EXECUTIVE SUMMARY

of the

TURN OFF THE SCREENS IN-DEPTH EVALUATION

FINAL REPORT

Submitted by

The Turn Off The Screens Partnership of Southwest Ontario

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Executive Summary

Introduction

The report examines the results of an outcome / impact-focused, in-depth evaluation of an Ontario Heart Health Program, Taking Action for Healthy Living (TAFHL)**Turn Off The Screens (or TOTS)**, project undertaken by a multi-site collaboration composed of the following six Ontario Heart Health / Community Coalitions and their respective Health Units:

- **Healthy at Heart Elgin / Elgin St. Thomas Health Unit,**
- **Grey Bruce Partners in Health / Grey Bruce Health Unit,**
- **Take Heart Huron / Huron County Health Unit,**
- **Healthy Living Partnership Middlesex-London / Middlesex-London Health Unit,**
- **Whole Hearted Living / Oxford County Public Health, and**
- **Healthy Living Perth / Perth District Health Unit**

To facilitate the multi-site, in-depth evaluation, the six sites formalized their collaboration, thereby forming the Turn Off The Screens Partnership in August 2006, and the group is referred to as "the Partners" or "the Partnership" throughout this report.

The report was prepared and written by Dr. Mary Carnahan, a consultant contracted through The Health Communication Unit at the Centre for Health Promotion to the Turn Off The Screens Partnership to conduct the locally-focused, in-depth evaluation. Both the evaluation and the report were produced by consultation and collaboration of the TOTS Partners**.**

Program Description

Turn Off The Screens is an incentive program to increase physical activity and reduce screen time among elementary school-aged children and youth. The program entails a five-day challenge and utilizes elementary schools as the primary channel for program delivery. Turn Off The Screens annually challenges children and youth to substitute physical activity for screen time during one week (five days, Monday to Friday, including Friday evening) in April. Screen time in this context means using any electronic device with a screen for entertainment or other non-essential purposes. In the TOTS program screen time is TV-viewing and playing video or computer games, except for homework.

The Turn Off The Screens program aims to decrease screen time in the hope of increasing physical activity levels of elementary school-aged children, thereby decreasing overweight and obesity which are risk factors for developing chronic diseases such as cardiovascular

disease, stroke, and some forms of cancer. Physical inactivity and overweight / obesity have been identified as health risk factors which are evident in a significant percentage of the population of the six counties comprising the respective districts of the TOTS Partnership.

The challenge is supported throughout local communities during Turn Off The Screens week by community partners who offer a variety of activities free or at low cost to children and families. Incentive draw prizes are provided for program participants who complete a log sheet for the week, and return log sheets verified by a parent to the school. Log sheets or log sheets totals are then returned by the school to their respective Health Units. Prizes and incentives consist of such items as gift certificates, athletic facility memberships, or products related to physical activity (e.g., sports equipment, etc.). Each site provides at least one grand prize, such as a bicycle, inline skates, or a one-year membership at the YM/YWCA.

Children who participate independently can return their log sheets to the library or recreation centre, or directly to the local health unit. Participation rates are calculated annually based on the number of log sheets returned to each school, and a percentage is calculated based on the school's enrolment.

Potential Audience and Actual Reach

Turn Off The Screens is aimed at elementary school-aged children and uses elementary schools as the primary channel for delivery. All elementary schools, including public, Catholic, private, independent and home schools, are eligible to participate in the program. School participation is voluntary, and therefore, participation is the principal's decision. The six sites of the TOTS Partnership encompass three public and three Catholic school boards, as well as a variety of private, independent, French language, and home schools and school associations / boards. TOTS materials have been translated into French to accommodate French Immersion and French Language schools in Middlesex-London

In some sites, Turn Off The Screens is offered independently through libraries and recreation centres, so that children can participate even if their school does not register for the program. Children from non-participating schools can obtain registration materials on the internet or directly from their local health unit. A local media campaign precedes the program annually, and through repetition over a period of years, children and their families have come to expect the program in April each year.

Potential Partners

The following list of partners / stakeholders includes ideal champions to support Turn Off The Screens. These include school boards, schools, School Councils, Home School Associations, Ontario Early Years Centres, pre-schools and day care facilities, parks and recreation staff and facilities, local teams, YM/YWCAs, libraries, churches, local businesses, hospitals, fire departments, news media, local municipal government, etc.

Potential Benefits and Limitations

The potential benefits of increased physical activity include the reduced risk of chronic disease in later life. Increased physical activity is an effective factor in controlling

overweight and obesity. Participation in Turn Off The Screens holds the possibility of building lifelong habits to substitute activity for screen time. Furthermore, there is a positive social and developmental benefit for children engaging in play time with family members.

Turn Off The Screens has some limitations. Although the program is provided through schools, monitoring of the week's activities by teaching staff is not a requirement. Instead, parents have the responsibility of ensuring their children are screen free, and of helping their children take advantage of community activities that are offered throughout that week. School staffs may decide to provide additional support to encourage students to participate in TOTS. Program organizers and principals from high participation schools tend to agree, that the program is more likely to be successful in schools that have a program champion, someone to spearhead the campaign, promote the program, encourage staff and students, ensure that all aspects of the program are implemented and that students are reminded of due dates, etc.

Rural communities tend to be limited in the number and variety of community activities that can be offered since recreational facilities are often lacking in small, rural communities.

Finally, Turn Off The Screens is limited to five days per year. Unless the Turn of the Screens message is reiterated throughout the year in other heart health /Health Unit programs, its long-term impact could be minimal. Turn Off The Screens demonstrates that there are alternatives to watching TV and playing computer or video games.

Program Costs

The up-front costs of this program, the heaviest of these being program staff time, are often underestimated. Beyond that, however, program costs will be incurred in the production of log sheets, promotional materials, program and administration materials, and obtaining prizes, incentives, and arranging community activities. Of these costs, log sheets and prizes / incentives usually account for the largest expenditures. Historically, community activities have been provided by the community partners. In a successful implementation year, the community activities are provided free or at low cost to participants and constitute a large proportion of in-kind funding. However, in some localities, depending on the number of potential partners and the relative wealth of the local facilities, there may be a cost to the program organizers, or the cost of the activities may have to be borne by the participants and their families.

Development of Turn Off The Screens

A factor that shaped Turn Off The Screens is its multi-site development and delivery. Even in its initial form, the program was delivered by a tri-county coalition consisting of Elgin, Middlesex-London and Oxford; later joined by Grey Bruce, Huron and Perth, the Southwest version of TOTS has always been a collaborative effort involving multiple sites. Table 1 provides details of the development of Turn Off The Screens in southwestern Ontario.

