

## Appendix A

# Research Methodology

This study employed an experimental design whereby each of the 409 referred youth were randomly assigned to either the MST group or the usual services group, which functioned as a control group. Data were also collected on the referral profile of the youth and the process of implementation was observed throughout the four years by the research team. The full research protocol is available for download:

[www.lfcc.on.ca/mst\\_overview.html](http://www.lfcc.on.ca/mst_overview.html)

The most pertinent aspects are described here.

It is important to note that MST supervisors and therapists were responsible for many research tasks above and beyond their work with families. Supervisors screened cases against the exclusionary criteria and maintained files with referral information. The therapists sought consent from families in their homes, administered pre-tests, debriefed control group members, contacted the school regarding the control group, and administered post-tests to MST and control cases. They also reviewed control cases for abuse and suicide risk and took appropriate action when necessary.

## Referral Criteria

During the research period, inclusionary and exclusionary criteria were set by the research team to ensure that referrals matched the referral criteria devised by MST Services Inc. Each site devised a local variation for securing referrals and processing cases within the strict dictates of a randomized study. The different referral streams are described elsewhere.<sup>1</sup> The goal was to have a strategy that limited referrals to the most appropriate cases and that referred potential candidates in such a way that no MST waiting list was created. In two sites (Mississauga and Simcoe County) referrals were accepted only from probation officers. In the other two sites (London and Ottawa) referrals were taken from community referrals agents. Differences among the sites have been discussed in the sixth chapter of this report.

### Inclusionary and Exclusionary Referral Criteria

Cases were not screened for treatment amenability or excluded because of poor prognosis for success. However, there were two categories of criteria used to determine eligibility for MST:

- the situation of the youth was consistent with a family preservation modality of treatment
- the presenting issues of the youth were among those for which MST has been empirically validated

### Appropriateness for Family-Preservation Intervention

The first category of exclusionary criteria addressed the appropriateness of a family-preservation intervention.

#### Requisite Level of “Family” Involvement

MST being a family-based intervention, a youth must have at least one adult caregiver. This may be a parent but could also be an older sibling, grand-parent, aunt, uncle or friend of the family. A Crown ward in a stable, foster placement would qualify. However, a client of the Children’s Aid Society in a new placement would probably not have qualified, as there was no way to determine if the placement would break down. Typically, youths in group homes or other residential settings were not suitable MST candidates unless a family reunification was imminent or a substitute caregiver could be identified.

#### Current Family Therapy

If the family was already engaged with a therapist and making gains, the intervention of a MST worker would be

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<sup>1</sup> London Family Court Clinic (1998). *Clinical Trials of Multisystemic Therapy with High-Risk Young Offenders, 1997 to 2001: Year-End Report 1997/98*. London ON: London Family Court Clinic. This report is available for download at [www.lfcc.on.ca/mst\\_overview.html](http://www.lfcc.on.ca/mst_overview.html)

neither needed nor appropriate. Had the arrangement later broke down, a referral could be made.

### **Safety of Youth and Family**

MST uses a family preservation model but some families cannot be preserved safely. When assessing the appropriateness of an MST referral, safety concerns overrode all others, whether that involved youths at risk of abuse, at risk of suicide, or at risk of harming other members of the family. MST is not a substitute for child protection involvement, in-patient hospitalization, or community safety through custody/detention.

### **Risk of Injury to Worker**

Clinical supervisors, perhaps in consultation with the police or probation officers, had the discretion to disqualify a case from the clinical trial because of a risk of injury or harm to the MST worker while in the family home. This situation was NOT indicated merely by family violence or assault convictions and it was only used once in the four years.

### **MST-Amenability**

The **second** category of exclusionary criteria pertains to the types of cases with which MST has been demonstrated effective. It has been tested on youths with many presenting problems, all of whom have one thing in common: criminal behaviour. Based upon clear direction from MST Services Inc. in South Carolina, two groups were deemed *ineligible* for MST at this point in time:

#### **Sex Offenders**

Sex offenders must be excluded because MST has not yet been demonstrated as effective with this group (although a project is under way to adapt MST to this purpose).

#### **Acute Psychosis**

Youths who were acutely psychotic were not candidates for the MST project. However, a psychiatric diagnosis was not a disqualifying factor in itself.

### **High Propensity for Future Criminal Behaviour**

The goal was to select youths who were at high risk for committing criminal offences in the future, particularly those likely to be incarcerated as young offenders.

#### **Phase I Referrals**

Prediction of future offending among the youths under 16 was made with the Risk/Need Assessment (RNA) instrument which was used by the Ministry of Community and Social Services. Youths qualified for referral to MST if they fell into one of two categories: high (scores of 27 to 34); or, very high (35 to 42). If insufficient numbers of these cases were available, clinical supervisors had the discretion to include "high moderates" (scoring 21 to 26). In addition, some youths who scored lower than 27 had been overridden into a higher category by a probation officer. They also qualified for MST. Detailed information on the Risk/Need scores can be found in Appendix C.

#### **Under 12 Referrals**

Referrals were accepted for youths under 12 years of age in the Ottawa site, meaning they had no official criminal record and no RNA scores. A modified version of the RNA was used to determine their risk for future offending. This instrument – based largely on the RNA – was completed either by the referral agency (e.g., police, children's mental health centre) or in some cases by one of the MST staff in Ottawa. In total, 29% of the Ottawa referrals were for youths under 12 years of age.

#### **Phase II Referrals**

In the last year of the project, referrals were accepted from youthful clients of the Ministry of Correctional Services. These so-called Phase II young offenders were all assessed using an instrument called the Level of Services Inventory (Ontario Revision), a tool which is used in the probation/parole offices of their Ministry. In total, there were 11 Phase II youth referred during the period of study.

## **Seeking Consent**

When a youth was referred to MST and met the inclusionary criteria, the next step was to approach the family about participation in the randomized study. In most cases, the option of MST had already been discussed with the family by

the person who made the referral and the family would have signed a consent form agreeing to the release of their names to the MST team. Signing such a consent did not oblige the family to participate in the study and they were free to refuse consent once they were told about the study, or indeed at any time during their participation.

The next step was for the MST team to contact the family and explain to them both how MST works and the contingencies of the randomized study. Consistent with the MST philosophy, this meeting almost always occurred in the family home. It was not uncommon that the youth was living elsewhere at the time, perhaps in custody, which necessitated two sessions at different places.

Strict observation of ethical principles was crucial in this process. The characteristics of an ethical study are that:

- g there is no negative consequence for those who decline to participate
- g there is no negative consequence for those who do
- g potential participants are informed of all that is expected of them including all benefits and risks which may be associated with participation
- g consent to participation is freely and voluntary given, with full appreciation of the above
- g participants understand that they can withdraw their consent to continued participation at any point in the process
- g all information gathered about them will be maintained in confidentiality
- g anonymity is assured in that individual participants will not be identified in any report or document produced

For the MST study, the implications of these standards were these. Potential participants must have understood:

- g what MST entailed, including the amount of time spent in the home, the intensity and duration of intervention and what was expected of the family
- g that youth who declined to participate in the study would receive the same level of intervention they would normally expect in their community (i.e., they were not penalized for declining consent)
- g that half of those who signed the consent forms would be receiving multisystemic therapy which would commence immediately
- g that half of those who signed the consent forms would continue to receive whatever intervention would have been available to them had no MST study been under way
- g that the decision about who gets the MST was made randomly so each person had an equal (50/50) chance of being selected
- g that the services offered to the control group were not a placebo or were not inferior but rather constituted the typical services available to young people in their community
- g that participation in the study entailed filling out some forms to gather background information
- g that families were free to drop out of the MST treatment at any time
- g that all information they provided would remain confidential except in three circumstances: 1) a person under 16 is at risk as defined in the *Child and Family Services Act*; 2) a person voiced a fixed intention to harm a specific other person that must be communicated to the police; or, 3) the information is subpoenaed by a judge
- g that at one, two and three year intervals, the criminal records of the youth will be checked and that this information will not be revealed to anyone outside the research group

A Letter of Information for potential participants provided a written explanation and a verbal explanation was also provided. A French language version was available for use in Ottawa. The MST therapist had to be assured that each person fully understood MST and what the study involved. Those who agreed to participate, both the youth and a parent/guardian, signed two consent forms: one consenting to participation in the randomized study and one granting permission to access the police and correctional data bases used in the follow-up. In addition, depending upon the standard protocol of the agency delivering MST, the family usually signed a consent to receive services agreement and may have been asked to provide consent to contact collateral sources of information.

The frequency and rationale of decliners were tracked. The rate of refusal must be low enough to avoid the possibility of a volunteer bias and to keep the generalizability of the results high. It is important not to systematically screen out treatment-refusing youth. The MST intervention can proceed without the active participation of the youth, but he or she had to have signed the consent form.

Experience was that the parents were more likely to decline participation than were the youths. Some parents are reluctant to have a therapist in the home or the intensive nature of the intervention did not appeal to them. Some families failed to see the need for counselling while others were satisfied with the services already provided by other agencies. Finally, there was a tendency for some parents to believe that the youth should be the "identified client" rather than the whole family. Families initially categorized as refusers could have been re-referred if they continued to meet the inclusionary criteria and later indicated a willingness to participate.

## **Pre-testing**

The pre-testing was administered once the family gave consent and before the random assignment was made. Part of the consent process involved an understanding on the family's part that they would be asked to complete these forms. All the forms were self-administered, some completed by the youth and some by a parent. However, where literacy was an issue, the worker assisted in their completion. This process usually took place in the family home immediately after they signed the consent forms, except in London because of the different referral procedures. In the end, five cases did not have pre-tests because of errors or misunderstandings.

The instruments were chosen to reflect several key domains which MST might impact as well as to gather some socio-historical information on the youth and family. Five instruments were used, all of which were re-administered at the end of the MST intervention. Intake scores are summarized in Appendix C.

