, MacMillan, Trocme, Dudziuk, & Boyle, 2000).
- Family History of Alcoholism (F-SMAST): (Crews & Sher, 1992)
- Alcohol and Other Drug Use (OSDUS): (CAMH, 2003)
- Adolescent Problem Drinking: The Rutgers Alcohol Problem Index (RAPI): (White & Labouvie, 1989).
- Adolescent Problem Drug Use: The drug abuse screening test (DAST): (Skinner, 1982).
- Adolescent Dating Violence: The Conflict in Adolescent Dating Relationships Inventory (CADRI): (Wolfe et al., 2001).
- Alcohol Outcome Expectancies: The Comprehensive Effects of Alcohol (CEOA): (Fromme & D'Aminco, 2000).
- Alcohol-related sexual and physical intimate violence (AESASVQ): (Abbey, McAuslan, Ross, & Zawacki, 1999)
- Motivations for Sexual Behaviour (SMS): (Cooper, Shapiro, & Powers, 1998).
- Angry Affect State-Trait Anger Expression Inventory (STAXI-2): (Spielberger et al., 1983; Spielberger, 1999).
- Interpersonal Competence: Four subscales (negative assertion, disclosure, emotional support, and conflict management) of the Interpersonal Competence Scale. (Buhrmester, Furman, Wittenberg, & Reis, 1988).
- Self-Esteem: Six items taken from the OSDUS (Adlaf, 2001).

• Drinking Motives (DMQ): (Cooper, 1994).

III. Lab-Developed Pilot Instruments

- Participation Impact Scale: Drawing on the limited work that has been conducted that examines the emotional impact of participating in survey research involving sensitive questions (e.g., Jacomb et al., 1999; Turnbull, McLeod, Callahan, & Kessler, 1988), preand post participation impact scales were included.
- Personal Background Questionnaire: Included a survey of participants' ethnic background, educational level and performance, age, current living arrangements, as well as paternal and maternal figures' educational background, tailored to a child welfare population.
- Modeling Influences, Parental Identification, and Community Involvement Survey: In keeping with a social-learning explanation of how alcohol and drug-taking behavioural patterns are established (Wall & McKee, 2002), this instrument was used to assess parental, sibling, and close friends' frequency of alcohol and drug-taking behaviour, as well as participants' degree of identification with paternal and maternal figures and community (e.g., school and neighbourhood) involvement.
- Involvement in Risk and Protective Activities: Adapted from the National Longitudinal Survey of Children and Youth (NLSCY), participants' annual frequency of involvement in risk (e.g., bullying) and protective (e.g., family gatherings, sports, hobbies, etc.) activities were assessed.
- Drug Outcome Expectancies: Following the reliable and well-validated method of assessing the contribution of alcohol outcome expectancies (AOEs) to drinking patterns (Wood, Sher, & Strathman, 1996), participants were asked to self-generate expected outcomes for their preferred drug of choice
- Emotionally and Physically Aggressive Outcome Expectancies: Borrowing from the alcohol expectancy literature (e.g. Wood et al., 1996), participants were asked to self-generate expected outcomes as a result of behaving emotionally (e.g. yelling) and physically (e.g. slapping, pushing, shoving) aggressive towards his/her best friend, girlfriend/boyfriend, or adult caregiver.
- Implicit Memory Associations for Risky Behaviours: Drawing on the extensive work conducted within the addiction field by Stacy and colleagues (e.g., Leigh & Stacy, 1994, 1998; Stacy, 1997; Stacy, Leigh, & Weingardt, 1994), cue associates, outcomebehavioural associates, and "Draw A Picture" tasks were employed to assess implicit cognitions concerning risky behaviours.

### Procedure

Lists of all active caseloads of youth between the ages of 14 and 17 were obtained from TCAS, CCAS, and JFCS. The files were identified via CAS case number, which allowed for the elimination of youth names and maintenance of confidentiality. Case files for each agency were then randomly drawn using a numbers table, and lists of selected youth were returned to the appropriate branch (e.g. North York, Toronto, Scarborough, Etobicoke, Long-term Care) of each agency. Branch liaisons then contacted the workers with randomly selected youth on their caseloads. Workers explained the study to participants (as per a set script) and obtained verbal telephone consent from the youth (or if under 16 years, the youth's guardian) for a member of the MAP team to contact him/her and explain the study in further detail. The research group took the perspective that it is more ethical to have the study introduced by CAS than by an unknown source given the context of protection, by virtue of being on the active caseload of CAS. CAS youth should be protected from "cold calls" from unfamiliar parties. The worker introduction is scripted and provides a familiar connector. Throughout the recruitment process, the voluntary nature, freedom to withdraw, and purpose of the study was explained to the youth.