TABLE 1: HISTORICAL DEVELOPMENT OF TOTS AND TOTS PARTNERSHIP	
1999	• Research indicating that 2/3 of Canadian children and youth were not sufficiently active to lay a solid foundation for future health and well being • This level of inactivity contributes to increased risk of obesity, heart disease and type II diabetes • Belief that these trends could be reversed.
2001	• Tri-county group meets to develop plans for 2002 campaign of Turn Off The Screens Week • Involved Elgin St. Thomas, Middlesex London and Oxford • Program is a week-long challenge encouraging elementary school children to turn off their computers (except for homework), TVs and refrain from playing video games for five days in April, and to participate in a range of activities provided throughout the week by various community partners
2002	• TOTS offered in Elgin St. Thomas • Middlesex-London and Oxford; MLHU copyrights logo / TOTS character • TOTS program was first offered in Huron County; statistics indicated that over 60% of Huron County adults were overweight or obese
2003	• Program was first offered in Perth County; Perth and Huron have previously collaborated on Ontario Heart Health projects • Elgin St. Thomas, Middlesex-London, Oxford, Huron and Perth collaborated to hold TOTS during the same week in April • Grey Bruce, responding to information that children spend on average 3 to 5 hours / day watching TV and using materials produced / copyrighted by MLHU, first implemented TOTS week
2004	• Sites continue to present TOTS during same week; some site-based differences in philosophy and approach • TOTS selected as program to submit for in-depth evaluation; six sites decided to collaborate as a multi-site to conduct the in-depth evaluation, thus marking the first time the sites had made a decision to move forward on the TOTS program as a collaborative group, attempted to streamline the materials and processes, while still adhering to site-based needs / requirements / organizational structures, etc.
2005	• Sites meet to collaborate on filling out their Program Assessment Surveys, some sections required individual, site-based information as well • Met with in-depth Evaluation Coordinator to develop a plan • Met again in late fall of 2005 with Evaluation Coordinator continuing to try to come to grips with the plan for in-depth evaluation.

The Local Context

Two sources were consulted for socio-economic / demographic data, including TOTS program staff and the Statistics Canada website (http://www.statscan.ca). While the sites vary in area, location, geography, and population, all six regions are faced with similar public health risks, including overweight and obesity, physical inactivity, and the need for smoking cessation. Sites vary slightly in the reported numbers of each health risk; nevertheless, these health risks are common across Southwestern Ontario, and in most sites, are slightly higher than the provincial averages.

The sites range from large, densely populated urban centres such as Middlesex-London, to mid-sized towns dotted throughout the Southwest region. In contrast are rural areas such as northern Grey and Bruce Counties, and parts of Huron and Perth.

Historical Models for TOTS

Like most programs, Turn Off The Screens was derived from previously designed and implemented programs, of which two will be examined here. The TOTS "character", the official logo, was copyrighted in 2002 by Middlesex-London, who presented the program in collaboration with Oxford and Elgin St. Thomas.

A model for Turn Off The Screens with widespread popularity was an American program, TV Turnoff, and its website offers ideas, program details and materials. In addition, the website provides a vast array of "research" and facts sheets which emphasize the displacement time for activity by passive consumption of screens. The concept of TV Turnoff has been operational since the early 1990s. TV Turnoff was not only a significant (web) source of information for this evaluation, but also for the developers of Turn Off The Screens.

A second influential model, derived from TV Turnoff was "The TV Turnoff Challenge", developed and presented by the Kingston, Frontenac, Lennox and Addington (KLF&A) Health Unit and Hearts at Work. Using a package supplied by KLF&A, the planning team from the Middlesex-London, Elgin and Oxford applied for funding for a program named "TV and Computer Reduction Challenge" to take place in the spring of 2002.

Theoretical Base

At the time of the first TOTS planning meetings in 2002, no specific tool had been administered for the purpose of environmental scanning / needs assessment. However, pairing demographic and health data from Statistics Canada with alarming information from public health monitoring services such as CFLRI and the Office of the Surgeon General of the USA, gave organizers a clear indication that a program to increase physical activity and decrease screen time was appropriate, relevant and timely. By 2006 / 2007, however, theoretical information needed to be updated; thus, a comprehensive literature review was undertaken as part of this evaluation. Although the fundamental message of TOTS (increase physical activity / decrease screen time) was still in line with

current theory and trends, the literature reviewed provided insight into some significant changes in children's use of electronic media with screens. In addition, ample evidence was available to indicate that a wide variety of different types of screened, electronic media were now available to adults and children alike. As a result of these two factors, the concept of "screen time" has taken on new dimensions which could complicate people's understanding and acceptance of Turn Off The Screens.

Outcome Objectives for Turn Off The Screens

By early spring of 2006, the TOTS Partnership had developed a logic model, consisting of both short-term and long-term goals, for Turn Off The Screens. All objectives are ultimately related to the following overarching goal:
- Children and youth are physically active enough for optimal health and development.

Short-term Objectives from Logic Model
- To increase the number of schools who participate in the TOTS challenge.
- To increase the number of children who participate in the challenge /to increase the number of children who are screen-free for all five days,
- To increase the number of community activities offered during the five-day challenge.
- To increase families' awareness of the benefits of physical activity, and
- To increase families' awareness of usual screen hours.

Long-term Objectives from Logic Model
- To increase the number of children and youth who engage in vigorous to moderate daily physical activity, and
- To decrease the amount of time children and youth spend daily on screen-related activities.

Other Objectives Considered in the Evaluation

Other objectives which were considered in this evaluation included the following long-term objectives which, to a degree, are implicit in the logic model:
- To increase families' awareness of the benefits of physical activity in the longer term, and
- To increase families' awareness of usual screen hours in the longer term.

Evaluation Purpose and Questions

The purpose of the in-depth evaluation was to assess whether or not Turn Off The Screens is effective in meeting its objectives, and if so, to what degree, under what circumstances and at what cost. In addition, the evaluation was to identify the essential elements and critical success factors of Turn Off The Screens. Specific evaluation questions were derived from the logic model objectives and as shown in Table 2.