### **1. Standard Client Information System (SCIS)**

These four forms, developed by Offord and Boyle as part of the Ontario Child Health Survey, were used by many members agencies of Children's Mental Health Ontario (formerly the Ontario Association of Children's Mental Health Centres). Permission for their use was secured and all data collected were forwarded to that agency for inclusion in their research data base. At intake, these four forms are used:

- g Parent Questionnaire, Long (Intake) Form (for ages 4 to 18)
- g Family and Household Questionnaire, Long (Intake) Form
- g Youth Questionnaire, Long (Intake) Form (for ages 11 to 18)
- g Teacher Questionnaire, Long (Intake) Form (ages 4 to 18)

### **2. Beliefs and Attitudes Scale**

Developed by Steven Butler and Alan Leschied, this is an instrument similar to the *Criminal Sentiments Scale* but designed for use with adolescents. No norms are available at this point.

### **3. Family Adaptability and Cohesion Scale - II (FACES)**

FACES-II is a 30-item scale that measures family adaptability (negotiation style, roles, assertiveness, leadership, discipline, child control, rules) and family cohesion (emotional bonding, coalitions, space, family boundaries, shared time/friends, decision-making, and shared activities). Permission to use this instrument was secured from the authors, who recommended the second version, rather than the third or fourth one, as being best for research. It was administered to both parents and to the youth.

#### **4. Social Skills Rating System**

There are three forms, one each for youth, parent and teacher with separate versions for elementary school (grades 3 to 6) and secondary school (grades 7 to 12).

#### **5. Parental Supervision Index**

A two-item parental supervision index,<sup>2</sup> asks the youth two questions: 1) during the course of a day, how often (do/does) your parent(s) know where you are; and 2) how often would your parent(s) know who you are with when you are away from home?

#### **Information from Teachers**

Two of the intake forms have teacher versions. The families gave signed consent for their completion by the school. The teacher information was viewed with caution for two reasons. First, there was a low response rate (57%) at intake and an even lower one (35%) at discharge. Intake teacher assessments were available for so few cases because these forms were not always completed and returned by the school. Reasons included that the teacher did not know enough about the youth to complete the forms (e.g., because of non-attendance) or that the youth was no longer enrolled in school. In most cases, the reason for non-response was unknown.

Second, while the response rate was the same for the two groups (58% versus 57%), there were some significant differences between the aggregate scores of the MST and the control groups. Group membership could be randomly determined, but we could not dictate in which cases the teacher information would be available. Among the 57% of cases for which the teacher information was available, the members of the control group had higher levels of externalizing behaviour problems. The differences were significant for conduct disorder ( $t = -2.4$ ,  $df = 185$ ,  $p < .02$ ), attention deficit ( $t = -2.9$ ,  $df = 224$ ,  $p < .004$ ) and total externalizing score ( $t = -3.2$ ,  $df = 185$ ,  $p < .002$ ), as measured by the SCIS. The MST group had higher levels of internalizing problems, but not significantly so. The two groups were the same for academic competence. These differences interject a bias into the data that suggests pre/post differences would not be a good reflection of program effect for either group.

## **Random Assignment**

Random assignment creates two groups of equal size that are identical in terms of variables which might impact future offending (criminal history, etc.). The key tenet of random assignment is that each youth has an equal (in this case 50/50) chance of being assigned to the treatment condition. The other half continue to receive the services available to them in their communities and they constitute the control group. When assignment to groups is random, you can assume the two groups differ only in the intervention they receive. Later analysis comparing the characteristics of the two groups confirmed that this was true.

Random assignment occurred in the family's home with the MST worker present, so the family knew immediately into which group they had been placed. In London, where the random assignment was conducted by the Youth Access Committee, members of the control group were immediately assigned to another service within the Safer Communities Program, chosen to match the youth's individual needs.

### **Ethical Obligations to the Control Group**

If the family was assigned to the control group, the case manager, who was usually the probation officer, was notified and the youth and family carried on with the original case management plan. An ethical obligation did attach to the MST team, however, in that information might have been revealed in the testing that needed to be addressed. Specifically, the responses to two items in the *Standard Client Information System* could indicate that a youth was at risk for suicide. If either of these items was endorsed by a youth, the therapist pursued the issue further with the youth and, when appropriate, with a parent. This assessment might have involved consultation with the clinical supervisor and another visit to the home. Therapists and their clinical supervisors were also able to consult with Principal Investigator Dr. Alan Leschied in London, a clinical psychologist, if the need arose (which it never did). When warranted, a referral to the appropriate agency was made.

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<sup>2</sup> S.J. Jang and C.A. Smith (1997). A Test of Reciprocal Causal Relationships Among Parental Supervision, Affective Ties, and Delinquency. *Journal of Research in Crime and Delinquency*, 34(3): 307-36.

The process of securing consent and administering the intake battery was a time consuming one for the MST therapists, but it was desirable that an experienced clinician do so because of the need to assess issues such as suicidality. Another situation that sometime arose in these sessions was the disclosure of child abuse. A parent could endorse the use of physical discipline with their children. Where this occurred, the MST therapist reviewed the matter with the parent, asking question to ascertain level and immediacy of risk. When necessary, where both the control and the MST groups were concerned, the team contacted local child protection officials.

## **Post-testing**

When an MST case was closed, the instruments from the intake battery were readministered. If the MST case closed prematurely, true of 19% of the families, the post-testing was not re-administered. The members of the control group were contacted five months after intake and asked to complete the testing again. Because of resource limitations, this task was performed by the MST teams themselves.

### **Response Rate**

There are several factors which should be kept in mind when interpreting the figures on pre- and post-testing. The first is the response rate for the discharge testing. In total, post-testing from the parents and/or youth is available in only 62% of the cases. Post-testing was more likely available from the MST group, probably because of the on-going family contact by MST therapists. In total, there was no post-testing available for either a parent or a youth in 49% of control cases. The same was true for only 28% of the MST group. In other words, the members of the MST group had a higher response rate at discharge (71%) compared with the members of the usual services group (52%) and the difference was significant ( $F = 16.7, df = 1, p < .001$ ).

For 19% of the MST group, non-response was because they had dropped out of MST. This fact could bias the discharge scores in favour of the MST group by eliminating many cases that did not conclude satisfactorily. Dropouts did not differ from MST completers on any of the intake testing. However, as noted in Chapter 2, MST drop outs performed poorly on some measures of recidivism compared with MST completers and the usual services group and they had more serious prior records at referral.

In addition, the response rate was lower for youth compared with parents. The youths were sometimes not available at discharge, true for example if they were in custody or no longer living at home.

### **Response Bias**

In an attempt to identify a response bias, responders and non-responders were compared in terms of criminal history, assessed risk, and clinical variables. Responders and non-responders were not different on any clinical measure except one, youth self-report of social relations ( $t = -2.1, df = 378, p < .034$ ). They did not differ in terms of pre-referral criminal record or assessed risk except that responders had higher levels of family problems ( $t = 3.5, df = 371, p < .001$ ) and personality/behaviour problems ( $t = 2.5, df = 371, p < .014$ ) according to the Risk/Need instrument. Responders also tended to be slightly younger on average, 14.9 versus 15.3 ( $t = -2.4, df = 387, p < .019$ ). Therefore, no serious response bias could be identified. In addition, responders and non-responders did not differ on measures of post-discharge recidivism.

## **Follow-up**

Follow-up data on recidivism and correctional service utilization are collected using a "CR" check of the Canadian Police Information Centre (CPIC). Records are checked at six months and after one, two and three years post-discharge. Access to this confidential data base was gained with permission of the court. In addition, all participants signed consent forms indicating that they understood this data base would be accessed as part of the research study. In the early portion of the study, information on correctional service usage was also collected from the Young Offender Strategic Information System (YOSIS) of the Ministry of Community and Social Services. A staff change at the Ministry part way through the project meant that this information was no longer available in useable format. However, during the period of time when both sources were available, there was such a high degree of correspondence between the two that it was decided that the CPIC data were sufficient.

## Appendix B Site-Specific Tables and Figures

Table B.1  
**Re-conviction at Six Months Post, MST and Usual Service Groups by Site**

	Simcoe Co.		London		Mississauga		Ottawa		All Sites	
	MST	U.S.†	MST	U.S.	MST	U.S.	MST	U.S.	MST	U.S.
No	34 (73.9%)	30 (71.4%)	40 (69.0%)	39 (69.6%)	30 (61.2%)	30 (67.4%)	39 (88.6%)	32 (82.1%)	143 (72.6%)	132 (72.1%)
Yes	10 (21.7%)	11 (26.2%)	15 (25.9%)	12 (21.4%)	16 (32.7%)	16 (32.7%)	4 (9.1%)	7 (17.9%)	45 (22.8%)	45 (24.6%)
Admn Only‡	2 (4.3%)	1 (2.4%)	3 (5.2%)	5 (8.9%)	3 (6.1%)	0	1 (2.3%)	0	9 (4.6%)	6 (3.3%)
<b>Total</b>	<b>46</b>	<b>42</b>	<b>58</b>	<b>56</b>	<b>49</b>	<b>46</b>	<b>44</b>	<b>39</b>	<b>197</b>	<b>183</b>

† Usual Services.

‡ Administration of justice offences include breach of probation, failure to appear in court, etc. where there is no other offence of conviction.