CAS workers then sent signed recruitment forms to MAP staff if the youth agreed to receive a phone call to further discuss the study, or an inability to recruit feedback form if the randomly referred youth was ineligible for the study or refused to participate in the study. This inability to recruit form outlined the reason for the youth's inability or refusal for participation as determined by the case worker. MAP research staff then phoned youth directly to explain the study in more detail and set up an appointment for data collection.

A youth self-report questionnaire package containing mostly commercially available, standardized, published; empirically validated and, to a lesser extent, unstandardized instruments was used. Also, a population-based survey of drug use behaviour, and a brief intelligence test was administered for the 1-year feasibility participants. The MAP study maintained anonymity with a self-generated ID number system for all data. Data collectors are separate from data entry persons. Data collectors supervise the questionnaire administrations. All data was unmarked and sealed in an envelope on which the youth added their self-generated ID. As such, researchers had no way of linking each youth's identity to his/her questionnaire data. Mandatory reporting obligations were followed as per any verbal disclosures to research staff. All youth were provided with the Kids Help Line and other resources listed on a help sheet after every assessment.

To guide the MAP procedures and support resolution of any concerns, there was a CAS Advisory Board per CAS site (Catholic CAS, Toronto CAS) where members were compensated for their time coordinating MAP activities in their CAS branch with an honorarium per CAS branch. CAS/MAP Advisory Boards meet with MAP researchers on a bi-monthly basis.

Results

The Initial phase of the MAP study was referred to as a feasibility phase, and was designed to examine whether this type of research could be done. The feasibility study examined recruitment rates among the youth, as well as some select preliminary questionnaire results. To date in the MAP study, 189 youth ages 14 to17 (mean age of 15 years) have been randomly drawn from agency caseloads. Fifty-nine (31%) of the referred youth were ineligible to participate for the following reasons:

•	Case closed / discharged	30%
•	Mental health issues	12%
•	AWOL	19%
•	Developmental delay	14%
•	In secure custody	5%
•	Not receiving child welfare services	20%

Of the 130 eligible youth, a 70% initial recruitment rate (N=88), an 89% retention rate at 6-month follow-up (N=48), and a 90% retention rate at 1-year follow-up (N=19) has been achieved. This includes a 79% recruitment rate among Crown wards, 92% among society wards, 57% recruitment rate among temporary care wards, and a 45% recruitment rate among those youth in community care. The average time required by youth to complete the questionnaire is 2.8 hours, with a range of 2 to 4.5 hours. Initially, youth were asked to travel to offices at the Centre for Addiction and Mental Health (CAMH) in Toronto for testing, but the strategy was altered after a low turnout rate of less than 50% for the first block of subjects. While still given the option to travel to CAMH, most youth (86%) are now tested in their homes, at an average cost of \$98.21 per testing session, taking into account researcher travel cost and participant payment. In total, MAP research staff traveled 16,425 kilometres to test youth in their homes during the life of the feasibility study.

Initial ease of recruitment data suggests that CAS workers are able to connect with youth in a reasonable amount of time to introduce them to the study (mean=1.1 attempts to connect) (see attachment 2 – MAP Youth Recruitment Outcome Data). Participant payment (youth are paid \$28 each time they complete the MAP questionnaire package) is the single largest motivating factor behind youth recruitment for the study (59%), followed by "no reason given" (32%). Unfortunately, the reasons behind youth's refusal to participate in the study despite eligibility are not clear, with the majority of youth responding that they are "just not interested" or give no reason (65%). Parental refusal accounts for 14% of youth who decide not to participate in the study, while a small number say they are "too busy" (8%) or are "not comfortable sharing their experiences" (5%). Initially, it appears that youth are reserved about participating in the MAP study when contacted by their CAS worker, with 52% being "somewhat interested", 33% being "very interested" and 15% having "no interest" in the study.

