

**Measuring Positive Parenting
Using the RRFSS:**

**Final Report of the Perinatal
and Child Health Survey
Initiative**



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Introduction

Monitoring local population-level change in parenting capacity is essential but difficult. As smoking behaviour is to chronic disease, parenting is to early childhood development. Yet, unlike other public health issues such as tobacco use, there is no standard approach to assess community change in the quality of parenting ability. Nor is there an approved method for evaluating the long-term impact of parenting programs or health promotion interventions on the parenting capacity of the population.

This project focused on the conceptualization through to operationalization of a monitoring tool to assist local Ontario health units and their communities in measuring parenting capacity. This final report outlines:

- Why this work was undertaken including the funding catalyst, the environment in Southwestern Ontario which facilitated the project and the knowledge gap that existed in monitoring population level parenting capacity,
- What was already known including the use of the questions on the National Longitudinal Survey of Children and Youth (NLSCY) and other related work,
- What was done including identifying key technical surveillance dilemmas encountered and their solutions while embracing this complex topic,
- What was found including the population-level results produced to date by the monitoring system in two Ontario Health units,
- Reflections on the use of the Rapid Risk Factor Surveillance System (RRFSS) for measuring positive parenting and the recommendations stemming from some of the most important lessons learned during the development process.

Main Messages

This report documents the development of a group of questions and their use to measure a population-level indicator of positive parenting on the Rapid Risk Factor Surveillance System in Ontario. Unlike other public health issues such as tobacco use, no previously accepted standard indicator existed. Adapting questions used on the National Longitudinal Survey of Children and Youth (NLSCY), Middlesex-London and Windsor-Essex County Health Units successfully used this indicator to establish a baseline positive-parenting rate in their communities.

Significant development issues were encountered during the adaptation of the NLSCY questions for a general population health telephone survey. These included the definition of “parent” and establishing the need for an index or reference child to which the questions would pertain. Questions related to punishment issues were removed from the survey when the module pretest showed that responses would be compromised. The final survey module consisted of five core questions which when scored together measured positive parenting on a scale from 0 to 20 and covered how often the parent:

- Praised their child,
- Laughed with their child,
- Talked or played with each other, focusing attention on each other for five minutes or more just for fun,
- Did something special with their child that he/she enjoys,
- Played games with their child (if the child was under two) or alternatively played games, sports, hobbies with their child (if the child was aged two to 11 years old).

This positive parenting module was included during the regular use of the Rapid Risk Factor Surveillance System (RRFSS) between May 2002 and October 2003. A sample of 858 parents of children aged 0 to 11 years responded to the questions. This represented approximately 24% of the total adult population accessed by the RRFSS.

Despite the use of these questions on a number of high profile surveys and reports, no standard approach to analysis was available. This report documents the results using two different analytic approaches. The first approach compares the results with the 1994 Canadian mean for positive parenting and the proportion of parents with scores above this mean of 13.5. A number of socio-demographic factors were examined to establish whether there was a relationship

with the positive parenting score. Overall, nearly 78% of parents scored above the 1994 Canadian mean benchmark, signaling a higher level of positive parenting. Differences in the percentage above the Canadian Mean were found by the parent’s gender, age group and the age group of the index child. Younger children were more likely to receive positive parenting than older children.

The second approach simply divided the scores into four equal categories. The largest group (61%) obtained scores in the highest increment (16-20), 33% scored 11-15 and approximately 6% scored under 11. This latter group might represent the parents at risk for poor parenting.

Use of the positive parenting module has expanded since its initial development, signaling a growing acceptance for such an indicator within the public health field.

Ten recommendations for the continued development of the indicator are identified:

1. Incorporate the positive parenting rate as a local, provincial and national health indicator of effective parenting ability.
2. Create a specific population-level objective in the Mandatory Health Program and Services Guidelines such as, “Increase to 85% the per cent of parents of children aged 0 to 12 years who scored above the 1994 Canadian mean for positive parenting”.
3. Ensure the sustainability of RRFSS or secure resources to build a complimentary structure for an ongoing/periodic parent-survey in Ontario at a level that allows for the reporting of local health unit level indicators.
4. Consider the inclusion of the positive-parenting module for one full year on the RRFSS by participating RRFSS health unit partners to allow for sample accrual.
5. Build on the success of the positive parenting module in the Rapid Risk Factor Surveillance System (RRFSS) by incorporating additional questions on hostile parenting (including questions on punishment) and parental knowledge.
6. Encourage, undertake and fund research on the validation of these “positive-parenting” measures including a shortened version of parenting style modules for use on population level surveys.
7. Standardize the description of the indicator including the definition of “parent” and which questions are included in the scale so that trends can be studied.

8. Monitor local and provincial trends in the positive parenting rate to detect whether this indicator is sensitive to change over time.
9. Ensure the continued inclusion of this indicator for parents of both 0-6 year olds and 7-12 year olds, as even greater challenges seem to exist for those parents of children aged 7-12.
10. Continue to explore and interpret the interaction between the age of the child and the age of the parent and its impact on the positive parenting score so that parenting initiatives will ensure that positive parenting is encouraged throughout the development of the child.

Why the Work was Undertaken

THE FUNDING CATALYST

On December 13, 2001, the Ontario Ministry of Health and Long-Term Care announced the availability of funding to public health units for traditional survey initiatives that addressed information needs in support of Early Child Development. Approximately \$45,000 was made available to each public health unit to complete the deliverables by the end of December 2002. Subsequently, an additional year of funding was announced in December 2002 for health units to continue previous initiatives or begin new projects related to perinatal and child health survey strategies for the duration of 2003.

Survey initiatives were expected to yield representative, population-based, cross-sectional measures of health status or risk factors for the local Board of Health's population or selected sub-populations in identified information areas. Parenting was identified as one of the five relevant information areas in addition to preconception health (including folic acid intake), prenatal (including healthy behaviours, food insecurity and exposure to Environmental Tobacco Smoke), postpartum health and child health, growth and development from birth to 6 (including childhood injuries, asthma and immunization).

Public health units were encouraged to build on existing initiatives and make effective use of opportunities and resources available in Ontario. One such opportunity included the initiation or enhancement of a health unit's participation in the Rapid Risk Factor Surveillance System (RRFSS). This system was modeled after the Behavioral Risk Factor Surveillance System, which operates throughout the United States. RRFSS developed in Ontario in 1999. It began at full capacity in 2001 to fill information gaps found in public health, and to inform local level program planning and evaluation. The surveillance system consists of a 20 minute, telephone survey that is asked monthly of approximately 100 respondents (adults aged 18 and over) from randomly selected households in each participating health unit region. Topics range from immunization through reproductive health to chronic disease risk factors and food safety. Currently 23 of the 37 health units in Ontario participate in RRFSS.

THE SOUTHWEST RESPONSE AND RRFSS

Due to the stated parameters and the short time frame, initially identified as one year, it was imperative to build on existing initiatives and opportunities where possible. The local health intelligence unit, the Southwest Region Health Information Partnership (SRHIP) offered to assist the health units in their planning by bringing the epidemiologists and other planners in the Southwest together to discuss their ideas and share resources. It

quickly became apparent that a number of southwest health units viewed the availability of these resources as a catalyst for joining the RRFSS. At the time of the funding announcement, Middlesex-London Health Unit was the only health unit participating in RRFSS within the Southwest Planning Region. The Middlesex-London Health Unit (MLHU) was able to secure an additional agreement from the survey house conducting the RRFSS (Institute of Social Research (ISR) at York University) to add an additional 2.5 minutes on their health unit's standard survey length starting in May 2002. This extra time allowed MLHU to add a parenting capacity related module to the RRFSS without detracting from the existing survey. By January 2002, an additional six of the remaining eight health units in the southwest (Elgin-St. Thomas, Grey-Bruce, Huron, Lambton, Perth and Windsor-Essex) committed to join RRFSS. These RRFSS participating health units with the help of SRHIP, agreed to work together to develop a survey module that would address the parenting capacity information gap. Those RRFSS participating health units in the southwest announced their intention to develop a module related to parenting to the Ontario RRFSS Working Group in January 2002, and invited all other interested health unit representatives to join in the teleconferences facilitated by SRHIP.

Other Perinatal and Child Health Survey related projects were carried out within the Southwest both by individual health units and various partnerships. The overall goal of this component of the project was to build local capacity to develop a sustainable surveillance system that would capture key indicators related to parenting capacity. Specifically the work was undertaken to assess the feasibility of using the RRFSS to develop and assess a population-level indicator of parenting capacity. Earlier reports documented developments related to the parenting component carried out in 2002.^{1,2} This report focuses on summarizing these developments, reporting the results to date, reflecting on using the RRFSS for measuring positive parenting and providing recommendations gleaned from the development process during the past two years.

IDENTIFYING THE INFORMATION GAP

Initially, the Parenting Module Development Group (Development Group) considered the specific information areas within parenting capacity that would be of use to health units. Three distinct topics emerged: parenting style (including positive parenting), family functioning, and community parenting services access.

After considerable discussion the Development Group agreed to move forward with parenting style. The rationale for focusing on this topic was four-fold:

1. The “Early Years Study” identified that parenting style had a significant effect on early child development.³
2. Public health epidemiologists had come to accept and expect to use health status indicators to measure the health of their local population. The “Statistical Report on the Health of Canadians”⁴ as well as the “Early Years Study” had both presented results on parenting style using similar scales. However, there was no standard population-level indicator used within Ontario public health units to measure a community’s parenting abilities.
3. Health unit representatives considered it valuable to highlight the extent of the current local need related to parenting capacity in order to inform program planning and to monitor community level change which might be associated with the long-term impact of parenting initiatives in the community.
4. Easily accessible questions within the public domain were already in use on the National Longitudinal Survey of Children and Youth (NLSCY) and the results of this survey would provide a provincial and national comparison for local results.