Table B.2  
**Re-conviction at One Year Post, MST and Usual Service Groups by Site**

	Simcoe Co.		London		Mississauga		Ottawa		All Sites	
	MST	U.S.	MST	U.S.	MST	U.S.	MST	U.S.	MST	U.S.
No	21 (58.3%)	24 (60.0%)	21 (41.2%)	23 (51.1%)	21 (48.8%)	18 (45.0%)	30 (78.9%)	22 (75.9%)	96 (55.8%)	84 (55.6%)
Yes	13 (36.1%)	14 (35.0%)	26 (51.0%)	18 (40.0%)	18 (41.9%)	21 (52.5%)	6 (15.8%)	7 (24.1%)	64 (37.2%)	60 (39.7%)
Admn Only	2 (5.6%)	2 (5.0%)	4 (7.8%)	4 (8.9%)	4 (9.3%)	1 (2.5%)	2 (5.3%)	0	12 (7.0%)	7 (4.6%)
<b>Total</b>	<b>36</b>	<b>40</b>	<b>51</b>	<b>45</b>	<b>43</b>	<b>40</b>	<b>38</b>	<b>29</b>	<b>172</b>	<b>151</b>

Table B.3  
**Re-conviction at Two Years Post, MST and Usual Service Groups by Site**

	Simcoe Co.		London		Mississauga		Ottawa		All Sites	
	MST	U.S.	MST	U.S.	MST	U.S.	MST	U.S.	MST	U.S.
No	10 (37.0%)	8 (33.3%)	5 (20.8%)	6 (23.1%)	7 (22.9%)	7 (26.9%)	14 (60.9%)	9 (56.3%)	36 (35.6%)	30 (32.6%)
Yes	16 (59.3%)	14 (58.3%)	17 (70.8%)	16 (61.5%)	16 (59.3%)	18 (69.2%)	7 (30.4%)	7 (48.3%)	56 (55.4%)	55 (59.8%)
Admn Only	1 (3.7%)	2 (8.3%)	2 (8.3%)	4 (15.4%)	4 (14.8%)	1 (3.8%)	2 (8.7%)	0	9 (8.9%)	7 (7.6%)
Total	27	24	24	26	27	26	23	16	101	92

Table B.4  
**Average Number of Offences Committed in Follow-up Period by Site**

	Simcoe Co.		London		Mississauga		Ottawa		All Sites	
	MST	U.S.	MST	U.S.	MST	U.S.	MST	U.S.	MST	U.S.
Breach of Probation Convictions	.28	.36	.50	.61	.39	.43	.05	0	.25	.31
Other Administrative Offences	.09	.21	.43	.52	.16	.24	.09	.10	.19	.25
Criminal Offences	1.04	.83	1.21	1.46	1.14	1.22	.45	.56	.7	1.0
Total Offences of Conviction	1.41	1.43	2.07	2.68	1.73	1.96	.48	.72	1.1	1.6
Total Prosecutions	.89	.81	1.16	1.30	1.02	.98	.39	.54	.69	.86

Table B.5  
**Average Days to Conviction and Admission to Custody by Site**

	Simcoe Co.		London		Mississauga		Ottawa		All Sites	
	MST	U.S.	MST	U.S.	MST	U.S.	MST	U.S.	MST	U.S.
Days to Conviction, All Offences	214	259	207	221	181	207	266	244	210	230
Days to Conviction, Admin Offences Excluded	244	294	212	230	181	205	268	244	219	241
Days to Custody Admission	285	294	207	252	212	221	267	146	235	246

Table B.6  
**Rates and Average Length of Custody Sentences by Site**

	Simcoe Co.		London		Mississauga		Ottawa		All Sites	
	MST	U.S.	MST	U.S.	MST	U.S.	MST	U.S.	MST	U.S.
Rate of Custody Sentences	39%	48%	45%	39%	41%	41%	18%	15%	36%	36%
Total Days Sentenced Custody	61	43	58	62	49	63	45	24	53	50
Open Custody	43	17	24	32	26	22	41	17	33	23
Secure Custody	18	26	34	30	23	42	4	7	21	27

Figure B.1: Six Month Survival Data, Simcoe Co. Only (n=88)

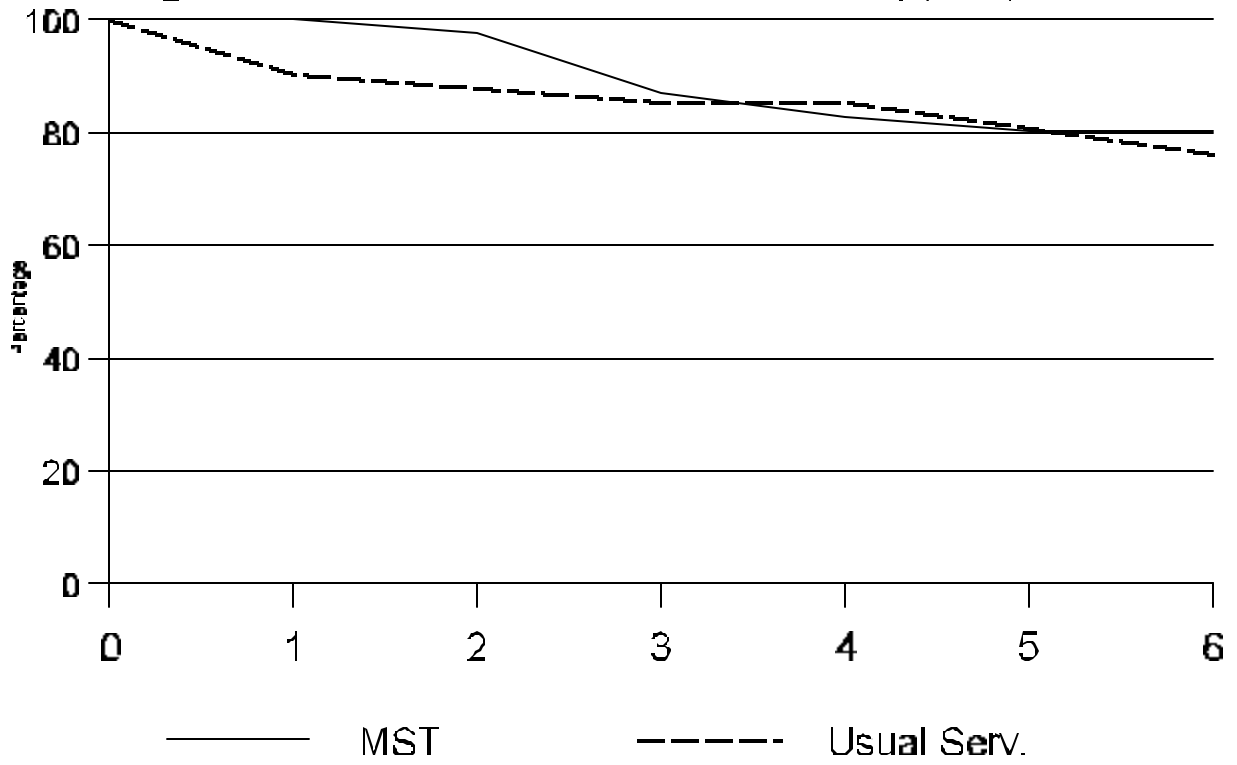


Figure B.2: One Year Survival Data, Simcoe Co. Only (n=67)

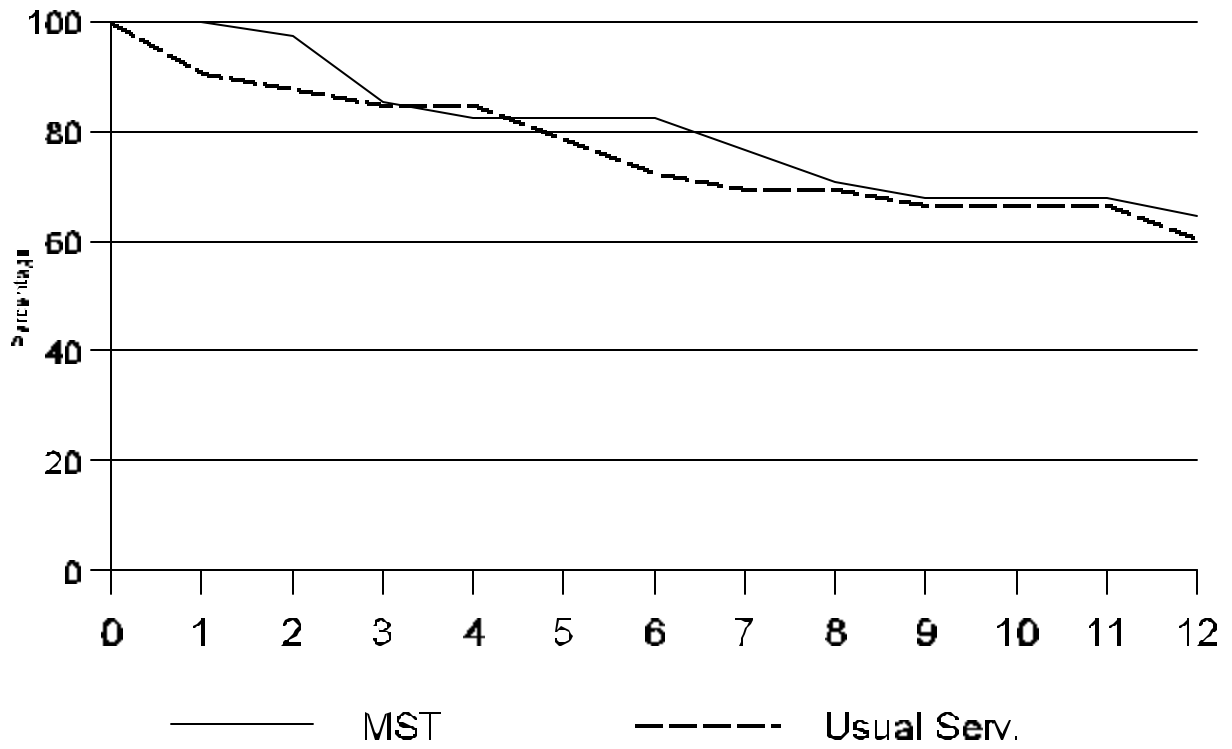


Figure B.3: Two Year Survival Data, Simcoe Co. Only (n=50)