Once youth agree to participate in the study, it is quite labour intensive for MAP research staff to contact them, explain the study in further detail, set up an appointment to meet with them (often in their home), meet with them and collect the data, and then file the data appropriately. MAP research staff have had to make as many as 19 calls to a single youth before meeting with him/her, with the average number of calls being 4. Initially, youth were encouraged to travel to offices at the Centre for Addiction and Mental Health for data collection, but this quickly evidenced itself as a flawed method, given the challenges of this particular population of participants. This is further elucidated by the fact that approximately 1 of every 10 meetings for

MAP data collection are cancelled by youth (most of these are ultimately re-scheduled) and more than 1 of every 10 MAP data collection meetings are simply missed by youth (i.e. failure to show). This problem has been somewhat addressed by altered project methodology which involves MAP researchers travelling out to test youth in their homes in the majority of cases (88%).

Preliminary results suggest that child welfare youth are experiencing an elevated degree of bullying and physical abuse (see Table 1). Fully 71% of surveyed CAS youth report bullying, 86% report physical abuse, and 46% report sexual abuse. Initial feasibility results also suggest that child welfare youth (and especially females) report lower sexual risk-taking and higher substance use and violence than normative estimates (see Tables 2 and 3).

Category	% of total sample: Yes	% of males: Yes	% of females: Yes
Bullied	71%	75%	63%
Physical abuse	86%	94%	79%
Sexual abuse	46%	38%	63%

Table 1 - Childhood experiences of violence questionnaire

Analyses on participatory experience indicate that youth do experience some minor stress and discomfort in completing the MAP questionnaire package (see Table 4). For instance, youth report being significantly less relaxed after (mean = 3.3) as opposed to prior to (mean = 4.3) filling out the MAP questionnaire, t=3.1, p<.01. Youth also report feeling less happy (mean = 4.1) after as opposed to prior to (mean = 2.9) filling out the MAP questionnaire package, t=4.1, p<.001. Despite this, participants show no differences in tenseness or distress levels as measured pre and post-MAP questionnaire completion (see Table 4).

Furthermore, it appears that youth remain interested in MAP research participation (see Table 4). For instance, when asked how important they think the research study is, the mean response remains steady at 4.8 and 4.9 on a scale of 0 (Not at all) to 6 (A lot) fro pre to post-MAP questionnaire completion. Youth also respond somewhat positively to the statement "I gained something by filling out this questionnaire", with a mean response of 3.5 on the same scale mentioned above. Finally, when asked if they would still have agreed to take part in the study after completing the questionnaires, the average response was 5.2 on a scale of 0 (Not at all) to 6 (A lot). This suggests that the youth tolerate the MAP questionnaire package well and may help to explain our extraordinary 6-month and 1-year follow-up retention rates of approximately 90%.

Table 2 - Sexual activity questions

Question	% of total sample: Yes or Mean	% of males: Yes or Mean	% of females: Yes / or Mean	
Have you ever had sexual intercourse?	55%	63%	47%	
How old were you when you had sexual intercourse for the first time?	13.7	13.6	13.8	
How old was your boyfriend or girlfriend at the time?	14.8	14	15.8	
How much did you want this to happen? - I didn't want it to happen - I was unsure about it - I wanted it to happen How long did you know each other	6% 29% 65%	0% 22% 78%	13% 38% 49%	
before having sex (in years) Was any protection used at the time?	87.5%	75%	100%	
If so, what type of protection was used? - Condom - Birth control pills - Other	100% 33% 7%	100% 43% 14%	100% 25% 0%	
Did you drink alcohol or use drugs before you had sexual intercourse for the first time?	31%	33%	29%	

Table 3 - Substance abuse questions

% Total sample who have used	Mean age & (SD)		
73%	<b>12.7</b> (2.2)		
47%	<b>12.4</b> (2.6)		
57%	<b>12.1</b> (2.1)		
50%	<b>12.7</b> (1.9)		
% Total sample who have used	Mean # of days & (SD)		
60%	<b>.8</b> (1.1)		
51%	<b>.4</b> (.9)		
54%	<b>3.8</b> (1.6)		
49%	2 (1.8)		
s $13 + days$ Once per day 3 4	or more 5		
	% Total sample who have used   73%   47%   57%   50%   % Total sample who have used   60%   51%   54%   49%   s 13+ days Once per day   3 4		