TABLE 2: QUESTIONS ADDRESSED BY THE EVALUATION	
Participation in TOTS: Short-term Objectives)	• Has the number of schools that participate increased annually? • Has the number of children and families that participate for the full five days increased annually? • Has the number of community activities offered free or at low cost increased annually?
Community Activities Short –Term Objectives	• As a result of participation in community activities, what changes have happened (e.g., how many schools have opened gyms, made gyms more accessible, how many recreation partners offered more programs, or changed program delivery)? • What else happened in the community during the week (spin-off activities)?
Awareness of TOTS Message: Short-term Objectives (During TOTS Week)	• Can participating children and families articulate the purpose of the program during TOTS Week? • Can principals articulate the purpose of the program during TOTS Week? • Why do children and families participate or not participate? • Why do schools participate or not participate? • How effective are the prizes / incentives in encouraging people to participate?
Long Term Objectives	• Has participants' physical activity increased since the TOTS challenge? • Has participants' screen-time decreased since the TOTS challenge? • Has families' awareness levels been sustained since the TOTS challenge? • Can principals, students and parents articulate the TOTS message after the TOTS challenge?

Type of Evaluation

This evaluation was an impact / outcome focused evaluation which was qualitative and utilized multiple methods to access multiple sources of data, including previous years' reports and documentation. Previous years' reports were largely based on data yielded by log sheets which included both quantitative and qualitative types of data. Nevertheless, the overall design for this in-depth evaluation was qualitative, and incorporated a broad range of types of data from a variety of data sources. These included documents, artifacts, interviews and focus groups.

Evaluation Design and Method

A qualitative design to access multiple data sources over a two-year period was developed for the evaluation. Data were to include previous years' tracking reports, artifacts, program materials, etc. as well as similar materials used in the implementation of TOTS throughout the evaluation. Both site-based and school-based data were collected specifically for this evaluation, which consisted of multiple components categorized as shown in Table 3. Data types and sources are categorized as either site-based or school-based. Note that data from documents are considered site-based even though the original source of information contained in the documents was school-based. Therefore, log sheets and reports, as well as children's stories, parents' notes and written comments submitted to TOTS organizers, whether current or from previous years are categorized as site-based.

This design is grounded in participant collaboration; that is, participants, to varying degrees, depending on their roles in the evaluation, also collaborated in the evaluation. Thus, principals, parents and children also participated in the evaluation, while the TOTS evaluation team, including the evaluator to a degree, also participated in the program. While this type of research is grounded in subjectivity rather than objectivity, the integration of data from different sources produces an image enriched by a variety of perspectives. Multiple data sources enable the use of triangulation as a method of verifying and authenticating the analysis / interpretation.

Intended and Actual Participants

Participant collaboration involved four different groups. Site-based interviews were conducted with program staff responsible for the administering and implementing TOTS. Schools were selected from across the six sites. Only public and Catholic school boards were included. Because children were included, an ethics review was submitted to and approved by the University of Western Ontario Research Ethics Board. Two schools from each of six school boards were selected based on TOTS participation data from TOTS 2006. The plan was to select from each school board one school with high participation in TOTS 2006 and one with no participation in 2006. TOTS 2006 results revealed that two school boards were already participating at 100% of schools. Therefore, in those two counties two schools that had shown low participation in 2006 were selected.

Furthermore, since two school boards were considerably larger than the other four, two additional schools were invited to participate in an effort to balance their representation with that of the smaller schools in the evaluation. One of those two schools agreed to participate. As a result, the total number of schools participating was 13, of which 7 were categorized as TOTS schools and 6 were categorized as Non / Low TOTS schools.

School-based data were intended to include interviews with principals of selected schools, focus groups of grade 6 to 8 students and parent focus groups.

TABLE 3: COMPONENTS OF TURN OFF THE SCREENS IN-DEPTH EVALUATION	
2006	**2007**
Documents • Program materials • Curriculum materials (Perth, Huron) • Previous years' data reports • Current year's data reports • Logic models	**Documents** • As in 2006, and • Additional curriculum materials (Grey Bruce) and reports not utilized in 2006 • Current year's data reports
Artifacts • Noteworthy comments excerpted by program staff from log sheets • Copies of press releases, photos from news reports, etc. • Unsolicited materials sent by teachers (e.g., children's journals, posters, etc.) • Radio advertisement (Grey Bruce and Huron) • Site-based promotional artifacts (e.g., TOTS bracelets, bookmarks, stickers, fridge magnets, etc.)	**Artifacts** • As in 2006, and • Artifacts yielded by similar sources in the 2007 Turn Off The Screens Challenge
Site-Based Participant Collaboration • Site-based program staff interviews • Meeting agendas and minutes from regular meetings throughout the first year of the evaluation (2006) • Agendae and minutes of regular teleconferences between evaluator and lead for 2006 • Official documents developed as required to facilitate the in-depth evaluation including, Memorandum of Understanding, Contract, Data Sharing Agreement	**Site-Based Participant Collaboration** • Second round of site-based program staff interviews • Meeting agendae and minutes from regular meetings throughout two years of the evaluation (2006 – 2007) • Agendae and minutes of regular teleconferences between evaluator and lead for 2006 and 2007 • Documentation of meetings and collaboration that took place in the development of the TOTS Program Manual
School-Based Participant Collaboration • Data not available in 2006	**School-Based Participant Collaboration** • Principal interviews • Student focus groups • Parent focus groups

Recruitment of School-based Participants

School board Directors of Education or their designate was contacted by the evaluator to request the Board's permission to conduct research in two to three schools in each county. Next, principals in the selected schools were contacted by telephone and by letter to seek permission to conduct an evaluation of Turn Off The Screens in their respective schools. Each principal was also asked to participate in an interview with the evaluator and to insert a prepared announcement in their fall newsletters. The insert announced the in-depth evaluation and asked parents and guardians of children in each school to consider participating in a parent focus group to provide input about Turn Off The Screens. Contact information for the evaluator was supplied in the newsletter announcement. Principals were also asked to select up to 4 students from grades 6 to 8 to participate in student focus groups. Principals were given an information package to distribute to those students and their parents. Permission forms were to be sent directly to the evaluator whose contact information was included in the packages. School boards, schools and participants would not named in any reports resulting from the evaluation.

Site-based Interviews

Heart health coordinators and program staff directly involved with Turn Off The Screens during the period of the evaluation were asked to provide interviews which were intended to take place both in 2006 and again in 2007. Although it was the intention to interview program staff and Heart Health coordinators from the early days of decision making about taking part in the in-depth evaluation, in all cases, this was not feasible. In total, 19 heart health coordinators and program staff members were involved with the in-depth evaluation at some point. The total number of individuals interviewed, however, was 13. Some were involved in the evaluation for only a short period of time; thus, they were not interviewed. Out of 13 individuals interviewed, only 6 worked on the TOTS team long enough to be interviewed twice (i.e., 2006 and 2007). An analysis of the site-based interviews appears in Table 4.