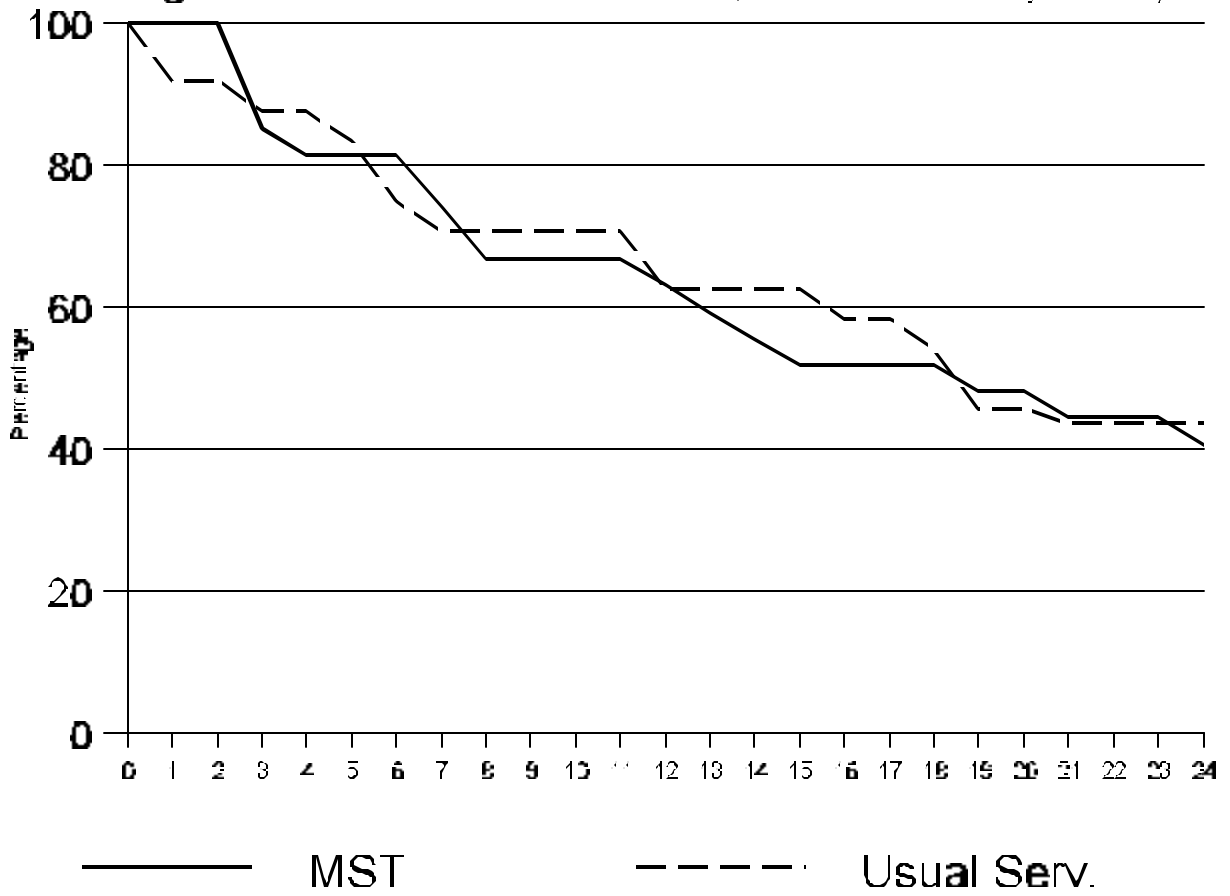


Figure B.4: Six Month Survival Data, London Only (n=114)

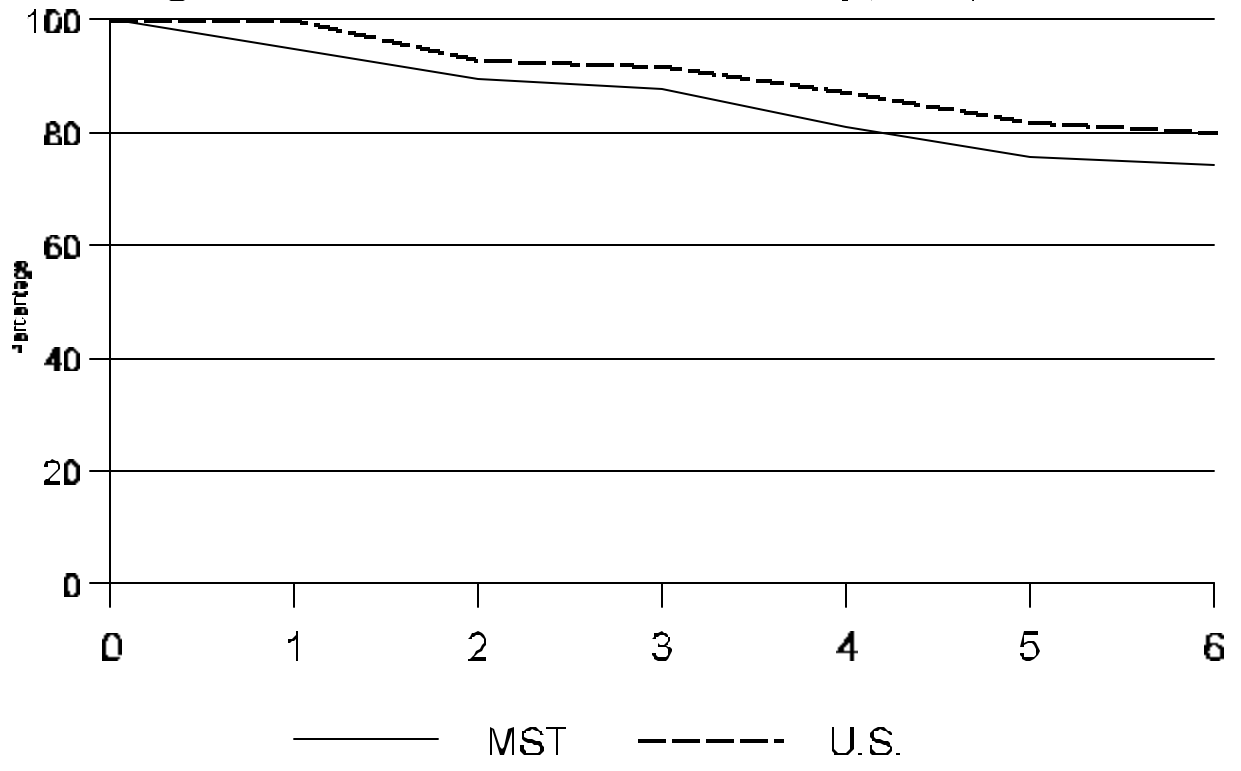


Figure B.5: One Year Survival Data, London Only (n=95)

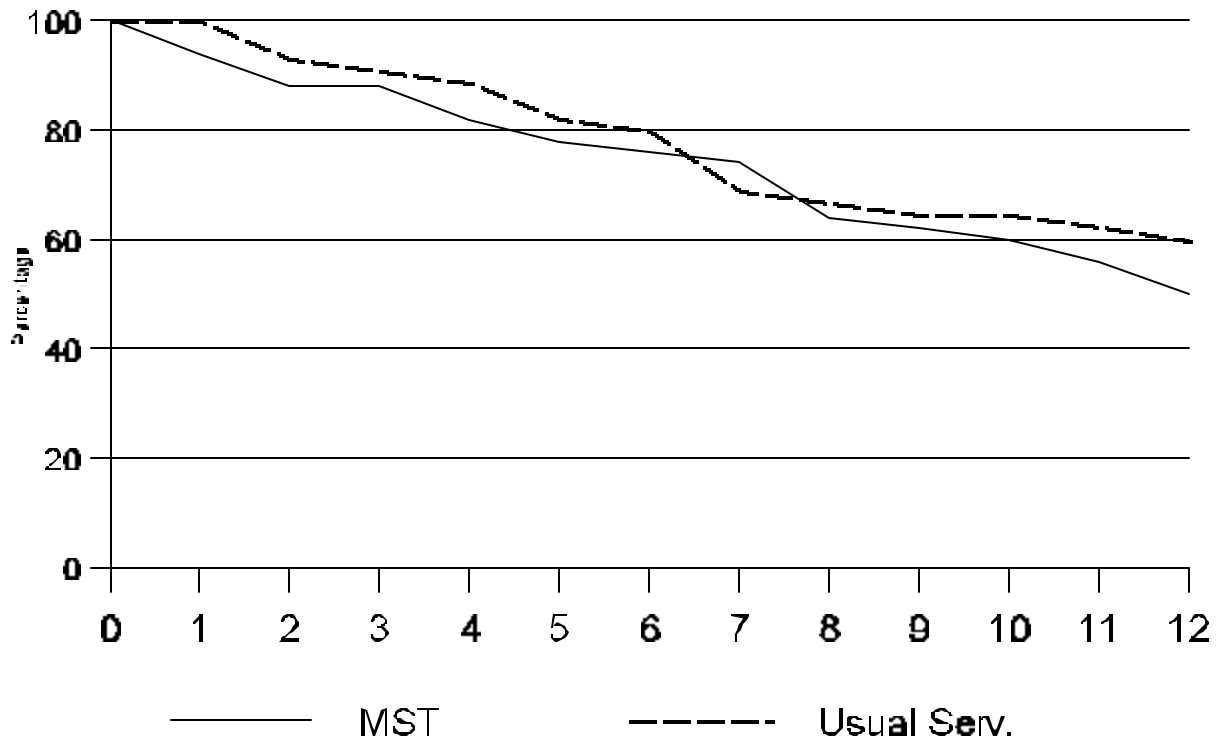


Figure B.6: Two Year Survival Data, London Only (n=50)