As smoking behaviour is to chronic disease, parenting is to early childhood development. Yet, unlike other public health issues such as smoking, no standard approach to assess community change in the level of parenting ability existed. Nor was there an approved method for evaluating the long-term impact of parenting programs or health promotion interventions on the parent population. As an example Figure 1 provides a framework of how tobacco use is conceptualized and monitored at the population level in Ontario using the Middlesex-London and Windsor-Essex regions as examples. In contrast it identifies the information gaps that existed for parenting capacity within this framework at the onset of this undertaking. Although “parenting style” was quickly identified as an indicator of parenting capacity, an approach to operationalizing and measuring this indicator was not widely available. Similarly, no clearly defined, long-term public health objective existed except that found in the Mandatory Health Programs and Services Guidelines (1997) in Child Health “to increase effective parenting ability in high-risk families”.⁵

Figure 1: Conceptualization of Tobacco Use and Information Gaps related to Parenting Capacity

Topic	Tobacco Use	Parenting Capacity
Description	Adult Daily Smoking Rate	Positive Parenting Style?
Indicator	% of adults that are daily smokers	?
Goal	Reduce the proportion of adult women and men who smoke daily to 15% by the year 2005.	?
Current Levels	Middlesex-London 18.5% ± 2.9 Windsor-Essex 22.3% ± 2.7 <i>Source: CCHS 2001</i>	?

What was Known

THE NLSCY QUESTIONS

Since 1994, the NLSCY has used two parenting scales in at least three consecutive cycles of this face-to-face interview survey. The scales consist of a group of questions that together measure a certain concept when the answers to the items are compiled. It is generally important to use all the questions in the scale to measure the underlying concept. The first scale consists of 18 questions and measures three different constructs or factors related to parenting for parents of children under 12 years old: positive interaction, hostile/ineffective parenting and consistent parenting⁶. Positive interaction is measured for the full age range (0-11), while the latter two measures included only children two years of age and older. These questions were suggested by Dr. Michael Boyle of Chedoke-McMaster and are based on Dr. Ken Dodge's work (Vanderbilt University). They are an adaptation of Strayhorn and Weidman's parenting practices scale⁶. These scales are widely used in the United States by the Fast-Track Project. Fast Track is a comprehensive, multi-site intervention designed to prevent serious and chronic antisocial behavior in a sample of children selected as high-risk at school entry because of conduct problems in kindergarten and home⁷. The Development Group contacted Dr. Boyle in March 2002. He continued to endorse the use of these scales although the scales had not been widely validated. However, to his knowledge, there was no other scale more widely accepted in the field nor any "shortened versions" of these scales. Efforts to undertake the development of a shortened version may promote greater use of the scale in the future.

The second NLSCY series of seven questions also provided by Dr. Boyle measure aversive/non-aversive parenting management techniques for those parents of children 2 and over. With input from Jennifer Macnab, a University of Western Ontario Graduate Student working in the field, and through a preliminary research review, the Development Group agreed to focus on using the first 18 questions.

USE OF THE NLSCY PARENTING SCALES

Analyses of the data from the first cycle of NLSCY Parenting Scales focused on associations between parenting practices or parenting styles and various child outcomes. Landy and Tam⁸ reviewed the relationship between parenting practices and developmental outcomes such as children's motor and social development, helping behaviour, language development and social relationships. They found that children's social relationships were the outcome most affected by parenting practices. Only 13.5% of the children under age two whose parents have high positive parenting scores show delayed social development compared to 35.2% of the children whose parents have low positive

parenting scores. They also demonstrated that positive interaction acts as a protective factor for high-risk children.

Landy and Tam⁹ expanded their earlier study by examining the association of multiple factors with child outcomes. Factors included are parenting practices, social supports, and risk factors such as being in a single-parent family, either parent having ever been a teenage parent, parental depression, low-income, low level of parent education, family dysfunction, being a recent immigrant, and having four or more children at home. Child developmental outcomes examined for children ages 4 to 11 included the co-occurrence of conduct disorder, hyperactivity, emotional disorder, repeating a grade in school; and for children ages 2 to 3 include emotional disorder, hyperactivity, and aggressive behaviour. Their findings support the theory that a complex relationship exists between risk and protective factors and the development of child resiliency. The likelihood of having more problem outcomes increases with an increase in the number of risk factors present. On the other hand, social support and parenting practices have a positive effect, with social support decreasing the child's risk of having social problems and positive parenting reducing child problems in most areas at all ages. For children ages 4 to 11, positive parenting reduced the odds of the child repeating a grade in school by 52%, having an emotional disorder by 41%, having a relationship problem by 27%, and by 25% for conduct disorder. For children aged 2-3, positive parenting is not shown to be particularly effective in reducing the odds of having one or more problems, while consistent parenting reduces the odds ratios for aggressive behaviour and hyperactivity by more than 50%.

Chao and Willms^{10, 11} used the NLSCY data from Cycle 1 to challenge one of the assumptions underlying the "culture of poverty" thesis - that children of poor parents have worse schooling outcomes because of the way they are parented. They re-classified the twenty-five NLSCY parenting practices questions to conform to parenting styles more commonly used in the child psychology literature: authoritative, authoritarian, permissive, and unskilled. Authoritative parenting is characterized by parents monitoring their children's behaviour, being responsive to their needs, and encouraging independence with a democratic approach. It stands in contrast to authoritarian parenting, characterized by parents being highly controlling and somewhat harsh in their approach to discipline, and "permissive" parenting, characterized by parents being overly-indulgent and setting few limits for behaviour.

Their findings suggest that parenting style is only weakly associated with socioeconomic factors, as the variables describing family structure and socio-economic status account for only about 2 to 6% of the variation in parents' practices. Results indicated that children

whose parents recorded a “permissive” parenting style are 1.6 times as likely to be vulnerable, those with “authoritarian” parents are 1.8 times as likely, while those with “unskilled” parents are nearly 2.6 times as likely to be vulnerable when compared to those whose parents are “authoritative”, the preferred parenting style. Chao and Willms conclude that the effects of good parenting are largely independent of the effects of family socioeconomic factors, and exert a stronger influence on child development.

Results from the NLSCY related to positive parenting for working Canadians were recently reported in “Work-Life Conflict in Canada in the New Millennium” funded by Health Canada¹². They appeared to have grouped questions in a slightly different arrangement to create a positive parenting score. The vast majority of Canadians in this sample (79%) engaged in behaviours associated with positive parenting several times a week or daily. One in five parents engaged in these behaviours only once a week or less. The report identified that gender, job type, or sector of employment did not seem to make any difference in the tendency to engage in behaviours associated with positive parenting. The only factor found to make a difference was “dependent care status”. Not surprisingly, those employees with children at home were more likely than those without children at home, to engage in activities with their children. This is an important finding when considering the inclusion of parents in parenting surveys who are in joint custodial relationships.

ADAPTING THE NLSCY QUESTIONS FOR OTHER SURVEYS

Although the NLSCY questions have been widely used on large population surveys it is unclear if there has been any validation of whether the scale measures what it purports to measure or whether it is a reliable measure. In 2001, the City of Ottawa - Public Health and Long-Term Care Branch used some of the individual questions from the NLSCY in a telephone survey. Their survey results reported on the individual item responses but did not assess a value on the parenting scale. They found that over 95% of responding parents say they provide daily praises, talk and interact daily with their child, and laugh daily with their child; 44% do something special with their child on a daily basis such as going to the park, a friend’s house, shopping mall etc. and the rest do something special at least once a week¹³.

During the initial development phase, the Development Group spoke with Dr. Carol Russell, Vice-President of Research and Programs at the “Invest in Kids Foundation”. Dr. Russell helped to develop the “The Parent Poll” a national survey for parents of children under six. She is also on the Advisory Board for the NLSCY and for Healthy Babies Healthy Children. The Parent Poll included specific questions related to parental knowledge of child development and the Parenting Style questions from the NLSCY. Respondents were selected from a “mail-panel”. This method utilizes

a group of people who have agreed to participate in as many surveys as possible for one year and are remunerated for each survey. Thus the respondents are likely to be more inclined to answer probing questions than a sample accrued through a random telephone survey such as the RRFSS. The “Parent Poll” identified an index child (the youngest child in the house) to whom the questions would apply.

Dr. Russell shared some of the results from her study¹⁴. It reported on six knowledge items from the “Parent Poll” for which there was a consensus within the child development field on the appropriate responses. For these six questions, less than a quarter of parents knew the answers. In addition Dr. Russell reported that they found a relationship between positive parenting and knowledge level. She encouraged us to consider using the knowledge questions on the RRFSS in the future in conjunction with the positive parenting module. The six knowledge questions have also been adapted in Calgary for a telephone survey in that region.

In the production of the document “Early Childhood Development in Niagara Falls, Ontario”¹⁵, the Early Years Action Committee developed a way to analyze their community, according to some broad indicators. The indicators had to meet two criteria:

- 1) evidence that the indicators were related to children’s developmental outcome, and
- 2) be amenable to change through the efforts and actions of families and communities.

The report set out ten indicators upon which the community could act over the next few years. Thus they looked across the spectrum of factors that impact on a child's health and created a list of 10 key indicators:

1. positive parenting
2. parental engagement
3. family functioning
4. maternal mental health
5. social support
6. social capital
7. neighbourhood quality
8. neighbourhood safety
9. use of resources
10. residential stability

Niagara's report explained that "positive parenting" was by far the most important factor explaining the outcomes in the behavioural domain, followed by the mother's mental health, and community social capital. The report was based on the full series of questions from the NLSCY. A random sample of 342 kindergarten children ages 5 and 6, and their parents were given the assessments. Statistics Canada interviewers collected detailed information from and about these children using the instruments from the NLSCY. Positive parenting was defined as the style of parenting called authoritative parenting.