Response options					
Not at all	So-so		A lot		
0 1	2 3	4 5	6		
Question	Pre-questionnaire mean & (SD)	Post-questionnaire mean & (SD)	Significant difference?		
How relaxed do you feel?	<b>4.3</b> (1.2)	<b>3.3</b> (1.7)	<i>t</i> =3.09, <i>p</i> <.01		
How happy do you feel?	<b>4.1</b> (1.5)	<b>2.9</b> (1.8)	<i>t</i> =4.13, <i>p</i> <.001		
How clear is this study to you?	<b>4.8</b> (1.3)	<b>5.1</b> (1.1)	-		
How distressed do you feel?	<b>1.9</b> (1.7)	<b>2.5</b> (1.9)	-		
How interested are you in this study?	<b>4.6</b> (1.4)	<b>4.6</b> (1.5)	-		
How important do you think this study is?	<b>4.9</b> (1.2)	<b>4.8</b> (1.5)	-		
How easy is it for you to breathe?	<b>5.1</b> (1.2)	<b>5.1</b> (1.3)	-		
How tense are your muscles?	<b>1.8</b> (2.1)	<b>2.5</b> (2.3)	-		
How high is your energy level?	<b>4.1</b> (1.5)	<b>3.8</b> (1.7)	-		
How easy do you feel it is to express yourself?	<b>4.2</b> (1.6)	<b>3.9</b> (1.9)	-		
How well do you think you could focus on things?	<b>4.4</b> (1.2)	<b>4.2</b> (1.6)	-		
I gained something from filling out this questionnaire	N/A	<b>3.5</b> (1.9)	N/A		
Had I known in advance what completing this questionnaire would be like for me, I still would have agreed	N/A	<b>5.2</b> (1.4)	N/A		

The MAP has now moved beyond the feasibility stage of the study and has moved on to the full longitudinal study, which will involve the referral of between 400 and 450 youth in total from CAST, CCAS and the Toronto Jewish Family and Children's Aid Society. A peer-reviewed journal article based on the MAP feasibility study is currently being written. This article will highlight the fact that while the MAP study is complicated and expensive, the youth seem to tolerate it well and the information it will provide about youth in the child welfare system is invaluable to planning targeted assessment, prevention, and treatment for child welfare-involved youth across a number of key health risk areas.

### Mobilized Resources

Over the life of the project, the MAP Feasibility study employed or involved 10 part-time graduate research assistants and 6 undergraduate work-study students. The longitudinal phase of the study is ongoing, and further funding is currently being sought to continue the study for another five years (two-year longitudinal with total N = 470). Existing participants will be followed-up on during this period and new participants will be recruited. A peer-reviewed publication based on the results of the feasibility study is currently being written and plans are underway to include information on the MAP Feasibility study in a special edition of the Ontario Association of Children's Aid Societies journal. This special edition will focus on participatory action research from the researcher, agency, and liaison person's perspective, and has a scheduled release early in the year 2005.

In the meantime, a presentation based on the results of the MAP study called "Setting the Stage for Evidence-based Practice in Child Welfare" will be presented at the Making Gains Conference in October 2004. The MAP Feasibility Study has also been featured in a number of newsletters including "Canada's Children", a publication of CIHR-CECW; "Communicate", a publication of the Children's Aid Society of Toronto; and "Connections", a publication of the Catholic Children's Aid Society. Workshops based on the research conducted in the MAP Feasibility study have also been held for CAS workers at the Catholic Children's Aid Society.

Lastly, the results and outcome of the MAP Feasibility study continue to foster further research goals, such as the CIHR-NET sponsored study examining the impact of child maltreatment on adolescent and adult health outcomes (Chris Wekerle, principal investigator). This NET has fostered collaboration with the OSDUS, Canada's longest-running teen population based survey on health risk behaviours. The OSDUS questionnaire administered to MAP youth will provide comparison points to the Ontario and Toronto-area population of youth. An application was also recently made to the Network for Centres of Excellence regarding the formation of a Canadian Child Welfare Research Network (Chris Wekerle, principal investigator). While the application was invited for a full application, it was not accepted at this time.

References

Abbey, A., McAuslan, P., Ross, L. T., & Zawacki, T. (1999). Alcohol expectancies regarding sex, aggression, and sexual vulnerability: Reliability and validity assessment. <u>Psychology of Addictive Behaviours, 13, 174-182</u>.

Adlaf, E. (2001). The Ontario Student Drug Use Survey. Toronto, Ontario: Centre for Addiction and Mental Health.