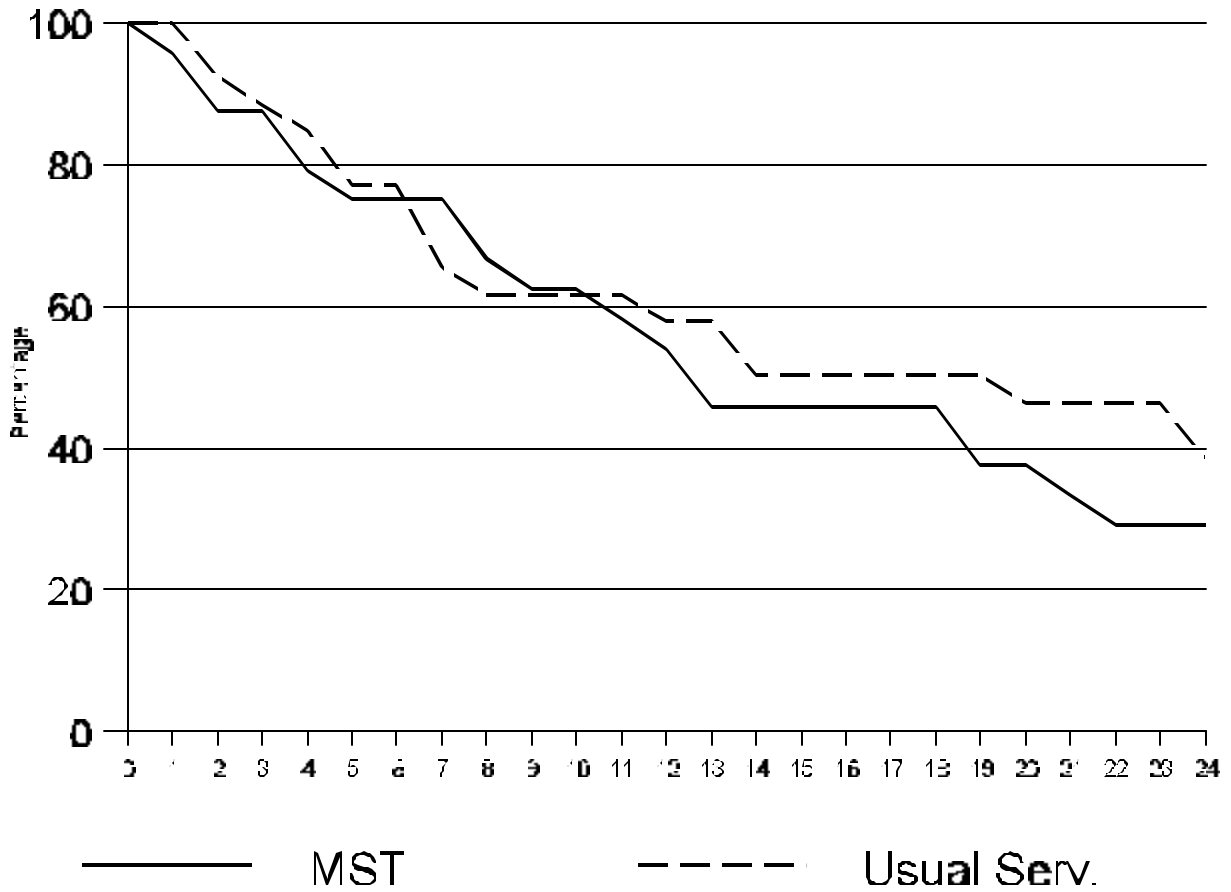
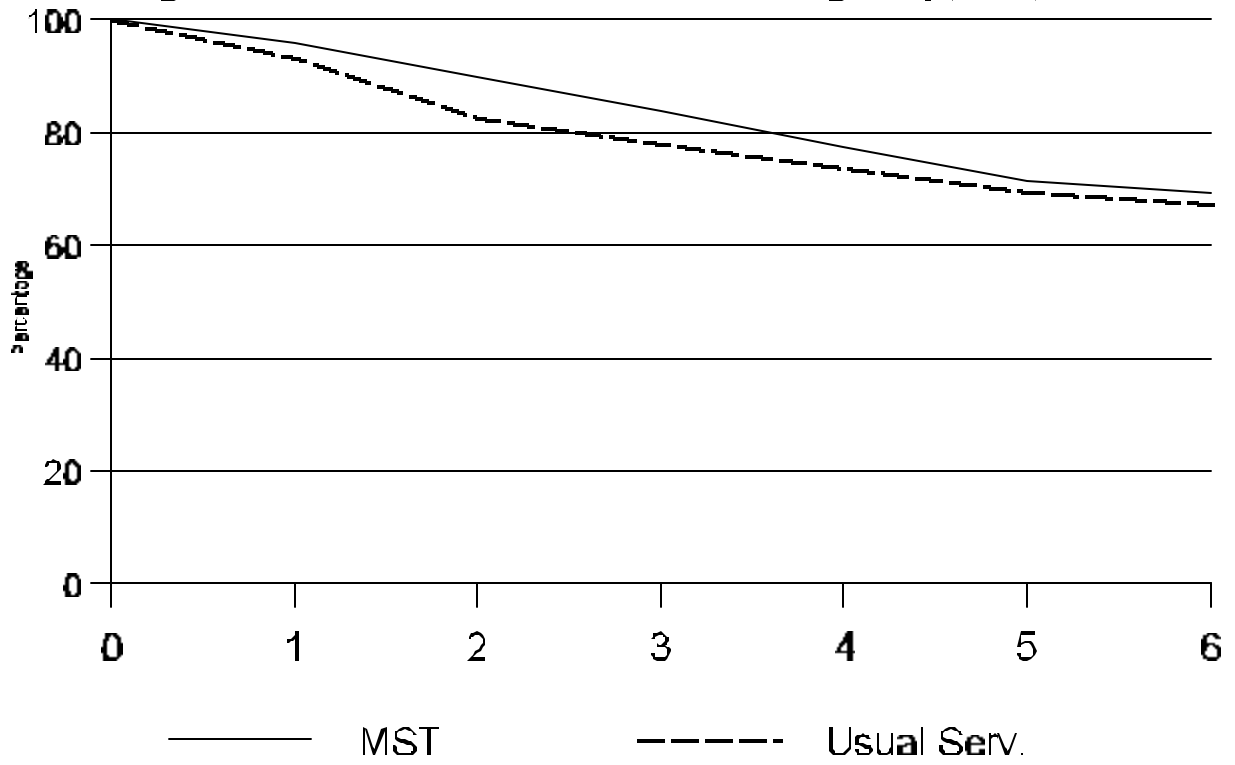


Figure B.7: Six Months Survival Data, Mississauga Only (n=95)