In 2003, Toronto Public Health conducted a 20- minute telephone survey including the NLSCY positive-parenting questions with approximately 1000 parents of children aged 0-6. Their approach to defining parents was slightly different. They included custodial parents of children who regularly lived at least part of the time in their home. Among other questions they also successfully included the hostile-ineffective scale (the series of questions which asks about punishment). Their success in incorporating these questions into the survey is attributed to having the questions embedded in a larger child health survey. The hostile-ineffective parenting questions were asked well into the survey at question 32, of a total survey of 92 questions. They did not report any unusual refusal or interviewee termination at these questions. Release of the results from their survey is pending and expected in the spring 2004¹⁶.

What was Done

RRFSS MODULE DEVELOPMENT

By May 2002, a small group of health units facilitated by SRHIP had developed a module for the existing RRFSS to contribute to local knowledge of parenting capacity. The RRFSS module was based on pre-existing questions used on the NLSCY. Initially, 18 questions to measure parenting capacity were proposed. These questions were widely cited for measuring concepts such as authoritative, authoritarian, and permissive parenting styles. These eighteen questions constituted one scale that measured the concepts of positive parenting interaction, consistent, and hostile/ineffective parenting.

Key issues in the initial adaptation of the NLSCY questions included:

- identification of a reference or index child for the series of questions,
- the identification of the sampling frame (i.e. the definition of parent), and
- the provision of interviewer notes.

Currently the NLSCY references a specific parent / child relationship for parents of children 11 years old and younger. There was wide discussion among the Development Group about whether a parent's parenting style is consistent for each child¹⁷. It is not well known whether the possible difference is enough to put the parent in a different parenting style category in relation to each of their children. Dr. Michael Boyle advised that we should consider that there might be as much within family variation as between family variation and urged us to identify a specific reference child.

After consulting with experts, it was decided that the questions would apply to one child, the index child. If a household had more than one child under 12, the child with the last birthday would be the child the parent would be asked to think of in relation to the questions. Second, the respondent would be asked what relationship they had with the child(ren) in their household. If the respondent is a brother/sister or nanny, they were excluded from answering the questions in the module. Parents and siblings who raised the child were asked the questions. If the respondent identified that they were a stepparent, guardian, grandparent or other relative they were then asked if they are at least partially responsible for raising the child. If they were fully or partially responsible for raising the child, they were asked the questions. If not, they were excluded from answering the questions in the module.

In summary, two entry questions were created for the module. The first identified individuals that are fully or partially responsible for raising a child. The second

question identified a single reference child within the family by identifying the child with the next birthday in the household who is under 12 years of age. A follow-up question was asked to identify the relationship of the individual to the child. This latter question was also meant to exclude adult siblings that would have some responsibility for raising the child but who were not legal guardians.

Interviewers from ISR requested that we provide them with definitions of a number of the terms used in the questions including the terms "punishment" and "discipline". The interviewers would then supply these definitions if clarification were requested during the interview. Our contact for the NLSCY, Kelly Astri, Research Analyst, Human Resource Development Canada shared with us that these definitions did not already exist. Therefore, interviewer instructions were created with input from the field and in consultation with the staff from ISR.

In April 2002, the parenting style module was pre-tested by the survey house, ISR. Results from the pretest clearly indicated that there would be significant problems if the questions were used within the RRFSS telephone interview context. First, the module took considerably longer than predicted, nine minutes on average for respondents to complete as compared to the estimated five minutes. As a general guideline, approximately four questions can be asked each minute on the RRFSS. This nearly doubling of the survey time was likely due to the need to repeat questions, for clarification, the need to provide definitions and the addition of the cognitive questions used to solicit feedback on the module questions themselves. Due to the cost per minute of the survey and the need to consider respondent burden, the use of a nine-minute module on the RRFSS was considered to be unrealistic.

Secondly, respondents were extremely reluctant to provide sensitive information about their children specifically the questions related to measuring the consistent and hostile/ineffective parenting constructs. Fifteen percent of respondents (3/20 pre-test cases) hung-up in the middle of the module. This result was despite the inclusion of a skip-out pattern built into the module after a respondent's refusal to answer two questions. ISR reported that this kind of response was highly unusual and had not been encountered with any of the other RRFSS modules. The interviewers explained that the respondents who quit in the middle of the module sounded extremely uncomfortable with the questions and were reluctant to participate. The most discomfort was registered for those questions where "punishment" was being discussed (See Appendix A from Q8 on). It was felt that the use of this module in its entirety might drastically reduce the overall RRFSS's completion rate as well as increase the risk of public complaints about the RRFSS. These results were

unexpected. Item non-response on the NLSCY and had been less than 5% in Cycle 1. It appeared that respondents' comfort with answering sensitive questions about their children might vary between survey contexts. Despite the use of these questions on other large-scale surveys, their use on the RRFSS was problematic.

In May 2002, the Parenting Module was incorporated into the RRFSS and included by the Middlesex-London Health Unit and the Windsor-Essex County Health Unit. The problem with the length of the total series of questions, coupled with the perceived offensive, confusing nature of some of the questions resulted in the module being reduced to five questions on positive parenting interaction. These five questions asked parents the following:

- How often they praise their child
- How often they laugh with their child
- How often they talk or play with each other, focusing attention on each other for five minutes or more just for fun
- How often do they do something special with their child that he/she enjoys
- How often they play games with their child (if the child is under two)
- How often they play games, sports, hobbies with their child (if child is 2-11 years old)

The final positive parenting module consisted of:

- a group of instructions and questions to identify parents/ guardians as well as the eligible index child (under 12 years old, living in the household with the next birthday),
- a series of five questions which combine to assess positive parenting (See Appendix B),
- Four standard cognitive questions to evaluate the clarity and acceptability of the questions to the respondent. (See Appendix C).

Although timing reports were not available, it appears that the module adds approximately 2.5 minutes on average to the total interview time. This is based on assessing the total interview length of the MLHU survey for the 100 respondents per wave prior to adding the questions and after adding the questions. Since less than a third of the respondents actually answered these questions, the actual length of the module for participating respondents might be as high as seven minutes. This module consists of 14 questions in total (5 entry, 5 positive- parenting scale and 4 cognitive testing.) Due to the cost per minute of the survey and the need to consider respondent burden, further consideration is indicated to assess the length of the

module both in terms of overall average survey length and respondent's time.

The survey tool has remained stable over time and no changes to the module have been made since the first wave of collection. A coding error was detected with respect to the age of the index child in November 2003 and subsequently modified. A syntax file was constructed by ISR to adjust for this error prior to November 2003. A data dictionary has been constructed noting this error for those who had opted into this module before November 2003. For the data dictionary, please see Appendix B.

ANALYSIS APPROACH

A major issue resolved in 2003 was the approach to analyzing and interpreting the data. Since these five questions were constructed as a scale, it was decided to analyze them both as individual questions and as a derived scale. However, questions remained – how positive was positive parenting interaction? What was the benchmark to which regions could compare? How could local results be put into a broader context? The 1994/1995 Canadian mean for these five questions on the NLSCY was designated the benchmark⁴. In 1994/1995, the Canadian mean for positive parenting was 13.5 out of a possible score of 20. The higher the score, the more frequent positive parenting interaction was practiced. With respect to scoring the questions, the highest score is 20, with 0 being never, and 4 for daily/all the time. Any parent who refused to answer a question or answered “don't know” to any of the five questions was excluded from analysis. While this mean score allowed a County or Region to situate itself to a national benchmark, it did not provide a more detailed picture of where people were situated with respect to scoring. To monitor change over time, another approach to the analysis was devised. The scores were divided into four equal increments (0-5; 6-10; 11-15; 16-20). This approach was created in anticipation that this method would be more sensitive to minor shifts within the parenting score range and therefore able to better monitor if a population's parents are moving up into higher scores over time

The results were analyzed using standards outlined by Statistics Canada and supported by the Ontario RRFSS Analysis Group:

- “Don't know” or “refused” responses that are greater than 5% are not to be excluded but reported separately
- Cells <5 are suppressed
- Denominators <30 are suppressed
- Statistically significant results are reported when $p < .05$.
- Point estimates with a coefficient of variation > 33.3 are suppressed

- Point estimates with a coefficient of variation from 16.6 to 33.3 are to be released with caution
- Point estimates with a coefficient of variation <16.6 are to be released without qualification

In addition, questions about positive parenting interaction are weighted. The questions are weighted to approximate a random telephone survey of individuals and thus adjust for the fact that RRFSS is a random household survey. It was deemed appropriate to weight the responses because the questions are not proxy questions about children's perceptions or behaviours (which would be unweighted in accordance with previously developed modules), but ask parents directly about their own behaviour with one of their children under the age of twelve.

The Middlesex-London Health Unit and Windsor-Essex County Health Unit developed a SPSS syntax file for the automated analysis of the positive parenting module including the derived positive parenting score and some suggested approaches for analysis and interpretation. This syntax file was made available to all RRFSS partners in December 2002.