TABLE 4: ACTUAL NUMBER OF PROGRAM STAFF INTERVIEWS AND INTERVIEWEES BY YEAR				
Year	**Number of Interviews**	Number of Interviewees (One year only)	Number of Interviewees (Both years)	**Number of Interviewees**
2006	**9**	3	6	**9**
2007	**8**	4	(6)	**10**
TOTAL	**17**	7	6	**13**

School-based Interviews and Focus Groups

In total, 13 principals were interviewed, including 7 from schools that had participated in TOTS 2006 and 6 from schools that either had not participated at all in TOTS 2006 or that had low returns on student log sheets, which was recorded as low participation in TOTS 2006. These numbers are summarized in Table 5.

Principals had been asked to select up to 4 students from grades 6 to 8 per school. However, some principals selected candidates from grades 5 to 8, and one principal requested that a fifth child be involved in that school's focus group. Because the most important selection criteria were children that were sufficiently mature and felt comfortable enough to take part in a focus group with peers, principals were deferred to on their selection choices.

Ultimately, student focus groups were conducted in all 13 schools, although one school had only one candidate who wished to participate and whose parents also gave permission for their child to participate. The total number of students and student focus groups is summarized in Tables 5 and 6.

Principals were asked to insert a prepared announcement into their fall newsletters. No confirmation was sought on whether or not that had occurred. The announcement was intended to recruit parents for focus groups; however, very few parents responded to the announcements, for a number of possible reasons. If the announcements were placed in the newsletters as requested, parents may not have read them. In addition, the announcements were to be placed in the fall newsletters about focus groups that would take place the following spring. The time lapse between the announcement and the proposed event may have hindered parent responses. Some principals had predicted that their parent populations would be unlikely to volunteer, and felt that parents in their communities would not want to be spokespersons. A number of principals volunteered to select specific parents. Other principals, eventually, were asked to select specific parents. Not all schools produced a parent or parents to participate in parent focus groups. The total number of parent participants was higher in TOTS schools than in Non/Low TOTS schools. The total number of parents and parent focus are summarized in Tables 5 and 6.

TABLE 5: SCHOOL-BASED PARTICIPANTS BY GROUP			
GROUP	TOTS	NON-LOW TOTS	TOTAL
Schools (Principals)	7	6	13
Students	7	6	13
Parents	5	1	6

TABLE 6: ACTUAL NUMBER OF STUDENT AND PARENT FOCUS GROUP PARTICIPANTS			
GROUP	TOTS	NON / LOW-TOTS	TOTAL
STUDENTS	21	25	46
PARENTS	9	4	13
TOTAL NUMBER OF FOCUS GROUP PARTICIPANTS			59

Treatment of the Data: Collection, Analysis and Interpretation

All school-based interview and focus group participants were informed of their rights as a participant, according to the procedures required by the UWOREB. Participants had the right to have all aspects of the evaluation explained to them, and could refuse to answer

any questions they did not wish to answer. As well, participants could withdraw from the evaluation at any time, up to the point where their interview data had been approved or their focus group data had been confirmed by their group as being consensual.

Data were analyzed and culled for themes, which were of two types: pre-designated and emergent. Initially, the various documents and artifacts were culled for themes, which were then compiled as "pre-determined" themes. These were then used in the analysis of any further data that were collected.

A constant comparison method was applied to all types of data; i.e., categories of data were compared and contrasted with other categories of data to determine parallels, contrasts, unique revelations. Some latitude was allowed during interviews and focus groups to enable the interviewer / facilitator to probe for further information or to follow up on interesting revelations.

Procedures for collection and analysis / interpretation of the data are provided in Tables 7 and 8. Details are specified for each component of the evaluation.

TABLE 7: DATA COLLECTION TOOLS & METHODS			
Category	**Source**	**Data Collection Tool**	**Data Collection Method**
Site-based	Documents and Artifacts	• Not applicable	• Requested from / Provided by sites • Gleaned from websites • Minutes and other documents used to support meetings
	Heart Health Coordinators and Program Staff	• Interviews	• Standardized questions for each year (2006, 2007) • Additional standardized questions for program leads
School-based	Principals	• Interviews	• Standardized questions for TOTS principals • Standardized for Non / Low-TOTS principals
	Students	• Focus Groups	• Standardized questions for TOTS students • Standardized questions for Non / Low-TOTS students
	Parents	• Focus Groups	• Standardized questions TOTS and Non / Low-TOTS parents

TABLE 8: PROCEDURES FOR DATA ANALYSIS & INTERPRETATION	
Type of Data	**Procedures**
Documents / Artifacts	1. Categorized and subcategorized according to type / purpose / content of document or artifact 2. Culled for themes 3. Utilized to establish list of pre-determined themes for use with other data types and any further documentary data that might be collected 4. Factual information tabulated / used to develop background, timelines, etc. 5. Program materials evaluated for common look, accuracy, usefulness, etc.
Interviews	1. Face-to-face interviews wherever possible 2. TOTS staff interviews taped 3. School principals' interviews not taped 4. Responses to questions typed into template at time of interview 5. Interview emailed to interviewee for editing 6. Categorized and tabulated by interviewee 7. Culled for themes 8. Compared to list of pre-determined themes 9. Merged and tabulated with other interview data for that group (i.e., TOTS principals / Non-TOTS principals / program staff / heart health coordinators) 10. Further tabulated by themes, compared with other data sets
Focus Groups	1. Explanation of procedures, rights as a participant 2. Responses to questions typed into template or written on wall charts 3. All written data shared with the group, reviewed to establish consensus 4. Each group's data categorized and tabulated by group 5. Culled for themes 6. Compared to list of pre-determined themes 7. Merged and tabulated with other like focus groups (i.e., TOTS students / Non-TOTS students / parents) 8. Further tabulated by themes, compared with other data sets

Strengths and Limitations of the Evaluation Design

This evaluation overall is qualitative and interpretive, although it does encompass data reports from quantitative sources. The evaluation is intended not only to expand on results reported from previous years' tracking tools, such as reports developed from student log sheet data, but also to balance previous (mainly quantitative) tracking reports with an in-depth examination of TOTS from multiple perspectives. This evaluation is

multi-faceted encompassing many sources and types of data and, therefore, employs a variety of methods for examining those data.

The fact that this investigation is qualitative, however, does not equate with a lack of rigour. Qualitative research has inherent strengths, including the ability to employ multiple data sources, datasets and methods. This multiplicity, in turn, creates the potential for triangulation, a strategy which tends to strengthen the results, even though those results, obtained using alternative methods and tools, are different, perhaps even contradictory. In other words, a specific point of focus, examined from different perspectives, using different tools, yields multiple images. By comparing, contrasting, and blending different results, perceptions and views, researchers can merge images, enhancing both our perception and understanding of the subject itself. Multiple layering of images produces depth, while comparison provides insight into the differences between and among separate views. Using both techniques in tandem serves to enrich and deepen our eventual understanding of a subject.