**Figure B.8: One Year Survival Data, Mississauga Only (n=84)**

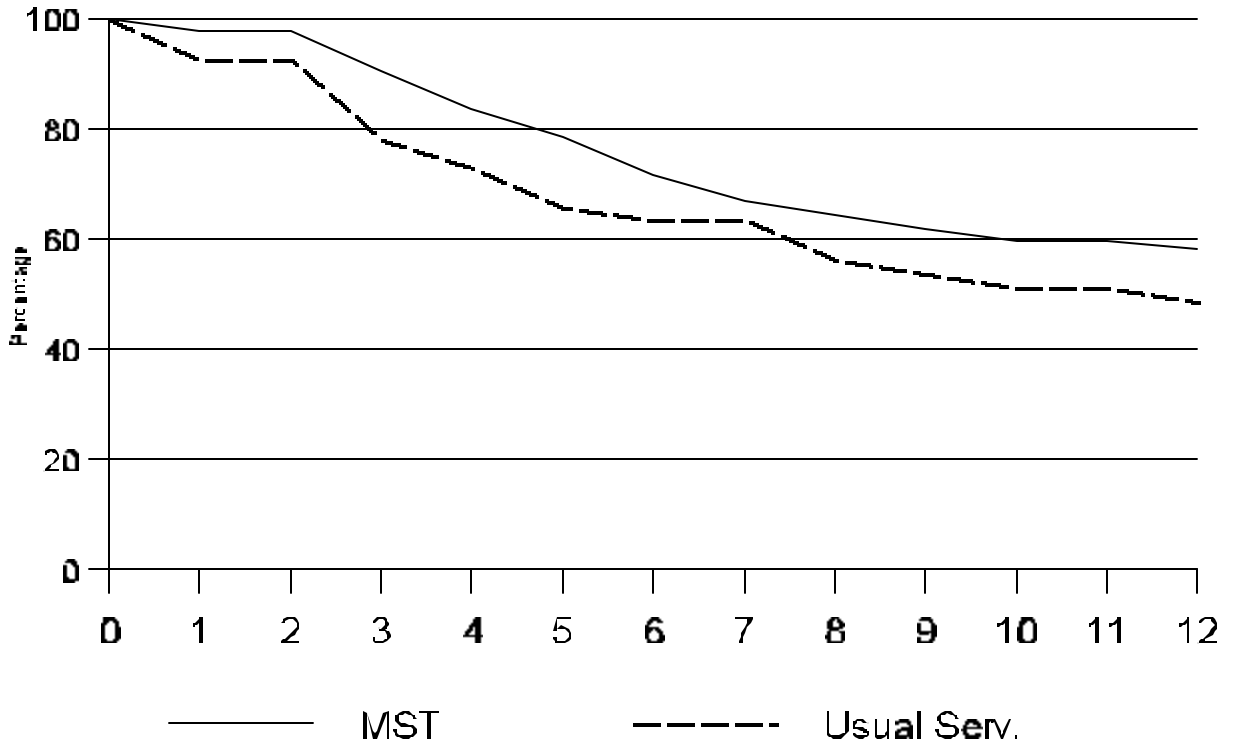
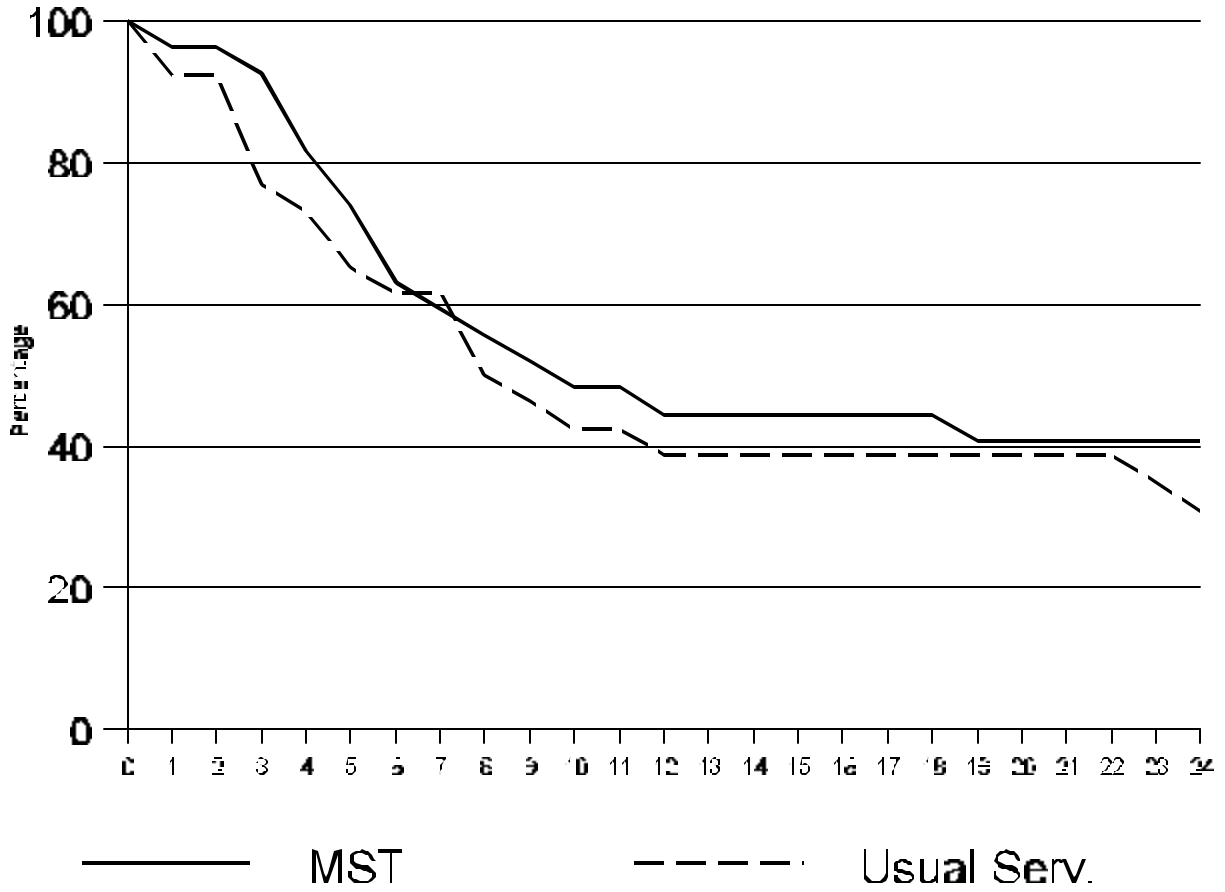
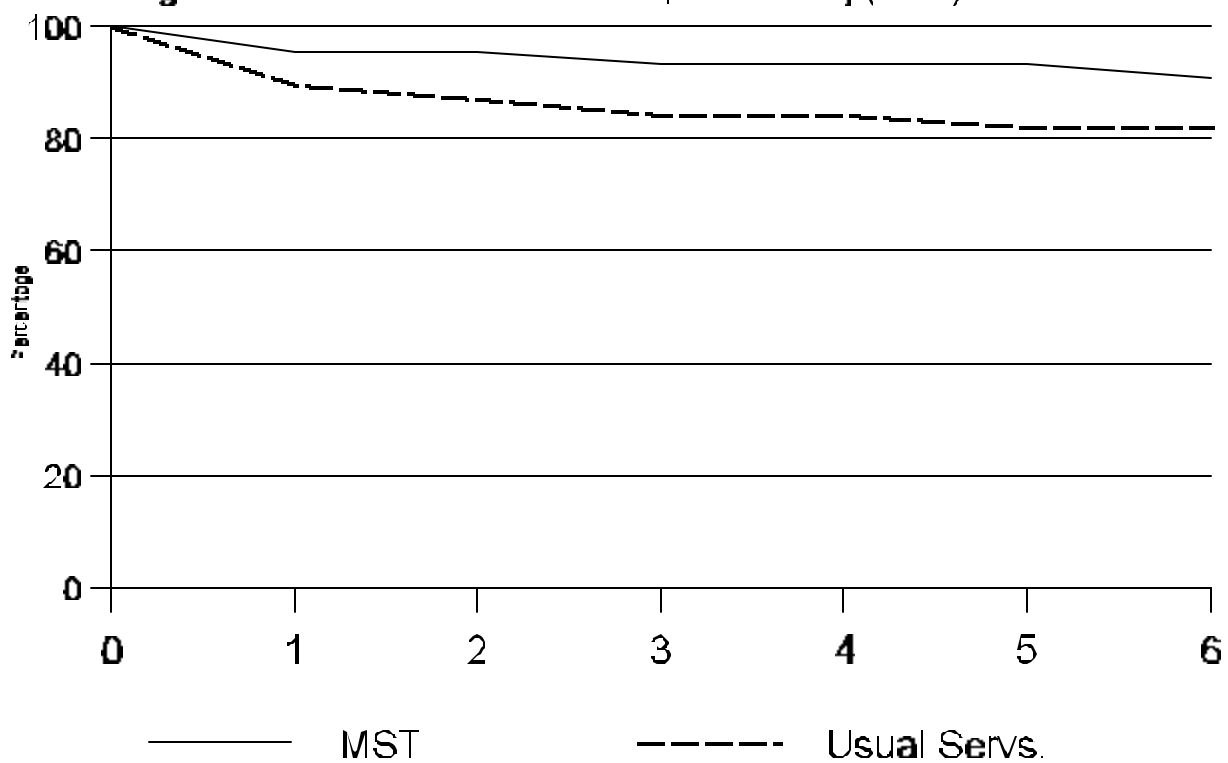


Figure B.9: Two Year Survival Data, Mississauga Only (n=53)



**Figure B.10: Six Month Survival Data, Ottawa Only (n=83)**



**Figure B.11: One Year Survival Data, Ottawa Only (n=67)**

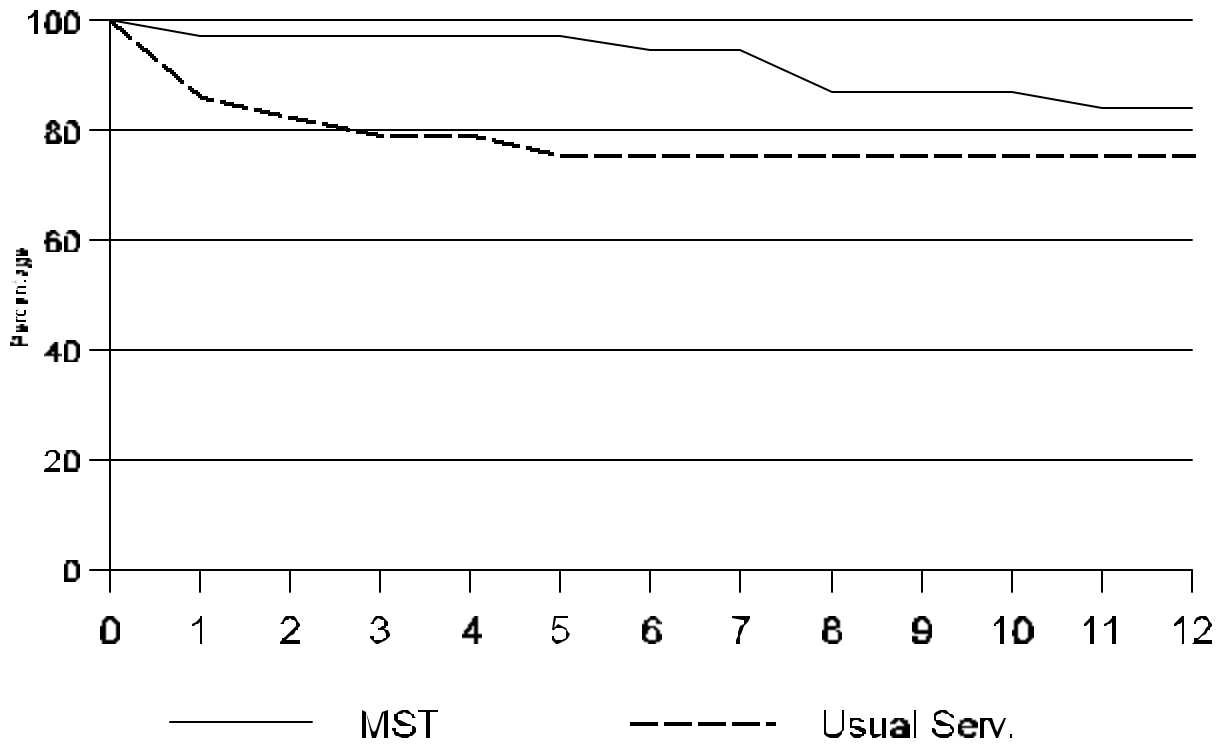
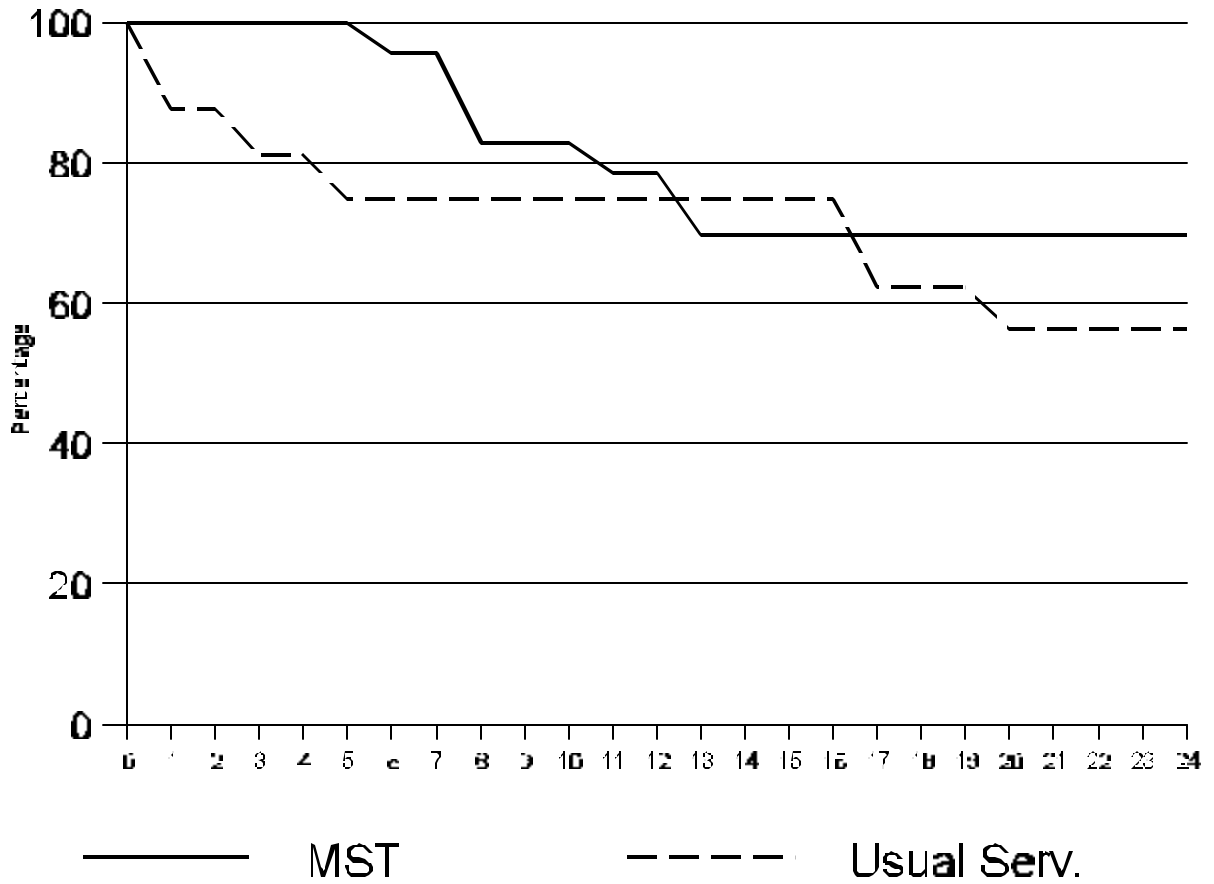