Bernstein, D. P., Fink, L., Handelsman, L., & Foote, J. (1994). Initial reliability and validity of a new retrospective measure of child abuse and neglect. <u>American Journal of</u> <u>Psychiatry</u>, 151 (8), 1132-1136.

Briere, John (1996). *The Trauma Symptom Checklist for Children: Professional manual.* Lutz, Florida: Psychological Assessment Resources Inc.

Brooker, S., Cawson, P., Kelly, G., & Wattam, C. (2001). The prevalence of child abuse and neglect: a survey of young people. *International Journal of Market Research*, *43*, 249-289.

Buhrmester, D., Furman, W., Wittenberg, M. T., & Reis, H. T. (1988). Five domains of interpersonal competence in peer relationships. <u>Journal of Personality and Social Psychology</u>, 55, 991-1008.

Cicchetti, D., & Walker, E.F. (2001). Editorial: Stress and development: Biological and psychological consequences. *Development and Psychopathology*, *13*, 413-418

Cooper, M. L. (1994). Motivations for alcohol use among adolescents: Development and validation of a 4-factor model, *Psychological Assessment*, *6*, 117-124.

Cooper, M. L., Shapiro, C. M., & Powers, A. M. (1998). Motivations for sex and risky sexual behavior among adolescents and young adults: A functional perspective. <u>Personality</u> <u>Processes and Individual Differences</u>, 75, 1528-1558.

Crews, T. M., & Sher, K. J. (1992). Using adapted short MASTs for assessing parental alcoholism: Reliability and validity. <u>Alcoholism: Clinical and Experimental Research</u>, <u>16</u>, 576-584.

DeBellis, M. (2001). Developmental traumatology: The psychobiological development of maltreated children and its implications for research, treatment, and policy. *Development and Psychopathology*, *13*, 539-564.

Derogatis, L. R. (1994). The Brief Symptom Inventory (BSI) Administration, Scoring, and Procedures Manual. Minneapolis: NCS Pearson, Inc.

Fromme, K., & D'Amico, E. J. (2000). Measuring adolescent alcohol outcome expectancies. <u>Psychology of Addictive Behaviors, 14,</u> 206-212.

Jacomb, P. A., Jorm, A. F., Rodgers, B., Korten, A. E., Henderson, A. S., & Christensen, H. (1999). Emotional response of participants to a mental health survey. <u>Social Psychiatry and</u> <u>Psychiatric Epidemiology</u>, 34, 80-84.

Kaufman, A.S., & Kaufman, N.L. (1990). *The Kaufman Brief Intelligence Test: Manual*. Circle Pines, MN: American Guidance Service.

Leigh, B. C., & Stacy, A. W. (1994). Self-generated alcohol outcome expectancies in four samples of drinkers. <u>Addiction Research</u>, 1, 335-348.

McGloin, J.M., Widom, C.S. (2001). Resilience among abused and neglected children grown up. <u>Development and Psychopathology</u>, 13, 1021-1038.

Skinner, H. A. (1982). The Drug Abuse Screening Test. <u>Addictive Behaviors, 7</u>, 363-371. Spielberger, C. D. (1999). *The State-Trait Anger Expression Inventory*, 2<sup>nd</sup> Edition. Lutz,

FL: Psychological Assessment Resources, Inc.

Spielberger, C. D., Jacobs, G., Russel, S., & Crane, R. S. (1983). Assessment of anger: The state-trait anger scale. In J. N. Butcher & C. D. Spielberger (eds.), <u>Advances in personality</u> <u>assessment</u>, (Vol. 2, pp. 159-187). Hillsdale, NJ: Lawrence Earlbaum.

Stacy, A. W. (1997). Memory activation and expectancy as prospective predictors of alcohol and marijuana use. Journal of Abnormal Psychology, 106, 61-73.

Stacy, A. W., Leigh, B. C., & Weingardt, K. R. (1994). Memory accessibility and association of alcohol use and its positive outcomes. <u>Experimental and Clinical</u> <u>Psychopharmacology</u>, *2*, 269-282.

Turnbull, J. E., McLeod, J. D., Callahan, J. M., & Kessler, R. C. (1988). Who should ask? Ethical interviewing in psychiatric epidemiology studies. <u>American Orthopsychiatric</u> <u>Association, 58, 228-239</u>.