On the other hand, qualitative research is commonly criticized for its subjectivity. Quantitative research is supposedly more rigorous because it is objective. Using multiple sources of data gives qualitative research an advantage, since multiple sources facilitate triangulation, a method of authenticating and verifying data. Thus, although subjectivity is a limitation which cannot be eliminated, researchers can attempt to compensate for it by acknowledging the subjective aspect of the work. Qualitative researchers must make every effort to minimize their own subjective biases and strive to achieve authenticity in their work. In this evaluation authenticity was enhanced by sharing the data with the individuals / groups who provided it for the purpose of confirming details and reaching consensus.

A limitation in the evaluation design was that the recruitment methods resulted in poor response by parents (particularly parents in Non-TOTS schools), which reduced the size and number of participants, the number of parent focus groups, and consequently, the amount of data collected from parents. As well, results obtained from the method of using a newsletter announcement were dependent on several factors; e.g., whether or not the principal chose to insert the announcement as requested, whether or not the newsletter was delivered to parents by children, whether or not the parents read the newsletter. Timelines did not allow for revising, and implanting another, recruitment strategy.

Finding / Results

In this section, findings from site-based data, including documents, artifacts and program staff interviews are provided. These are followed by findings from school-based data, including principal interviews, and student and parent focus groups.

Essential Elements and Critical Success Factors of TOTS

The evaluation identified those elements which are essential to the TOTS program and defined the program's critical success factors. Input from and discussion with the

individual members of the TOTS team provided insight into both those aspects that essential to the program, and those which are critical, but not essential. Some aspects of TOTS were identified as being both essential to the program and critical to the program's success. Details are provided in Table 9.

TABLE 8: ESSENTIAL ELEMENTS AND CRITICAL SUCCESS FACTORS	
Essential Elements	• Community Partners • Log sheets (returned completed and verified by a parent signature) • Program materials • Five-day challenge • Prizes and incentives • Schools as the primary channel for the program • Effective communication to the target audience • Elementary aged school children and their families as participants
Critical Success Factors	• Program relevance to the lives / realities of the target audience • Increased number of schools participating annually • Increased number of children participating annually • Program materials in a ready-made package • Community activities (if possible, free to participants) • In-kind contributions from community partners (e.g., community activities) • School board and school cooperation and support • Program champions in key positions; e.g., school board administrator, mayor, a principal or teacher in each school • Media support

Site-based Findings: Participation Rates

Prior to formalizing the TOTS Partnership 2006, the sites had collaborated to give program materials a common look, including use of the TOTS character. Each site has conducted at least on multiple methods process evaluation of the program. All sites use data from log sheets to calculate participation rates in schools, and to award grand prizes to individual participants. However, not all sites obtain the same open-ended data from log sheets. For example, one log sheet asks children to log daily activities they undertook in place of screen time during the five-day challenge, and asks for parent verification by signature for each entry. Other sites ask questions such as how many hours of screen time did they engage in during the week before the challenge, and why they were not able to be screen-free for the full five days. Some sites do not collect log sheets back from schools, but rather, they ask schools to complete a summary form with totals and names for the prize draw.

Furthermore, some sites distribute staff surveys each year, while others do not. Because of these differences in the amount and type of data they collect, some definite patterns could be discerned across the six sites based on their annual reporting about log sheet returns and surveys. Merged results from the log sheets are reported in Table 9, including the results of merged open-ended log-sheet data.

TABLE 9: TRENDS DEMONSTRATED IN COMBINED LOG SHEET DATA ACROSS SITES / YEARS OF TOTS IMPLEMENTATION	
Participation Rates (Number of Schools & Number of Children)	• Annual growth occurred across sites generally in the number of individuals participating except in 2007. • Annual growth occurred across sites generally in the number of schools participating. • In two school boards (geographically spread across three sites) 100% of schools participated in both 2006 and 2007. • Anomalies in the participation rates from year to year can be explained in view of significant events in the broader social environment.[1] These can be site-based or more general.
Participation Rates By Grade Level	• Data about participation by grade is not generally collected across sites. • In sites where such information is requested, participation rates tend to drop off in the intermediate grades (7 & 8). • Grade 7 & 8 students who do participate fully dramatically reduce their screen time during TOTS Week. • Exception was Perth in 2003 and 2004; grade 7s and 8s were high participation grades both years. • Participation generally is the highest in the primary (except kindergarten) and junior grades (i.e., grades 1 – 6), although exceptions to this have occurred in individual schools in some sites, in some years. • Kindergarten participation tends to be lower generally than participation rates in grades 1 to 3.[2]
Screen Time Reduction and Physical Activity Increase	• In sites where related questions are asked on the log sheet, participants generally indicate that they reduce their screen time and increase their physical activity levels during the TOTS five-day challenge. • Participants tend to increase their physical activity (during the challenge) whether or not they are screen-free for five full days.

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[1] For example some of the participating school boards experienced a period of teacher "work-to-rule" during 2005, which would have impacted on the schools' distribution and collection of log sheets and log sheet report forms.

[2] A possible explanation for kindergarten children's participation rates usually being lower than for children in the other primary grades (1 – 3) is that the preferred model for kindergarten class structure, especially in rural areas where busing is a factor, is full day / alternate day kindergarten; thus in a normal week kindergarten students attend for either two full days or three full days (depending on their rotation that week). Many of these students may spend their home days at babysitters or day care facilities and probably spend some time watching television as a standard day care activity.

Alternatives Activities Selected to Replace Screen Time	• Frequently cited activities selected as alternatives to screen time include playground activities, playing with friends, walking, biking, sports (baseball, basketball), dancing, household chores and / or playing with / babysitting younger siblings. (These data are supplemented by information gleaned from artifacts.)
Reasons Given to Explain Why Participants Were Unable to be Screen-Free for Five Days	• Favourite TV show • Visiting someone else's house, or at babysitter's, TV was on • Family watched TV together or parents got a special video for family, or a special event was televised • Was sick – nothing else to do, didn't feel like doing anything else • "Educational" show • Inclement weather – nothing else to do • Forgot

An objective in the TOTS log sheet similar to increased annual participation as a measure of growth was an increase in the number of community activities. Activities are listed annually on the log sheets each year. Simply tallying the number of community activities per year per site showed an annual increase up to a point to which facilities for activities were available. Thus, that objective had been reached, and further growth would only be possible with growth in the number of community facilities available or growth in the number of spin-off activities (e.g., if school communities chose to provide their own activities).