Figure B.12: Two year Survival Data, Ottawa Only (n=39)



## APPENDIX C

### Characteristics of Referrals

Table C.1  
Average Risk/Need Scores on Eight RNA Sub-scales by Sex of Youth

	Boys	Girls
Prior/Current Offences or Dispositions (0 to 5)	1.17	0.93
Family Circumstances (0 to 6)	4.03	4.19
Education/Employment (0 to 7)	4.57	4.19
Peer Relations (0 to 4)	2.73	2.69
Substance Abuse (0 to 5)	1.28	1.67
Leisure Recreation (0 to 3)	1.97	2.32
Personality/Behaviour (0 to 7)	4.78	4.58
Attitudes/Orientation (0 to 5)	2.76	2.69
<b>TOTAL (0 to 42)</b>	<b>23.51</b>	<b>23.49</b>

Table C.2  
Average Risk/Need Scores on Eight RNA Sub-scales by Site

	Simcoe	London	Mississ.	Ottawa†
Prior/Current Offences or Dispositions (0 to 5)	1.23	.72	1.29	1.35
Family Circumstances (0 to 6)	3.23	4.36	4.21	4.41
Education/Employment (0 to 7)	4.20	4.29	4.69	4.78
Peer Relations (0 to 4)	2.48	2.36	3.07	3.14
Substance Abuse (0 to 5)	1.16	1.50	1.49	1.35
Leisure Recreation (0 to 3)	1.85	2.07	2.25	2.11
Personality/Behaviour (0 to 7)	4.31	4.71	4.72	5.23
Attitudes/Orientation (0 to 5)	2.16	2.50	3.16	3.28
<b>TOTAL (0 to 42)</b>	<b>20.64</b>	<b>23.04</b>	<b>24.93</b>	<b>25.82</b>

† Excludes under 12 referrals

Table C.3

**Prior and Current Offences/Dispositions from Risk/Need Assessment by Sex**

	Boys	Girls	Total
Three or More Prior Convictions	21.8%	14.9%	19.9%
Two or More Prior Failures to Comply	16.2%	15.8%	16.1%
Prior Probation	25.9%	18.8%	24.0%
Prior Custody	28.6%	27.7%	28.3%
Three or More Current Convictions	24.8%	17.8%	22.9%

Table C.4

**Family Circumstances/Parenting Rating from Risk/Need Assessment by Sex**

	Boys	Girls	Total
Inadequate Supervision	57.9%	55.4%	57.2%
Difficulty Controlling Behaviour	96.2%	96%	96.2%
Inappropriate Discipline	54.5%	59.4%	55.9%
Inconsistent Parenting	81.2%	75.2%	79.6%
Poor Father/child Relations	66.9%	70.3%	67.8%
Poor Mother/child Relations	49.2%	60.4%	52.3%

Table C.5

**Education/Employment Ratings from Risk/Need Assessment by Sex**

	Boys	Girls	Total
Disruptive Classroom Behaviour	76.8%	58.4%	71.1%
Disruptive Schoolyard Behaviour	68.2%	45.5%	62.0%
Low Achievement	90.3%	89.1%	89.9%
Problems with Peer Relations	72.7%	71.3%	72.3%
Problems with Teacher Relations	79.0%	69.3%	76.4%
Truancy	63.3%	73.3%	66.0%
Unemployed/Not Seeking Employment	12.0%	15.8%	13.0%

Table C.6  
**Peer Relations Ratings from Risk/Need Assessment by Sex**

	Boys	Girls	Total
Some Delinquent Acquaintance	87.3%	96.0%	89.7%
Some Delinquent Friends	83.5%	90.1%	85.3%
No or few Positive Acquaintances	46.4%	39.6%	44.6%
No or few Positive Friends	57.7%	47.5%	54.9%

Table C.7  
**Substance Abuse Ratings from Risk/Need Assessment**

	Boys	Girls	Total
Occasional Drugs Use	53.2%	67.3%	57.1%
Chronic Drug Use	21.8%	27.7%	23.4%
Chronic Alcohol Use	12.0%	23.8%	15.3%
Substance Use Interferes w. Functioning	23.7%	33.7%	26.4%
Substance Use Linked to Offence(s)	14.7%	13.9%	14.4%

Table C.8  
**Leisure/Recreation Ratings from Risk/Need Assessment by Sex**

	Boys	Girls	Total
Limited Organized Participation	81.8%	92.1%	84.7%
Could Make Better Use of Time	86.7%	89.1%	87.4%
No Personal Interests	30.7%	48.5%	35.6%

Table C.9  
**Personality/Behaviour Rating from Risk/Need Assessment by Sex**

	Boys	Girls	Total
Inflated Self-Esteem	25.1%	18.8%	23.4%
Physical Aggression	79.0%	73.3%	77.4%
Tantrums	68.9%	76.2%	70.9%
Short Attention Span	72.7%	60.4%	69.3%
Poor Frustration Tolerance	86.1%	88.1%	86.7%
Inadequate Guilt Feelings	66.3%	61.4%	64.9%
Verbally Aggressive, Impudent	83.9%	88.1%	85.1%

Table C.10  
**Attitudes/Orientations Rating from Risk/Need Assessment by Sex**

	Boys	Girls	Total
Antisocial or Pro-criminal Attitudes	67.0%	50.5%	62.5%
Not Seeking Help	53.2%	59.4%	54.9%
Actively Rejecting Help	30.3%	36.6%	32.1%
Defies Authority	87.3%	88.1%	87.5%
Callous, Little Regard for Others	39.7%	35.6%	38.6%

Table C.11

**Parent and Youth Responses to Family Adaptability and Cohesion Scale (FACES-II), Intake (n=398)**

	Low	High	Mean	Std. Deviation
<b>Parents</b>				
Adaptability	6.2	69.8	38.7	10.8
Cohesion	1.3	64.4	32.6	11.8
<b>Youth</b>				
Adaptability	17.8	71.0	43.7	9.9
Cohesion	8.4	68.2	39.9	11.7

Table C.12

**Parent Ratings (t-scores) About Youth on Standard Client Information System, Intake**

	Low	High	Mean	SD	%age over clinical cutoff
Conduct Problems	42.6	169.0	96.9	24.2	84.3%
Oppositional Problems	39.1	89.3	72.1	12.6	58.6%
Attention Deficit	37.0	95.5	67.7	13.4	50.0%
<b>EXTERNALIZING TOTAL</b>	<b>42.1</b>	<b>105.0</b>	<b>77.3</b>	<b>15.3</b>	<b>70.0%</b>
Over Anxious	37.1	103.0	65.8	12.6	17.1%
Separation Anxiety	36.1	90.8	58.3	11.7	23.9%
Depressive	39.4	112.0	62.5	14.6	49.6%
Social Relations	36.6	102.0	67.8	13.0	52.7%
<b>INTERNALIZING TOTAL</b>	<b>37.9</b>	<b>91.8</b>	<b>70.3</b>	<b>11.2</b>	<b>34.3%</b>

Table C.13

**Parent Ratings (t-scores) About Self on Standard Client Information System, Intake**

	Low	High	Mean	SD	%age over clinical cutoff
Family Functioning	36.1	98.0	65.9	10.4	32.6%
Depression	40.7	111.0	64.0	14.3	32.7%

Table C.14

**Teacher Ratings (t-scores) on Standard Client Information System, Intake (n=192 to 226)**

	Low	High	Mean	SD	%age over clinical cutoff
Conduct Problems	45.9	155	81.2	25.0	61.0%
Oppositional Problems	43.1	104	72.0	15.7	57.5%
Attention Deficit	40.5	105	65.8	12.9	38.5%
<b>EXTERNALIZING TOTAL</b>	<b>42.8</b>	<b>118</b>	<b>73.1</b>	<b>16.1</b>	<b>59.4%</b>
Over Anxious	20.5	91	57.7	13.7	24.9%
Depressive	39.7	111	69.7	13.1	48.4%
Social Relations	28.7	95.7	67.5	12.1	47.1%
<b>INTERNALIZING TOTAL</b>	<b>38.7</b>	<b>105</b>	<b>66.3</b>	<b>12.6</b>	<b>41.1%</b>