WHAT WAS FOUND

OVERVIEW

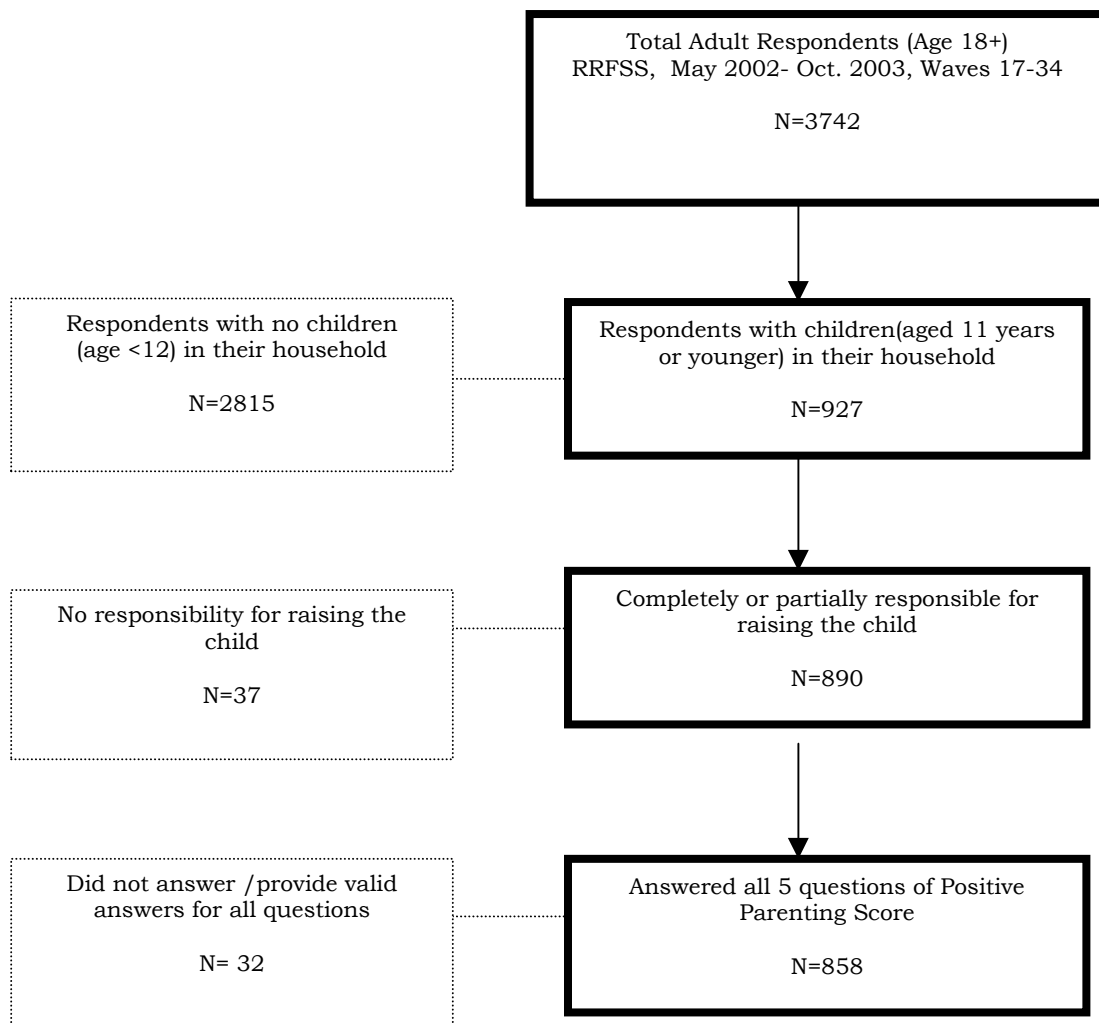
Overall, the results provide base-line measurements of positive parenting against which future rates can be compared. They indicate that a large proportion of parents in Middlesex-London and Windsor-Essex practice positive parenting. The results are presented in the following order: survey participant flow and sample characteristics, frequency of individual positive parenting behaviours, local positive parenting score comparisons to the Canadian mean, for positive parenting and incremental parenting scores.

older on RRFSS in Waves 17 to 34, interviewed between May 2002 and October 2003 (890/3742) were identified as being partially or completely responsible for raising a child aged 11 or younger. Of this 426 were residents of the Middlesex-London Health Unit region and 466 were residents of the Windsor-Essex County Health Unit region. In the unweighted sample 93.3% were parents while the others were stepparents, guardians, grandparents, and other relatives. This group was eligible for inclusion in the positive parenting module. Only those respondents who provided valid answers for all 5 questions on the positive parenting score were included in the final sample of 858.

SURVEY PARTICIPANT FLOW

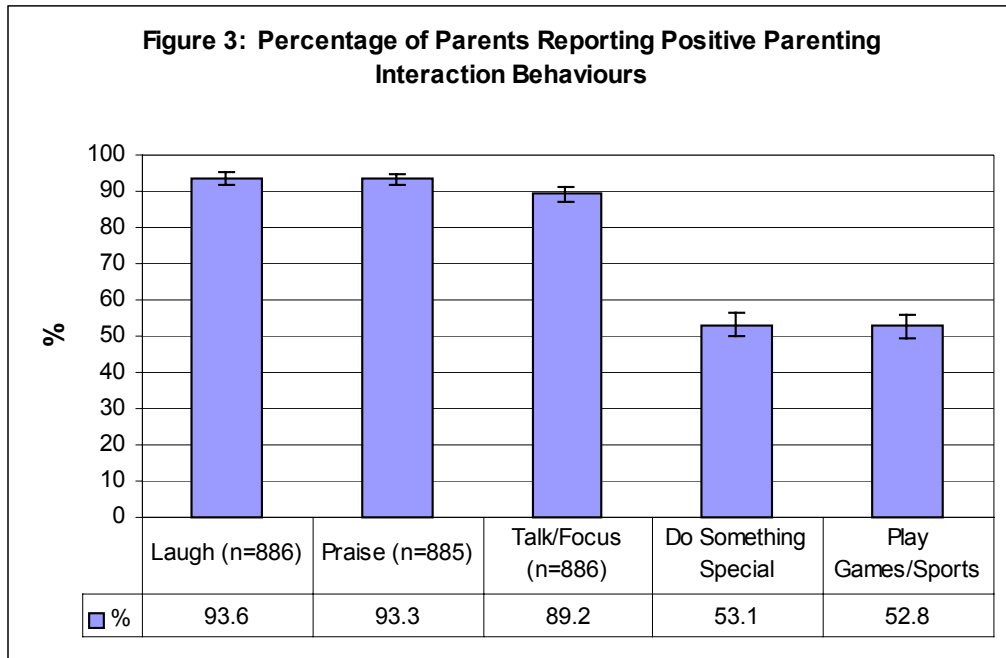
Figure 2 outlines the survey design and participant flow. Approximately 24% of the total respondents aged 18 and

Figure 2: Survey Design and Participant Flow- Unweighted Counts



When each of the five questions in the positive parenting module is considered individually, a lower percentage of parents reported participating in those activities that might require more planning or resources than those activities involving more verbal behaviours (Figure 3). For example nearly 95% of parents in Middlesex-London and Windsor-Essex combined reported that they praised their kids while just over half reported that they play games or sports with their children daily. This split in results was similar to that observed in

the City of Ottawa Parenting Survey 2001¹³. However, lower percentages were reported for the more resource intensive activities such as doing something special with their child on a daily basis, by those parents surveyed in Ottawa (44%) than the southwest sample (53.1%). Slightly different sample sizes were observed for each question due to the fact that the results exclude “don’t knows” and “refusals” and represent the weighted counts.

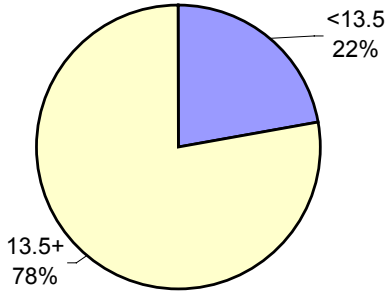


POSITIVE PARENTING SCALE COMPARED TO CANADIAN MEAN

The five questions were combined to create the positive parenting scale. Higher scores reflect a greater frequency of positive parenting. To provide some assessment of positive parenting in the local population the results

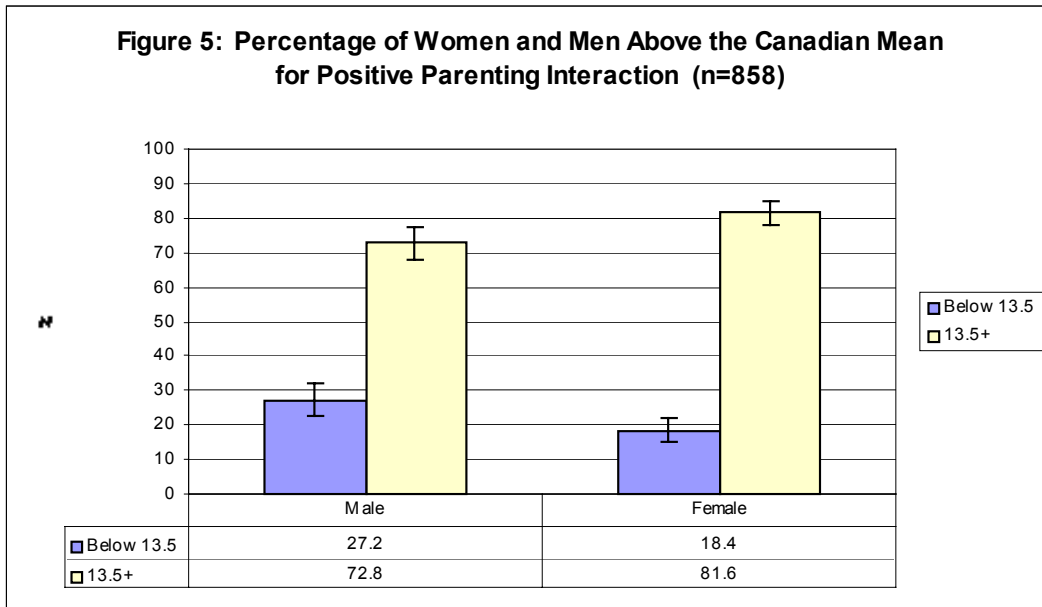
were compared to the 1994 Canadian mean of 13.5 for positive parenting interaction. In the combined regions of Middlesex-London and Windsor-Essex, 77.8% (± 2.8; n=858) were above the mean (Figure 4). The overall mean on the Positive-Parenting Scale was 16.1 for this combined sample indicating that a greater proportion of parents in Middlesex-London and Windsor-Essex exhibit positive parenting than did the 1994 Canadian population.