Findings: Results from Surveys

All sites have conducted surveys (aside from the open-ended information obtained from log sheets) at least once. Some sites annually distribute a survey form to key school staff members. In areas where surveys are usually distributed annually, returns are high, and results are very supportive of the TOTS program. However, since the respondents tend to be school administrators or key teachers who support the program, positive results are not surprising, and suggests that those who support the program support it strenuously. Despite their limitations, these surveys have yielded some clear trends in school administrator / key teacher opinions, as shown in Table 10.

TABLE 10: TRENDS EMERGENT FROM COMBINED SURVEY DATA	
Satisfaction with the Program	• Program is worthwhile and will encourage the school to participate again another year • Promotions are effective – well publicized • Supports Daily Physical Activity (DPA) or supports school goals for physical activity • Found it to be a "fun" activity • Program gets positive support from School Councils, parents
Resource Materials	• Package is ready-to-use, materials are well organized and prepared • Program is easy to administer at school level and requires little (or no) monitoring from school staff • Morning announcements and posters were useful (and used)
Prizes/ Incentives	• Prizes appropriate, good motivators • Children should not need prizes and incentives; the motivation should be intrinsic or we should try to encourage the children to be intrinsically motivated
Benefits of Participation	• Younger students enjoy the program, enjoy participating • Encourages children and families to focus on activities other than screen time; encourages physical activity • Focuses on family time together • Focuses on getting outside and getting active
Barriers to Participation	• Older students not motivated to participate, • Younger students require teacher support (reminders to take materials home, return log sheets, etc.) • Few or no community activities in certain areas
Additional Supports Provided by Schools	• Increasingly, schools in many sites are providing school-based after-school activities to support TOTS • School Councils involvement is increasing related to organizing TOTS at the school level and providing support for students / after-school activities
Suggestions Regarding Support Needed or Changes	• Increase the prizes / incentives available for classrooms. • Change the date to avoid inclement (late winter) weather and / or hockey playoffs

Findings from Historical Documents, Artifacts, and Literature Review

Historical data provided background information about the development of Turn Off The Screens and the collaboration among the six sites and were used as the basis for Table 1, The Development of TOTS and SWTOTS Partnership. In combination with the various

artifacts studied in the evaluation, the documents provide not only details but also depth and context. For example, photographs of previous years' grand prize draw winners added a personal dimension to the data; other photographs taken at various community activities demonstrate that TOTS is for families, and it's about having fun being active together as families in communities. Children's stories and drawings were also strongly suggestive of three dimensions; family times, a variety of physical activities and fun.

The literature review which was conducted for the evaluation used as a starting point the references provided as foundational for the development of TOTS. In the course of the literature review, updated information shed new light on the program context, particularly with regards to electronic media use by children. The majority of children in North America now have access to the internet and cable TV. Children tend to be multiple users and some forms of screen time actually may stimulate physical and social activity. As well, many more children have TVs in their bedrooms than even five years earlier. Updated information is continually needed to maintain the relevance of TOTS to its target audience. Information included in TOTS school resource packages also needs to keep pace with recent research.

Findings Related to TOTS Curriculum
Perth, and later Huron and Grey Bruce, have in past years distributed a curriculum resources package to schools which was developed for an earlier version of a program similar to TOTS entitled "Spring Off The Couch" in Durham Region. This package was evaluated as part of the in-depth evaluation using a rubric designed for the purpose. The overall score given was 3 out of a possible 4, with two main recommendation: first, that the package be augmented so that it contained a lesson for each grade from kindergarten to grade 8, and second, that lessons should more explicitly tied to the Ontario curriculum expectations. Rather than augmenting the existing package, the TOTS Partnership opted to have a new package designed specifically for TOTS.

Findings from Site-based Interviews
High staff turnover made the two-year, multi-site evaluation a challenge. However, group norms implied that experienced members would automatically mentor newer members. In addition, newer members tended to be willing to take on roles with additional responsibilities. An implicit, and at times, explicit assumption was that the in-depth evaluation was not optional and once it had been undertaken, it would be completed satisfactorily. Other underlying assumptions included a strong belief in the overarching program goal, and that positive change could be achieved.

Interviews were conducted in 2006 and again in 2007. The first year's interviews provided information about the program, its history and development and local demographics, which have been noted in other sections of this executive summary. The second year's interviews allowed TOTS program staff to reflect on their learnings and understandings about TOTS, about the evaluation process, and to react to some early findings from the school-based data. Data gleaned from the 2006 interviews

supplemented previous and current years' documentary data in portraying TOTS as a successful program. In addition, staff expressed a common desire to find out from the in-depth evaluation whether or not the increased awareness and apparent behaviour change observed during TOTS Week were sustained over a longer period of time. Some disappointment was expressed related to the process of the in-depth evaluation and the length of time it had taken to clarify roles, responsibilities, and working relationships and norms in the beginning months. A significant finding of the 2006 interviews was the wealth of artifacts (notes from parents, students, teachers, etc,.) that had been collected by some program staff. This sparked a concerted effort in the second year to collect stories of success and to compile artifacts in the 2007 implementation of TOTS.

Other data from interviews included some reflections on working with community partners and school boards. TOTS program staff recognized the efforts and contribution of their partners, noting that implementing TOTS costs considerably more than the approximately $4000 site allocation reported by two individual sites. A 2005 budget from Middlesex-London shown in the TOTS Program Manual as a sample budget that includes the site's allocation for TOTS, program staff and admin salaries related to TOTS, and in-kind contributions from community partners; the total cost was over $40,000.

As well, program staff reported strong support from both schools and school boards; in the 2007 interviews, this information was strengthened, and within the context of identifying essential elements and critical success factors, interviewees differentiated between school support and school board support, noting that one could be present without the other but that the presence of both could be a significant boost for the success of TOTS. In theory, the amount of support required from school staff is minimal, because the TOTS program materials are highly organized and presented in a highly usable package. However, program staff acknowledged that the program is more successful when there is a TOTS champion in the school and / or teachers make an effort to supplement the TOTS package with reminders to students, additional activities, etc. The support of School Councils was acknowledged as being especially helpful in ensuring a successful implementation of TOTS.

At the time of the 2007 interviews, log sheet returns for 2007 had been tallied and program staff was aware that the individual participation rates had dropped across the six sites[3]. Interviews allowed them to reflect on reasons why the participation rates had changed. Technological change was acknowledged as a probable factor, given the increased availability of electronic devices with screens. As well, program staff acknowledged hearing from many sources that people wanted more flexibility in the TOTS program. Some interviewees speculated on potential program changes to be discussed with their community partners.