Table C.15

**Youth Self-Report (t-scores) on Standard Client Information System, Intake (n=380 to 395)**

	Low	High	Mean	SD	%age over clinical cutoff
Conduct Problems	40.3	143	70.1	19.3	38.2%
Oppositional Problems	32.5	84.1	60.3	10.7	19.5%
Attention Deficit	32.0	88.9	58.3	11.2	13.7%
<b>EXTERNALIZING TOTAL</b>	<b>32.7</b>	<b>101</b>	<b>63.1</b>	<b>12.4</b>	<b>26.9%</b>
Over Anxious	29.4	77.2	50.7	11.1	4.8%
Separation Anxiety	34.0	90.2	55.3	11.3	11.7%
Depressive	32.1	86.3	55.7	10.2	8.1%
Social Relations	35.1	101	63.5	13.0	35.0%
Self-Esteem	33.8	92.4	56.1	10.4	9.9%
<b>INTERNALIZING TOTAL</b>	<b>31.9</b>	<b>88.9</b>	<b>54.9</b>	<b>11.0</b>	<b>7.6%</b>

Table C.16

**Family Income Categories by Site**

	Simcoe	London	Mississauga	Ottawa
under \$10,000	9.0%	11.8%	4.1%	12.8%
\$10,000 to \$14,999	19.2%	30.0%	2.1%	19.8%
\$15,000 to \$19,999	12.8%	11.8%	9.3%	14.0%
\$20,000 to \$29,999	16.7%	19.1%	22.7%	14.0%
\$30,000 to \$39,999	10.3%	11.8%	11.5%	14.0%
\$40,000 to \$49,999	12.8%	3.6%	11.3%	2.3%
\$50,000 to \$59,999	5.1%	2.7%	8.2%	8.1%
\$60,000 +	14.1%	9.1%	26.8%	15.1%

Table C.17  
**Economic Indicators for Families by Site**

	Simcoe	London	Mississauga	Ottawa
Family Income < \$20,000	41.0%	53.6%	15.5%	46.6%
On Welfare	31.7%	50.0%	16.0%	43.7%
Medical Condition Prevents Work (primary caregiver)	18.3%	20.2%	19.4%	26.1%
Primary Caregiver Unemployed	20.7%	29.3%	12.2%	25.8%
Lone Parent Family	40.2%	51.3%	39.0%	57.0%
Less than High School educ. (primary caregiver)	37.2%	45.2%	30.0%	31.8%
Subsidized housing	19.8%	12.9%	10.0%	36.5%

Figure C.1  
**Responses to Parental Supervision Index at Intake**

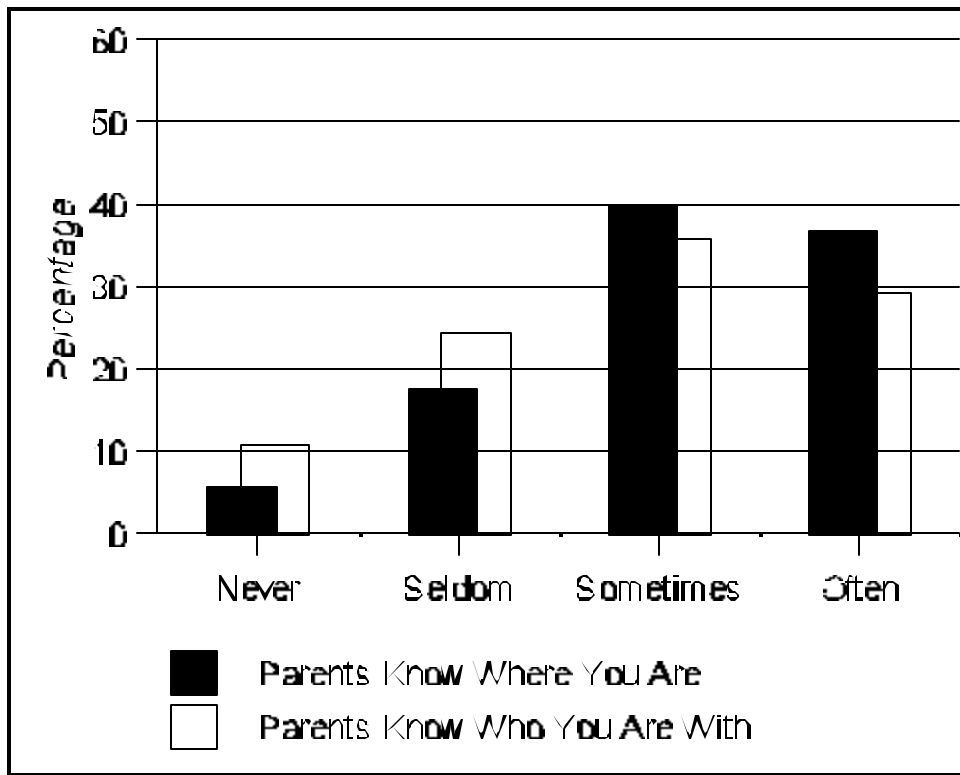


Figure C.2  
**Pre and Post Responses to Two Items of Parental Supervision Index (n=367)**

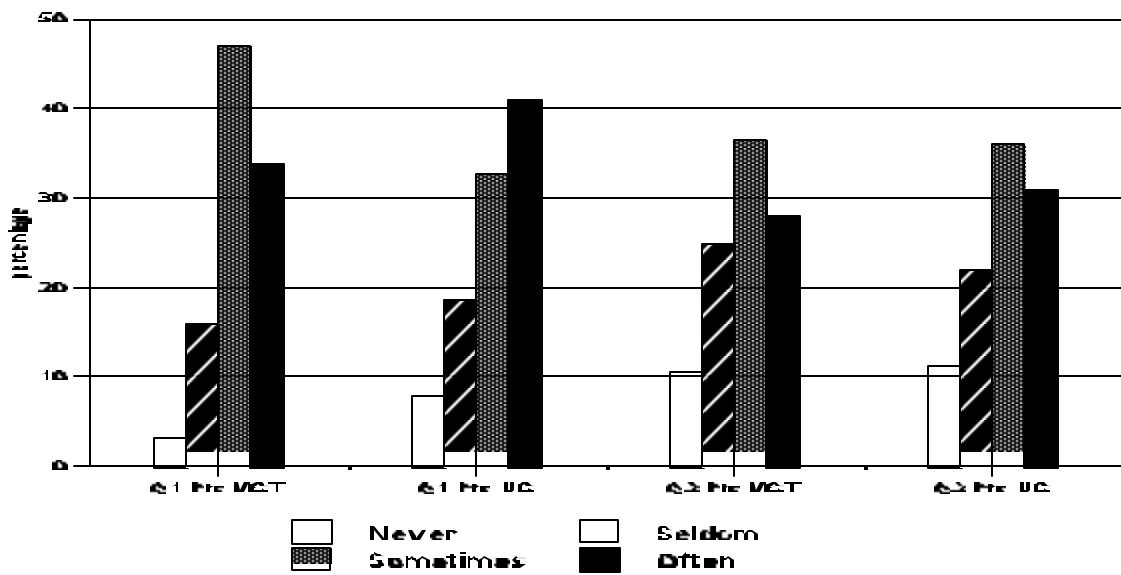


Figure C.3  
Teacher Percentile Ratings of Academic Competence

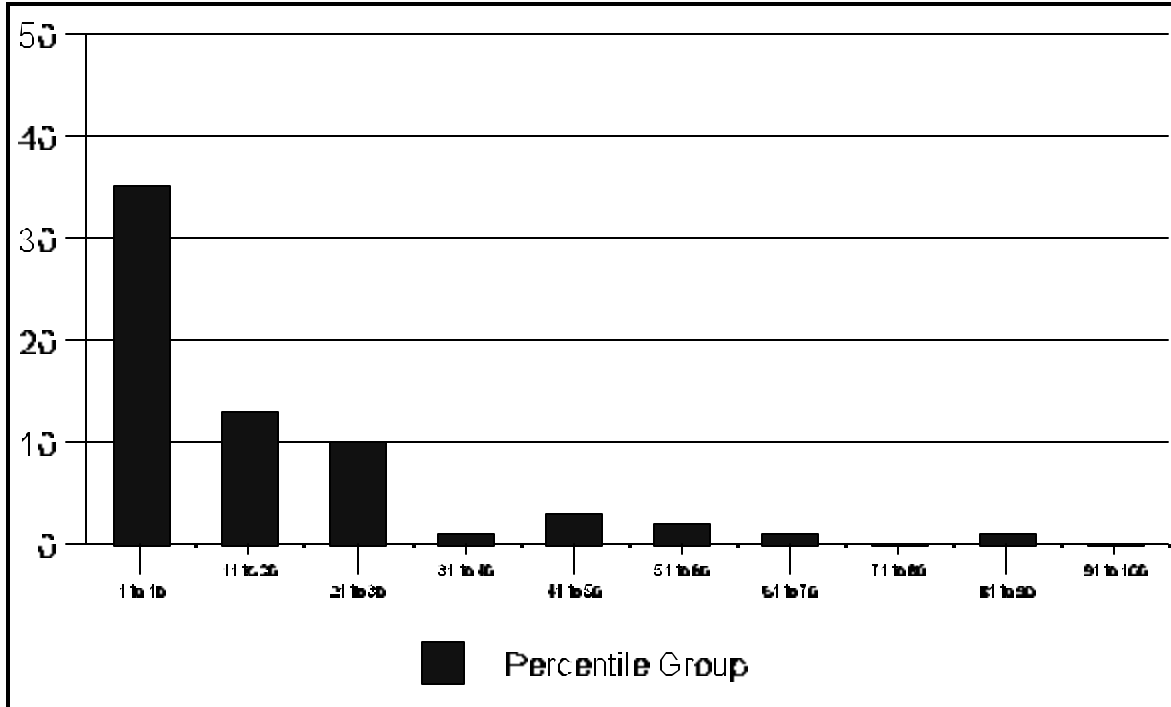


Figure C.4  
Teacher Percentile Ratings of Social Skills and Problem Behaviours