Figure 4: Percentage of Respondents Above and Below the Canadian Mean for Positive Parenting Interaction (Middlesex-London and Windsor-Essex Combined) n=858

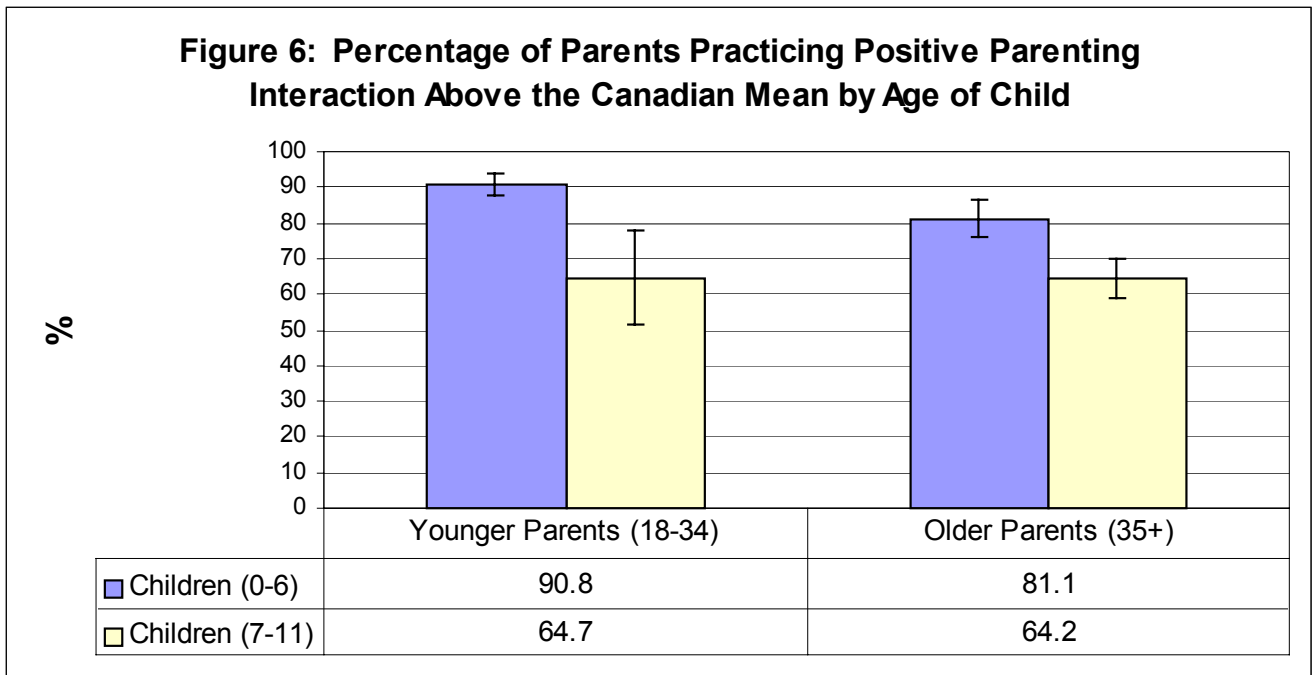


A number of socio-demographic variables were considered to determine their impact on the frequency of positive parenting. Differences in the percentage above the Canadian mean for positive parenting were observed by the parent's gender, age group of parent and age group of index child. The percentage of females above the Canadian Mean ($81.6\% \pm 3.4$; $n=494$) were higher than males ($72.8\%, \pm 4.6$; $n=364$) (Figure 5).

Figure 5: Percentage of Women and Men Above the Canadian Mean for Positive Parenting Interaction (n=858)



Those parents age 18-34 years old were more likely to be above the Canadian mean (87.1%, ±3.5; n=357) than their older counterparts aged 35 and older (71.7% ± 4.0; n=494). Parents of younger children aged 0-6 were also more likely to be above the Canadian mean (86.6%, ±2.9; n=524) than their older counterparts aged 7-11 years old (63.9%, ±5.1; n=335). Of the two variables, the age of the index children is more strongly associated with the age of the parent with respect to positive parenting interaction. In other words, the age of the index child – usually a younger child (0-6) is more likely to determine the frequency of positive parenting interaction than age of the parent (Figure 6).



The age of the index child is strongly associated with the frequency of positive parenting. Specifically, the younger the child, the more positive parenting the child is likely to receive, regardless of the age of the parent. These findings beg the questions: If positive parenting is practiced frequently in children’s early years, does this trend continue into children’s later years, where positive parenting interactions currently are markedly decreased from the early years? Do older children experience more hostile/ineffective parenting interaction and do these interactions account for the lower levels of positive

interaction? It would be prudent to monitor the cohort of children over time to determine if these children do receive the same amount of positive parenting interaction as they get older or shed light on why they do not. At the very least, monitoring these behaviours can reveal where programming/education needs are to be focused more heavily as well (i.e., for those parents, particularly men, with children 7-11).

No significant differences were observed in the following variables:

- Health units, Middlesex-London (76.0%, ±4.2; n=400) compared to Windsor-Essex (79.5%, ±3.7; n=458)
- Income Level: Less than \$40,000 (77.3%, ±6.2; n=176), 40,000 to less than 70,000 (75.0%, ±5.1; n=276), 70,000 to less than 100,000 (78.3%, ±6.4; n=161) and 100,000 and over (78.9%, ±7.1; n=128)
- Employment Status: Employed (76.7%, ± 3.2, n=690) Not employed (82.2%, ± 5.8 n=169)

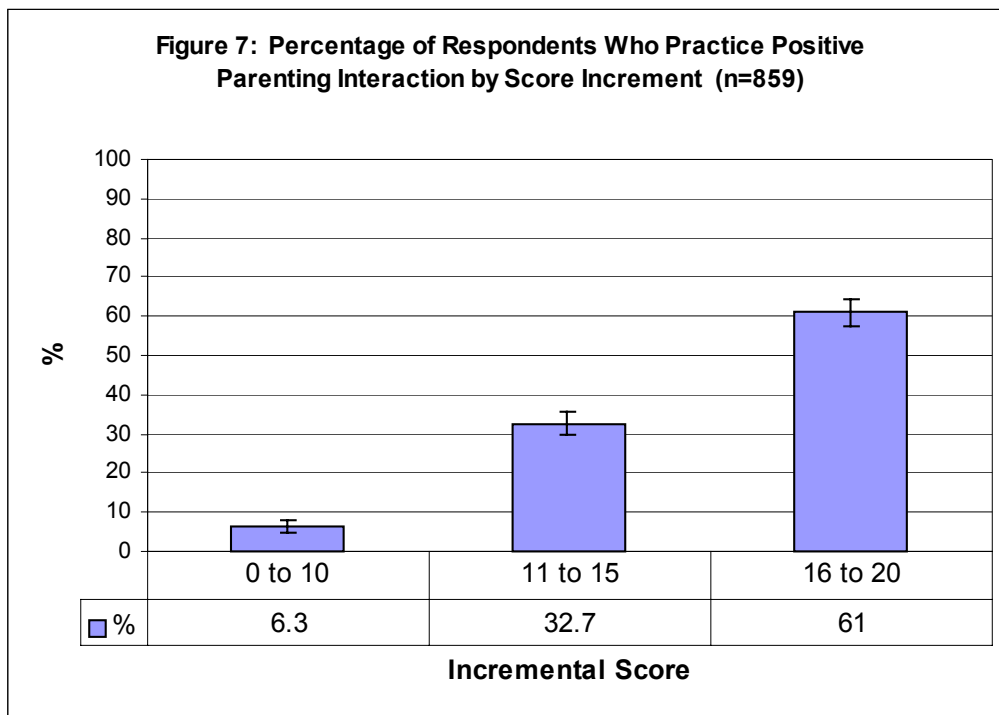
As education level increased so did the percentage above the Canadian Mean. However, this trend was not statistically significant. (Less than high school (68.5%, ±10.7; n=73), High school (75.9%, ±5.0; n=286) and Post secondary (80.3%, ±3.5; n=498)

The finding that region, education, employment status, and income are not associated with the frequency of positive parenting interaction is also elucidating. Of these variables, the association was the weakest between income and the frequency of positive parenting

interaction – a surprise considering that income is often a determinant not only of knowledge of healthy living, but of practicing a healthy lifestyle. This finding however was similar to that of Chaos and Wilms^{10, 11} who found that socio-economic status was only weakly associated with parenting style. Two variables seem to be at odds: those that are highly educated, and those that are not employed have a greater tendency to practice positive parenting more often with their children. These trends are not statistically significant but may warrant further follow-up. The finding regarding employment, however, could help to support policy change that assist parents to spend time with their children such as flex time and other recommendations made by Duxbury and Higgins in their recent report on work-life conflict in Canada, (2003 ref).

POSITIVE-PARENTING INCREMENTAL SCORES

When the Positive-Parenting Score was divided into four equal increments (n=859 weighted) (0-5, 6-10, 11-15 and 16-20), 61.0% (±3.3) of respondents scored in the highest increment (16-20), 32.7% (±3.1) scored 11-15 and the remainder (6.3% ±1.6) scored under 11 (Figure 7). This latter group with scores of 10 or less might represent the group of parents at risk for poor parenting.