The 2007 interviews also provided a forum for program staff to relate stories of success and helpful hints from their years' experience with TOTS; these data were used in

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[3] Whether the drop in individual participation in 2007 is a one-year anomaly or a trend has yet to be determined.

sections of the TOTS program manual which was being developed concurrently with the in-depth evaluation by the evaluator and the TOTS team.

School-based findings

For the purposes of organizing findings for the report, this section on school-based findings includes principal interviews, student focus groups and parent focus groups. Schools were divided into participating schools (TOTS schools) and non-participating schools (Non-TOTS schools).

Findings from Principal Interviews

Thirteen principals were interviewed; seven were classified for data analysis purposes as TOTS principals and six as Non-TOTS. As with TOTS program staff, high turnover was evident among the principals that took part in the evaluation, which complicated classification of principals into TOTS or Non-TOTS. Only two Non-TOTS principals had not implemented the program previously in another school and were currently in schools that had not participated in 2006. Other Non-TOTS principals had been involved with TOTS implementation in previous schools. Another complication involved a school that was selected based on non-participation in 2006, yet had participated and failed to complete the official registration process. In addition, it was possible for principals to represent TOTS schools (based on school participation in 2006) even if they had not previously implemented TOTS. Furthermore, based on school participation rates, two school boards had 100% of their schools participating in 2006. Thus, low participation schools were selected and classified with Non-TOTS schools for purposes of analysis. Data from principal interviews indicates that basing the participation rates solely on the log sheet returns may be somewhat unfair to some schools where staff and / or School Councils were, in fact, involved and provided after-school activities. Log sheet returns do not necessarily indicate a school community's actual level of participation in TOTS week.

Principals from both TOTS and Non-TOTS groups support the dual message of TOTS (reduce screen time / increase physical activity). However, some expressed concern about the concept of screen time and questioned whether or not it is possible to eliminate screen time altogether. They noted that doing the job of principal requires spending a considerable amount of time using a computer.

Some principals perceived TOTS as an "add-on", while others perceived TOTS as fitting seamlessly into the regular curriculum. Most principals claimed they consult staff and School Councils when making decisions about taking on external programs such as TOTS. Generally, principals felt that the prizes and incentives were not a significant factor in motivating children and families to take part in TOTS. More than half of the principals characterized TOTS as specifically for families; i.e., TOTS is a program that encourages families to get active together. They noted that barriers to TOTS implementation can include inclement weather, lack of resources, lack of sufficient parent volunteers and too many events already scheduled for their schools. As supports,

they noted staff and parent support as being of high importance. They also noted that younger children find the program fun. As well, some mentioned that holding the program in April provides an opportunity for families to celebrate being able to get outside and be active following months of feeling restricted because of winter weather.

Most principals stated that a great many programs, activities, issues, etc. "cross their desks" every day. This comment is consistent with recent studies in school leadership, and confirms that principals face many different challenges on a daily basis.

When asked their opinion of whether or not TOTS has a long-term impact, a few responded negatively, pointing out that it is only a week-long program and that it is up to the parents to ensure a long-term impact. However, taken as a group, principals were more positive than negative in their assessments of the potential for long-term impact.

Suggestions for improvement included changing the name of TOTS so that it has a more positive connotation ("Turn Off . . ." is perceived by some as negative). A further suggestion was to bring the TOTS promotional materials more in line with the Ontario Curriculum. Overwhelmingly, principals suggested either changing the timing of the program or providing a program structure which allows schools to choose when they are going to implement the program. A few principals suggested that a needed support for TOTS implementation was access to and / or tips on how to recruit more volunteers to help facilitate the program during TOTS Week.

Findings from Student Focus Groups

Students who took part in focus groups were in grades 5 to 8. Both TOTS and Non-TOTS students recognized the TOTS name and could articulate the dual message. Students in Non-TOTS schools may have participated independently or may have attended a TOTS school in the past. Some Non-TOTS students said their current school had participated in TOTS in previous years. Students selected by principals for focus groups tended to be articulate, well-rounded students, all of whom noted that they take part in many physical activities, both in and outside of school, and both organized and non-organized sports. Many also reported that they take dance lessons and / or participate in gymnastics, karate, etc.

Most students had little knowledge of the grand prizes that had been offered each year, and no students had won draw prizes in the past. A few students mentioned that they had been unable to participate in TOTS 2006 because they needed to use their computers for assignments, projects, etc. When the facilitator probed further into this statement, students as a group knew that computers are allowed for homework during the five-day challenge, yet there seemed to be some confusion expressed around that concept.

When the facilitator probed for other reasons why they did or did not participate, most respondents said they were not willing to miss their favourite TV show. The most frequently cited barriers to participation included inclement weather and not wanting to miss TV shows, such as NHL hockey and a variety of regularly scheduled "reality"

shows. One student said, "Not many people are willing to turn off their TV" and another echoed, "It's not worth it" to turn the TV off for a week. Another student said he had participated fully the past year and that it was "really hard" to have to ask a schoolmate who had won the play-offs.

When asked why they did participate, students said that they did it for the challenge, that they participated every year with their families and that it was fun, etc. Some responses included the following:
- "I think the whole purpose is for kids to be more active with their families, instead of just laying around. If you're just laying around, when you get older, you're not going to be able to do anything."
- "Just sitting around isn't keeping you fit and healthy."

Students' suggestions for improving Turn Off The Screens included changing the timing so that TOTS does not coincide with televised hockey play-offs. Several groups suggested changing the structure; i.e., have one TOTS day per month throughout the school year. Inclement, cold, snowy weather was mentioned as a reason for holding the five-day challenge even later in the school year, such as in May or June.

Most groups wanted many prizes even if they were small prizes, although in one group there was disagreement and discussion about whether or not the older students would participate for small prizes, such as a pen or a ribbon. One group suggested that instead of no TV, the program should focus on limiting the amount of TV in combination with increasing their physical activity.

Findings from Parent Focus Groups

Six parent focus groups were conducted which included nine parents from TOTS schools and four from Non-TOTS or Low-TOTS schools. Parent response to recruitment procedures was disappointing. Despite the low numbers, parent focus groups took place in schools distributed across the southwest region.

Although parents were classified into TOTS or Non-TOTS schools for purposes of analysis, there was a blend of parents across schools such that some non-participants were recruited from participating schools and vice versa.

Almost all parents were recruited with the assistance of principals and had some involvement with School Council. All parent focus group participants were volunteers in their children's schools. As well, all were women and children ranged from junior kindergarten to grade 9, although most of their children were in the primary and early junior grades.