Wall, A-M., & McKee, S. A. (2002). Cognitive social learning models of substance abuse and relationship violence. In C. Wekerle & A-M. Wall (Eds.). <u>The violence and addiction</u> <u>equation: Theoretical and clinical issues in substance abuse and relationship violence</u>, (pp. 123-152). Philadelphia, PA: Brunner/Mazel.

Walsh, C. A., MacMillan, H. L., Trocme, N., Dudziuk, J., & Boyle, M. (2000). Psychometric properties of the childhood experiences of violence questionnaire. Victimization of Children and youth: An International Research Conference, Durham, NH.

Wekerle, C., & Wolfe, D. A. (1998). Prevention of child physical abuse and neglect: Promising new directions. <u>Clinical Psychology Review</u>, 13, 501-540.

White, H. R., & Labouvie, E. W. (1989). Towards the assessment of adolescent problem drinking. Journal of Studies on Alcohol, 50, 30-37.

Wolfe, D. A., Scott, K., Reitzel-Jaffe, D., Wekerle, C., Grasley, C., & Straatman, A-L. (2001). Development and validation of the conflict in adolescent dating relationships inventory. <u>Psychological Assessment, 13,</u> 277-293.

Wood, M. D., Sher, K. J., & Strathman, A. (1996). Alcohol outcome expectancies and alcohol use and problems. Journal of Studies on Alcohol, 57, 283-288.

# Attachment 1 - MAP Participatory Action Research Questionnaire

() Not at (	-11		Scale	Scale					)
		3	Extremely			6		(+)	
1	2 3 <del>7</del> 3							,	
Question						N	Mean	( <b>SD</b> )	
1. How relevan	t to your work	is this research?				34	5.7	1.1	
2. How investe	d do you feel ii	n this research project?				34	5.7	1.0	
3. How collabo	orative has this	project been?				33	5.8	1.2	
4. Given where you are at in your career, how much have you learned about research?						32	4.6	1.3	
5. Given where you are at in your career, how much have you learned about practice?					33	4.4	1.3		
6. Have you felt your contributions were taken into consideration by the group?					33	6.1	.9		
7. How supportive has your institution been about your participation in this research?					34	5.7	1.1		
8. Have the group meeting minutes been accurate reflections of the group discussions?					28	6.3	.7		
9. Have the group meeting minutes been helpful?					31	5.8	.9		
10. Do you believe this project can have an impact on practice and benefit CAS youth?				33	6.2	.7			
Have you discussed this research project with your supervisor? (N=27) 96% - Y					ES	4%	6 - NO		
Have you discu	issed this resea	rch project with other s	staff? (I	N=32)	94% - YI	ES	6%	6 - NO	
Are these discu	ssions being up	pdated over time?	(1	N=27)	89% - YI	ES	119	% - NO	
Is the workload for this project too heavy? (N=29) 10% - Y					10% - YI	ES	909	% - NO	
Please estimate the number of hours / week you devote to this project					23	1.4	1.1		

# Data Analysis – MAP Participatory Action Questionnaire (July 15, 2004) Total N=34

Attachment 2 - MAP Youth Recruitment Outcome Database Total N=189

1.) Number of attempts made by CAS Worker to speak with youth:

N=185 Min. = 0 Max. = 4 Mean = 1.1 St. Dev. = .7

#### 2.) Reason given for those youth who initially agreed to participate:

N=105 Money - 59% No Reason Given - 32% Several Reasons Given - 4% Simply "Interested" - 2% Interested in changing the "System" - 2% Hoping it will help with relationship issues - 1%

3.) Reason given by those youth who initially refused to participate despite eligibility:

N=37 Just not interested / no reason given – 65% Parents refuse participation – 14% Too busy – 8% Not comfortable sharing experiences – 5% It will interfere with school – 3% The payment is not high enough – 3% Several reasons – 2%

4.) Interest expressed by eligible youth when CAS worker informed him/her of the study:

N=126 Not at all interested – 15% Somewhat interested – 52% Very interested – 33%

5.) Number of calls made to ELIGIBLE youth by MAP research staff:

Total = 496 Min. = 0 Max. = 19 Mean = 3.9 St. Dev. = 3.3

6.) Number of meetings with MAP research staff cancelled by youth:

Total = 15 Min.= 0 Max. = 2 Mean = .08 St. Dev. = .29

7.) Number of meetings with MAP research staff missed by youth:

Total = 23 Min. = 0 Max. = 2 Mean = .12 St. Dev. = .36