Reflections and Recommendations

ASSESSING PROJECT PROGRESS

This project was undertaken to develop a sustainable surveillance system that would capture key indicators related to parenting capacity, specifically to assess the feasibility of using RRFSS to develop and monitor population level parenting capacity. Towards that end a successful module has been developed and its use documented by two Ontario health units, Middlesex-London Health Unit and Windsor-Essex County Health Unit. The results indicate that interesting and substantial descriptive information on positive parenting

can be collected using the RRFSS over the course of eighteen months. Using these results, Figure 8 illustrates how parenting capacity can be conceptualized using a familiar framework employed for tobacco use. This framework identifies the indicator of positive parenting rate and sets a reasonable goal that public health might consider based on current levels of positive parenting.

Figure 8 Conceptualization of Parenting Capacity Using Tobacco Use Framework

Topic	Tobacco	Parenting Capacity
Description	Adult Daily Smoking Rate	Positive Parenting Rate
Indicator	% of adults that are daily smokers	% of parents with children aged 11 or younger with positive parenting scores above 1994 Canadian Mean
Goal	Reduce the proportion of adult women and men who smoke daily to 15% by the year 2005.	Increase % of parents of children aged 11 or younger who scored above the 1994 Canadian Mean on the positive parenting score to 85% by the year 2010
Current Levels	Middlesex-London 18.5% ± 2.9 Windsor-Essex 22.3% ± 2.7 <i>Source: CCHS 2001</i>	Middlesex-London 76.0% ± 4.2 Windsor-Essex 79.5% ± 3.7 <i>Source: RRFSS 2002-2003</i>

More work must be done to disseminate this framework and refine both this conceptualization and use of this framework for positive parenting. Dissemination activities to date are itemized in Appendix D.

CURRENT USE OF THE MODULE ON RRFSS

One of the important indicators of the success of this project and its acceptability among public health practitioners is the expansion in its current use by participating RRFSS health units in Ontario. Use of the positive parenting module on the RRFSS has expanded from two health units in May 2002 Middlesex-London and Windsor-Essex to a total of nine different health units having used or scheduled to use the module as of January 2004. Middlesex-London purchased an additional 2.5 minutes per survey to increase the interview length and accommodate the module. Windsor-Essex incorporated the module within their allotted 20-minute interview time. In 2003, the option to purchase additional interview time above the 20 minutes was withdrawn by ISR and both health units

incorporated the module into their standard interview. Figure 9 outlines the historical use of the module since its initial use in 2002. Three additional health units incorporated the positive-parenting module in 2003 including Elgin-St. Thomas, Leeds-Greenville & Lanark and Brant County. Four more Health units are scheduled to include this module in 2004 Windsor-Essex will continue to include the module on RRFSS in 2004. MLHU will continue to use the positive parenting module in their Parent-Only RRFSS survey developed in 2003 as part of the Perinatal and Child Health Survey Initiative and scheduled for completion in 2004.

Figure 9: RRFSS Positive-Parenting Module Selection History by Health Unit for May 2002 to January 2004

Year	Month	Wave	Health Unit								
			Middlesex-London	Windsor - Essex	Elgin-St. Thomas	Leeds	Brant	Lambton	KFLA	Niagara	Simcoe
2002	May	17	X	X							
	Jun	18	X	X							
	Jul	19	X	X							
	Aug	20	X	X							
	Sep	21	X	X							
	Oct	22	X	X							
	Nov	23	X	X							
	Dec	24	X	X							
2003	Jan	25	X	X							
	Feb	26	X	X							
	Mar	27	X	X		X					
	April	28	X	X	X	X					
	May	29	X	X	X	X					
	Jun	30	X	X	X	X					
	Jul	31	X	X	X	X	X				
	Aug	32	X	X	X		X				
	Sep	33	X	X	X		X				
	Oct	34	X	X	X		X				
	Nov	35	X	X	X		X				
	Dec	36	X	X	X		X				
2004	Jan	37	*	X	X		X	X	X	X	X

* will be used on Parent-Only RRFSS Survey in 2004

RECOMMENDATIONS

Substantial progress was made toward the intended goal of assessing the feasibility of using the RRFSS to monitor parenting capacity at the local level. The unique funding made available to public health units in 2002 and 2003 for perinatal and child health survey initiatives helped to initiate substantial surveillance work in the parenting capacity area. However the need exists to continue to build on the momentum of the past two years. Future funders, researchers, and public health practitioners are encouraged to move forward on the following ten recommendations resulting from the key learnings during the positive parenting module development and use:

1. Incorporate the positive parenting rate as a local, provincial and national health indicator of effective parenting ability.
2. Create a specific population-level objective in the Mandatory Health Program and Services Guidelines such as, “Increase to 85% the per cent of parents of children aged 0 to 12 years who scored above the 1994 Canadian mean for positive parenting”.
3. Ensure the sustainability of RRFSS or secure resources to build a complimentary structure for an ongoing/periodic parent-survey in Ontario at a level that allows for the reporting of local health unit level indicators.
4. Consider the inclusion of the positive-parenting module for one full year on the RRFSS by participating RRFSS health unit partners to allow for sample accrual.
5. Build on the success of the positive parenting module in the Rapid Risk Factor Surveillance System (RRFSS) by incorporating additional questions on hostile parenting (including questions on punishment) and parental knowledge.
6. Encourage, undertake and fund research on the validation of these “positive-parenting” measures including a shortened version of parenting style modules for use on population level surveys.
7. Standardize the description of the indicator including the definition of “parent” and which questions are included in the scale so that trends can be studied.
8. Monitor local and provincial trends in the Positive-Parenting Rate to detect whether this indicator is sensitive to change over time.
9. Ensure the continued inclusion of this indicator for parents of both 0-6 year olds and 7-12 year olds, as even greater challenges seem to exist for those parents of children aged 7-12.
10. Continue to explore and interpret the interaction between the age of the child and the age of the parent and its impact on the positive parenting score so that parenting initiatives will ensure that positive parenting is encouraged throughout the development of the child.

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Appendix A - NLCY Parenting Style Module

This section is asked only if the respondent identifies that they are involved in raising a child. Children under 24 months are asked fewer questions as follows:

Children 0-23 months: par-C1 to par-Q6; par-Q7A

Children 2-11 years: par-C1 to par Q 18

The following questions have to do with things that {identified child} does and ways that you react to him/her

Par-Q1 How often do you praise {identified child}, by saying something like “Good for you!” or “What a nice thing you did!” or “That’s good going!”

- 01 Never
- 02 About once a week or less
- 03 A few times a week
- 04 One or two times a day
- 05 Many times each day

Flow Information **If refusal go to Par-Stop**

Par-Q2 How often do you and he/she talk or play with each other, focusing attention on each other for five minutes or more, just for fun?

Par-Q3 How often do you and he/she laugh together?

Par-Q4 How often do you get annoyed with {identified child} for saying or doing something he/she is not supposed to?

Par-Q5 How often do you tell him/her that he/she is bad or not as good as others?

Par-Q6 How often do you do something special with him/her that he/she enjoys?

Par-C7 If age<3 go to Par-Q7A
Otherwise go to Par-Q7

Par-Q7 How often do you play sports, hobbies, or games with him/her?

Flow Information **If refusal go to Par-Stop**

Par-Q7A How often do you play games with him/her?

Par-C8 If age<2 go to Par-Stop
Otherwise to go Par-C8A (continue)

Par-I8 Interviewer: Use reference card item 6 for questions Par-Q8 to Par-Q18

Par-I8A Now, we know that when parents spend time together with their children, some of

the time things go well and some of the time they don't go well. For the following questions, I would like you to tell me what proportion of the time things turn out in different ways.

Par-Q8 Of all the times that you talk to {identified child} about his/her behaviour, what proportion is praise?

- 01 Never
- 02 Less than half the time
- 03 About half the time
- 04 More than half the time
- 05 All the time

Flow Information

If refusal go to Par-Stop

Par-Q9 Of all the times that you talk to him/her about his/her behaviour, what proportion is disapproval?

Par-Q10 When you give him/her a command or order to do something, what proportion of the time do you make sure that he/she does it?

Par-Q11 If you tell him/her he/she will get punished if he/she doesn't stop doing something, and he/she keeps doing it, how often will you punish him/her?

Par-Q12 How often does he/she get away with things that you feel should have been punished?

Par-Q13 How often do you get angry when you punish {identified child}?

Par-Q14 How often do you think that the kind of punishment you give him/her depends on your mood?

Par-Q15 How often do you feel you are having problems managing him/her in general?

Par-Q16 How often is he/she able to get out of a punishment when he/she really sets his/her mind to it?

Par-Q17 How often when you discipline him/her, does he/she ignore the punishment?

Par-Q18 How often do you have to discipline him/her repeatedly for the same thing?

End

Appendix B - Positive Parenting Data Dictionary

MODULE INFORMATION

PURPOSE OF THE MODULE:

The goal of the positive parenting interaction module is to contribute to local knowledge regarding parenting capacity, particularly with children under 12 years of age, in response to the Ministry of Health and Long Term Care's funding for Perinatal and Child Health Survey Strategies on early child development.

DATE OF LAST REVISION: November, 2003

MODULE QUESTIONS

VARIABLE NAME: par_1

VARIABLE TYPE BY YEAR: Optional 2002 (Wave 17+)

MODULE QUESTION:

Now some questions about parent and child relationships. [If more than one child LESS than 12 years old] How old is this child? [The child with the LAST birthday].

1	Less than a year
11	Eleven years old
98	Don't know
99	Refused

ANALYSIS ISSUES:

This question displays the age of children selected as the subject of the following questions. If there is more than one child under 12 in the household, the child with the last birthday is selected as the subject of the following questions. If there is only one, that child is the selected subject.

In 2003, it was discovered that par_1 cannot be calculated due to an incorrect fill. As a result, par_1 can only be calculated from wave 34 (Oct/November), 2003 on.

The following syntax, however, will allow those who wish to calculate the age of the index child from all waves before wave 34 (October/November 2003).

```
if h_unit= (insert health unit).
compute flag=0 .
if (age0=0 and age1_3=0 and age4_11=1) or
   (age0=0 and age1_3=1 and age4_11=0) or
   (age0=1 and age1_3=0 and age4_11=0) flag=1 .
if flag=1 .
```

```

compute kids_age=-1 .
if (dc3a lt 12) kids_age=dc3a .
list vars=idnum kids_age dc3a dc3b dc3c dc3d dc3e dc3f dc3g dc3h par1.
if (dc3b lt 12) kids_age=dc3b .
list vars=idnum kids_age dc3a dc3b dc3c dc3d dc3e dc3f dc3g dc3h par1.
if (dc3c lt 12) kids_age=dc3c .
list vars=idnum kids_age dc3a dc3b dc3c dc3d dc3e dc3f dc3g dc3h par1.
if (dc3d lt 12) kids_age=dc3d .
list vars=idnum kids_age dc3a dc3b dc3c dc3d dc3e dc3f dc3g dc3h par1.
if (dc3e lt 12) kids_age=dc3e .
list vars=idnum kids_age dc3a dc3b dc3c dc3d dc3e dc3f dc3g dc3h par1.
if (dc3f lt 12) kids_age=dc3f .
list vars=idnum kids_age dc3a dc3b dc3c dc3d dc3e dc3f dc3g dc3h par1.
if (dc3g lt 12) kids_age=dc3g .
list vars=idnum kids_age dc3a dc3b dc3c dc3d dc3e dc3f dc3g dc3h par1.
if (dc3h lt 12) kids_age=dc3h .
list vars=idnum kids_age dc3a dc3b dc3c dc3d dc3e dc3f dc3g dc3h par1.
recode kids_age (-1=SYSMIS) .
compute par1=kids_age .
    
```

COMPARABILITY TO OTHER SURVEYS

CCHS (2000) None

NPHS (1996) None

BRFSS (1998) None

VALIDITY/RELIABILITY TESTS:

COGNITIVE TESTING RESULTS:

From waves 17-24 (2002), 12.9% found these questions difficult, confusing, or unclear, and 18% needed the question to be repeated (two health units combined - unweighted).

DATE OF LAST REVISION: November, 2003

MODULE QUESTIONS

VARIABLE NAME: par_2

VARIABLE TYPE BY YEAR: Optional 2002 (Wave 17+)

MODULE QUESTION:

What is your relationship to [fill KIDNAME], are you a parent, step-parent, legal guardian, grand-parent, brother, sister, or something else?

1 Parent

- 2 Step-parent
- 3 Guardian
- 4 Grand-parent
- 5 Brother/sister
- 6 Brother/sister R volunteers they have a role in raising child
- 7 Something else (specify)
- 8 Live-in-nanny or other paid child care provider
- 9 Other relative (uncle, aunt, etc.)
- 98 Don't know
- 99 Refused

ANALYSIS ISSUES:

If R is a brother/sister (5), something else (7), live-in nanny (8), d or r, then they are exited out of the module. Parents (1), and siblings who have raised the child (6), are directed to PAR_4. Step-parents (2), guardians (3), grand-parents (4), and other relatives (9) are directed to PAR_3.

COMPARABILITY TO OTHER SURVEYS

CCHS (2000) None

NPHS (1996) None

BRFSS (1998) None

VALIDITY/RELIABILITY TESTS:

COGNITIVE TESTING RESULTS:

From waves 17-24 (2002), 12.9% found these questions difficult, confusing, or unclear, and 18% needed the question to be repeated (two health units combined - unweighted).

DATE OF LAST REVISION: November, 2003

MODULE QUESTIONS

VARIABLE NAME: par_3

VARIABLE TYPE BY YEAR: Optional 2002 (Wave 17+)

MODULE QUESTION:

Are you completely or partially responsible for raising [fill KIDNAME]?

- 1 Yes, complete or partial responsibility
- 5 No responsibility
- 8 Don't know
- 9 Refused

ANALYSIS ISSUES:

This question is asked of step-parents, guardians, grand-parents, and other relatives (aunt, uncle).

COMPARABILITY TO OTHER SURVEYS

CCHS (2000) None

NPHS (1996) None

BRFSS (1998) None

VALIDITY/RELIABILITY TESTS:

COGNITIVE TESTING RESULTS:

From waves 17-24 (2002), 12.9% found these questions difficult, confusing, or unclear, and 18% needed the question to be repeated (two health units combined - unweighted).

DATE OF LAST REVISION: November, 2003

MODULE QUESTIONS

VARIABLE NAME: par_4

VARIABLE TYPE BY YEAR: Optional 2002 (Wave 17+)

MODULE QUESTION:

First, how often do you praise [fill KIDNAME], by saying something like: “Good for you!” or “What a nice thing you did!” or “That’s good going!” Do you do this many times a day, one or two times a day, a few times a week, about once a week or less, or never?

- 1 Many times each day (includes “all the time”)
- 2 One or two times a day
- 3 A few times a week
- 4 About once a week or less
- 5 Never
- 8 Don’t know
- 9 Refused

ANALYSIS ISSUES:

This question is asked of step-parents, guardians, grand-parents, and other relatives (aunt, uncle) who answered yes to PAR_3 and parents.

For each health unit, a special weight must be created for the combination of waves selected. In the syntax file, this is called wteachu. For examining your health unit against others, a special weight is also created. In the syntax file, it is called wtcomb. If using a different name, be sure to change it in the syntax file.

COMPARABILITY TO OTHER SURVEYS

CCHS (2000) None

NPHS (1996) None

BRFSS (1998) None

NLSCY (1996-97) par q1

How often do you praise ... , by saying something like "Good for you!" or "What a nice thing you did!" or "That's good going!"?

VALIDITY/RELIABILITY TESTS:

COGNITIVE TESTING RESULTS:

From waves 17-24 (2002), 12.9% found these questions difficult, confusing, or unclear, and 18% needed the question to be repeated (two health units combined - unweighted).

DATE OF LAST REVISION: November, 2003

MODULE QUESTIONS

VARIABLE NAME: par_5

VARIABLE TYPE BY YEAR: Optional 2002 (Wave 17+)

MODULE QUESTION:

How often do you and [fill KIDNAME] talk or play with each other, focusing attention on each other for five minutes or more, just for fun? Do you do this many times each day, one or two times a day, a few times a week, about once a week or less, or never?

- 1 Many times each day (includes "all the time")
- 2 One or two times a day
- 3 A few times a week
- 4 About once a week or less
- 5 Never
- 8 Don't know
- 9 Refused

ANALYSIS ISSUES:

This question is asked of step-parents, guardians, grand-parents, and other relatives (aunt, uncle) who answered yes to PAR_3 and parents.

For each health unit, a special weight must be created for the combination of waves selected. In the syntax file, this is called wteachu. For examining your health unit against others, a special weight is also created. In the syntax file, it is called wtcomb. If using a different name, be sure to change it in the syntax file.

COMPARABILITY TO OTHER SURVEYS

CCHS (2000) None

NPHS (1996) None

BRFSS (1998) None

NLSCY (1996-97) par q2.

How often do you and he/she talk or play with each other, focusing attention on each other for five minutes or more, just for fun?

VALIDITY/RELIABILITY TESTS:

COGNITIVE TESTING RESULTS:

From waves 17-24 (2002), 12.9% found these questions difficult, confusing, or unclear, and 18% needed the question to be repeated (two health units combined - unweighted).

DATE OF LAST REVISION: November, 2003

MODULE QUESTIONS

VARIABLE NAME: par_6

VARIABLE TYPE BY YEAR: Optional 2002 (Wave 17+)

MODULE QUESTION:

How often do you and [fill KIDNAME] laugh together? Do you do this many times each day, one or two times a day, a few times a week, about once a week or less, or never?

- 1 Many times each day (includes “all the time”)
- 2 One or two times a day
- 3 A few times a week
- 4 About once a week or less
- 5 Never
- 8 Don’t know
- 9 Refused

ANALYSIS ISSUES:

This question is asked of step-parents, guardians, grand-parents, and other relatives (aunt, uncle) who answered yes to PAR_3 as well as parents/siblings who were responsible for raising the child.

For each health unit, a special weight must be created for the combination of waves selected. In the syntax file, this is called wteachu. For examining your health unit against others, a special weight is also created. In the syntax file, it is called wtcomb. If using a different name, be sure to change it in the syntax file.

COMPARABILITY TO OTHER SURVEYS

CCHS (2000) None

NPHS (1996) None

BRFSS (1998) None

NLSCY (1996-97) par q3

How often do you and he/she laugh together?

VALIDITY/RELIABILITY TESTS:

COGNITIVE TESTING RESULTS:

From waves 17-24 (2002), 12.9% found these questions difficult, confusing, or unclear, and 18% needed the question to be repeated (two health units combined - unweighted).

DATE OF LAST REVISION: November, 2003

MODULE QUESTIONS

VARIABLE NAME: par_7

VARIABLE TYPE BY YEAR: Optional 2002 (Wave 17+)

MODULE QUESTION:

How often do you do something special with [fill KIDNAME] that he/she enjoys? Do you do this many times each day, one or two times a day, a few times a week, about once a week or less, or never?

- 1 Many times each day (includes “all the time”)
- 2 One or two times a day
- 3 A few times a week
- 4 About once a week or less
- 5 Never
- 8 Don’t know
- 9 Refused

ANALYSIS ISSUES:

This question is asked of step-parents, guardians, grand-parents, and other relatives (aunt, uncle) who answered yes to PAR_3 and parents.

For each health unit, a special weight must be created for the combination of waves selected. In the syntax file, this is called wteachu. For examining your health unit against others, a special weight is also created. In the syntax file, it is called wtcomb. If using a different name, be sure to change it in the syntax file.

COMPARABILITY TO OTHER SURVEYS

CCHS (2000) None

NPHS (1996) None

BRFSS (1998) None

NLSCY (1996-97) par q6

How often do you do something special with him/her that he/she enjoys?

VALIDITY/RELIABILITY TESTS:

COGNITIVE TESTING RESULTS:

From waves 17-24 (2002), 12.9% found these questions difficult, confusing, or unclear, and 18% needed the question to be repeated (two health units combined - unweighted).

DATE OF LAST REVISION: November, 2003

MODULE QUESTIONS

VARIABLE NAME: par_8

VARIABLE TYPE BY YEAR: Optional 2002 (Wave 17+)

MODULE QUESTION:

How often do you play games with [fill KIDNAME] or How often do you play sports, hobbies, or games with [fill KIDNAME]? Do you do this many times each day, one or two times a day, a few times a week, about once a week or less, or never?

- | | |
|---|---|
| 1 | Many times each day (includes “all the time”) |
| 2 | One or two times a day |
| 3 | A few times a week |
| 4 | About once a week or less |
| 5 | Never |
| 8 | Don’t know |
| 9 | Refused |

ANALYSIS ISSUES:

This question is asked of step-parents, guardians, grand-parents, and other relatives (aunt, uncle) who answered yes to PAR_3 and parents.

For each health unit, a special weight must be created for the combination of waves selected. In the syntax file, this is called wteachu. For examining your health unit against others, a special weight is also created. In the syntax file, it is called wtcomb. If using a different name, be sure to change it in the syntax file.

COMPARABILITY TO OTHER SURVEYS

CCHS (2000) None

NPHS (1996) None

BRFSS (1998) None

NLSCY (1996-97) par q7 par q7a

How often do you play sports, hobbies or games with him/her?

How often do you play games with him/her?

VALIDITY/RELIABILITY TESTS:

COGNITIVE TESTING RESULTS:

From waves 17-24 (2002), 12.9% found these questions difficult, confusing, or unclear, and 18% needed the question to be repeated (two health units combined - unweighted).

DATE OF LAST REVISION: November, 2003

MODULE INDICATORS

INDICATOR TITLE

Use of positive parenting interactions/practices between parents and children under 12 years of age.

INDICATOR DESCRIPTION:

% of parents who fall below/above the Canadian average as indicated on the 1994 NLSCY

% of parents who score in the lowest to highest quartiles of the scale.

INDICATOR OBJECTIVES:

To measure the percentage of parents who practice positive parenting interaction between themselves and their children in an effort to influence local programming and services to parents.

ANALYSIS CHECK LIST:

Parents are defined as natural parents to the child, or step-parents, guardians, grandparents, or siblings who are responsible for raising the child.

If there is more than one child under the age of 12 in the household, the reference child is identified through a systematic selection process (child with last birthday) and all answers are given in reference to that child. If there is only one child in the household under 12, that child is the reference child and all answers are given in reference to that child.

For each health unit, a special weight must be created for the combination of waves selected. In the syntax file, this is called wteachu. For examining your health unit against others, a special weight is also created. In the syntax file, it is called wtcomb. If using different names, be sure to change it in the syntax file.

METHOD OF CALCULATION:

Use syntax file for creation of scale variable and the two interpretations of that scale.

Creation of score system and derived variable for that score (posint):

The score ranges from 0 to 20. The higher the score, the higher the positive interaction.

Recode par4-par8 response categories so that the lower scores are actually high and the high scores are low. (1=4) (2=3) (3=2) (4=1) (5=0). The don't know's and refusals are included.

The next step entails excluding those cases from posint where any one item in the scale (par4-par8) is either missing, a don't know, or a refusal. Only those items that are less than 8 in par4 to par8 are added to create a new variable postint. This exclusion is necessary when trying to run a mean, median, and mode.

Do a frequency distribution of this variable as well as a mean, median, and mode. Don't know's, refusals, and missing data should be excluded. Only values between 0 and 20 should be shown.

(Number of parents with a score of 0-20, excluding don't knows, refusals, and missing data)

(all parents, excluding don't knows, refusals, and missing data)

mean, median, mode

Creation of the variable that divides the scores above and below the Canadian mean – 13.5/20 (posint2c)

Recode the posint so that 0 thru 13=1 and 14-20=2, 99=99 and sysmis=sysmis.

Frequency distribution of those above/below the cut point of 13.5.

Number of parents who fall below/above 13.5 or don't know/refused (excluding missing)

All parents (excluding missing)

Creation of the variable that divides the scores into four equal increments (postint4c)

Recode posint so that 0-5=1, 6-10=2, 11-15=3, 16-20=4, 99=99, sysmis=sysmis.

Frequency distribution of those who fit into these four increments (1 and 2 include those who exhibit lower positive interaction; 3 and 4 include those who exhibit higher positive interaction)

Number of parents between 0 and 20 (equal increments of 4) or don't know/refused (excluding missing)

All parents (excluding missing)

DATE OF LAST REVISION: November, 2003

Appendix C - Cognitive Testing Questions

```
>COG_LOAD< [if HEALTH_UNIT is <5>]
  [store <parenting> in COG_FILL]
  [goto make_win1]
[endif]
[if HEALTH_UNIT is <20>]
  [store <parenting> in COG_FILL]
  [goto make_win1]
[endif]
[if RANDOM1 is <1>]
  [store <mosquitoes> in COG_FILL]
  [store <les vaccinations antigrippales> in F001]
[endif]
[if RANDOM1 is <2>]
  [store <pesticide use> in COG_FILL]
  [store <l'utilisation des pesticides> in F001]
[endif]
```

```
>cog1< [use window <6>]
  [define <d><8>][define <r><9>]
```

[r]Did you find the last few questions about [fill COG_FILL] difficult to answer, confusing or unclear?[n]

[bold][yellow]

Interviewer: If appropriate explain to R that we are asking this and the next questions to obtain feedback from respondents to find out if they understand the questions. While most people have no problem with the question meaning, we need to make sure this is true of all types of respondents. [n][white]

1 yes
5 no

d don't know
r refused
@

```
[@] <1> [goto cog2]
  <5,d,r> [goto END_COG]
```

```
>cog2< [use window <6>]
```

[r]Which questions did you find difficult to answer, confusing or unclear?[n]

1 Enter text, end with //

d don't know
r refused
@

```
[@] <1> [specify]
```

<d,r>

>cog3< [define <d><98>][define <r><99>]
[use window <6>]

[r]Can you tell me what made these questions difficult to answer, confusing or unclear?[n]

[bold][yellow]

Interviewer: If not obvious, please make sure you determine which question(s) R is referring to. [n][white]

1 Enter text, end with //

d don't know
r refused
@

[@] <1> [specify]
<d,r>

>cog4<

[bold][yellow]

Interviewer: Did you need to repeat any of the questions in this section?
[n][white]

1 yes
5 no

d don't know
r refused
@

[@] <1> [goto cog4a]
<5,d,r> [goto END_COG]

>cog4a<

[bold][yellow]

Which ones did you need to repeat?
[n][white]

1 Enter text, end with //

@

[@] <1> [specify]
<d,r>

>END_COG< [window 4 destroy]
[window 6 destroy]
[if HEALTH_UNIT is <5>][goto exit_parent][endif]
[if HEALTH_UNIT is <20>][goto exit_parent][endif]
[if RANDOM1 is <1>][goto exit_wnv1][endif]
[if RANDOM1 is <2>][goto ROUTE_COG3][endif]

Appendix D Dissemination Activities

Efforts to discuss the development and the results of the Positive-Parenting Module have included:

PRESENTATIONS:

May 29, 2002 Ruth Sanderson and Iris Gutmanis, “Travelogue: The Adventures of Measuring Parenting Capacity” Middlesex-London Health Unit’s Research & Practice Symposium, London, Ontario

May 15, 2003. Ruth Sanderson. RRFSS-Overview and Opportunities. Community Data and Research Committee. London, Ontario

October 17, 2003. Ruth Sanderson and Sheila Sikora. Measuring the Marigolds: The Epidemiology of Children’s Health- Annual Association of Public Health Epidemiologists in Ontario (APHEO) Conference.

November 4, 2003 Ruth Sanderson and Sheila Sikora. Measuring Parenting Capacity- Evaluating Population Level Change using RRFSS. OPHA- Public Health in Motion. Ontario Public Health Association Conference. Windsor, Ontario.

REPORTS:

Middlesex-London Health Unit (May 2002) Project Status Report: Measuring Parenting Capacity: Perinatal and Child Health Survey Strategy Initiative. London, Ontario: Author

Middlesex-London Health Unit (July 2002) Project Status Report II: Measuring Parenting: Perinatal and Child Health Survey Strategy Initiative: Measuring Parenting. London, Ontario: Author.

ABSTRACTS ACCEPTED:

Ruth Sanderson and Sheila Sikora. June 2004. CPHA Population Health in Our Communities- CPHA Annual Conference Measuring Parenting Capacity - Evaluating Population Level Change Using RRFSS. Poster Presentation St. John’s, Newfoundland.