Parents demonstrated high recognition of the TOTS program and message. Non-TOTS parents had heard about the program from friends whose children attend other schools, through the local media, or in previous schools.

Some parents expressed confusion about what constitutes legitimate computer use during the TOTS challenge. Some parents work at home, and computers are a necessary tool for their work. Several commented that they feel pressured during TOTS week; they fear that their children are confused when parents encourage them to be screen-free for five days, but spend time at the computer themselves.

Two parents admitted having falsified their children's log sheets in previous years, which was unsolicited information. A number of parents pointed out that the all day / alternate day kindergarten model used for kindergarten organization in most school boards makes it difficult for kindergarten children to remain screen-free for a full five days, since they are at home for at least two full days during challenge week. Some of those children go to babysitters or daycare centres where television was reported to be used as entertainment.

With regards to television viewing by their children, all parents claimed to have rules especially during the week. Most claimed to spend time watching TV with their children. A small number said that they do not have cable television services and therefore, do not watch much TV at their homes. A number of parents also voiced their support of "educational" TV and "educational" computer games, citing the latter as a way of helping children master reading and math skills. Parents overwhelmingly claimed that their children were highly active, and many parents claimed that they made a point of taking part in outdoor recreation as family activities regularly.

When asked their opinions of the TOTS materials, some parents suggested the log sheets need to have an expanded area for younger children to log their activities. Some parents also asked for a space for parents to initial each day's activities rather than one space for the whole week. (In fact, this space was provided on the log sheets by some sites in 2007.) The majority of parents were supportive of the concept of incentives and prizes, but wanted to see many small prizes or a reward for each participant, such as a certificate, ribbon or sticker. One pointed out that her School Council spends additional fundraising money annually to support TOTS implementation by purchasing prizes for each grade. In one school the parents had no knowledge of the TOTS grand prize draws.

However, in another school parents raised concerns about the school-level prizes, such as rewards for full class participation because children in a class whose parents do not support TOTS feel centered out. They further postulated that the practice of rewarding a group for full-group participation encourages falsification of the log sheets. Parents as a whole seemed more focused on school-level prizes probably because they have greater familiarity with school-level prizes than with the grand prize draws held in each county.

When asked their opinions of both the short- and long-term effects of Turn Off The Screens on children and families, the majority of TOTS and Non-TOTS parents said that there is definitely a short-term impact. Furthermore, parents were generally positive in their views on longer term impact. One parent suggested that the experiential learning of the five-day challenge has potential for a longer term impact on young children. Others claimed their children continued to make conscious efforts to be more aware about

physical activity and screen time following the five-day challenge. One parent expressed a negative view, suggesting that families "get right back into their routines the day after" the program concludes, while another stated that unless the parents ensure a carryover, a longer term impact is unlikely.

Suggestions for improvement included token prizes for all successful participants, changing the timing (not during hockey play-offs, later in the school year to take advantage of better weather), and one challenge day per month rather than one full week. A suggestion was made by several parents that TOTS Week should not occur in a week when their school board holds a professional development day for teachers, because many children end up at babysitter's homes or daycare centres, where TV is regularly used to entertain the children. Furthermore, parents wanted increased involvement of school staffs, to ensure that log sheets are sent home and returned to school on time, reminders of the date on which TOTS is scheduled to begin, and general support in the classroom for the home-based efforts to have children complete the challenge successfully.

Discussion of Findings / Results

 The evaluation encompassed a broad range of data types and sources. The scope of the evaluation, however, was somewhat limited in terms of the number of schools and school-based participants that could provide data. Therefore, findings are not generalizable to all elementary aged school children, nor are the views expressed by their parents and their principals generalizable to all members of their respective groups. However, the evaluation design attempted to compensate for limitations in number of subjects by selecting from a broad field of possible subjects. The evaluation included participants from both the public and Catholic school boards in the southwest. As well, the evaluation sought input from three different target population groups. Furthermore, the target population groups were differentiated by sub-group (TOTS, Non-TOTS and Low-TOTS). As long as the findings reflect authenticity, they can be generalized to other elementary schools, and other elementary-aged children and families throughout the southwest region. Findings may also be generalizable to other similar school districts in Ontario.

The short-term objectives stated in the TOTS logic model included the following:
- To increase the number of schools that participate in the challenge,
- To increase the number of participants who are screen-free for all five days,
- To increase the number of community events offered during TOTS Week,
- To increase families' awareness of the benefits of daily physical activity, and
- To increase families' awareness of usual screen hours.

Short-term objectives were limited to the duration of the five days annually which comprise the TOTS challenge.

Participation Results

Short-term objectives were achieved with fairly consistent results with the exception of the individual (full, five-day) participation rates for 2007, which sites continue to consider in the light of other data from the in-depth evaluation and the updated literature review. Rapid technological change and the resulting changes on people's lives need to be taken into consideration and clearly, all programs need to adapt to changing times. A somewhat modified TOTS program will be implemented again in 2008 in the six sites. School

Most sites showed fairly consistent annual growth in the number of individual participants up until 2007. As well, most sites showed consistent and strong growth in the number of schools that participate. Considered in conjunction with data from other sources accessed in the evaluation, lower individual participation in 2007 suggests that children and families are increasingly unwilling to completely forego screen-related activities for five full days. This trend is paralleled by rapid increase in the availability over the last five years of electronic devices that have screens and which can be used for multiple purposes, including entertainment and communication.

A weakness that was found in the log sheets as a data collection tool was that even though children's self-reporting is verified by a parent signature, the verification may not be true or correct, and therefore, the log sheets can report incorrect or false information. The possibility was verified by two parents in separate focus groups who volunteered the information that they had falsified their children's log sheets. Their reasons for having done so were related to the expressed need for greater flexibility around the program. Despite questionable validity of log sheets as a single source of data, other data sources tended to support the perception of TOTS has having gained support and participants over the years of its implementation. In those sites where incomplete log sheets are collected along with completed log sheets, data indicates that participation is higher than that shown in the annual figures. Increasingly, as shown in the 2007 individual participation results, children and families attempt the five-day challenge but are unable to sustain the effort. However, even partial participation demonstrates support for the program and people are attempting to meet the challenge.

Community Activities

The objective of an annual increase in the number of community activities was a reasonable indicator in the early years. However, the potential number of activities has been successfully reached; therefore, the objective is no longer needed. Maintenance of the present number of community activities could be a useful replacement objective.

Community activities have been a largely untapped source of data. Attendance data would be useful, although at large events in particular, attendance is difficult to assess accurately unless tickets are sold or some other tracking device is put in place. Community activities could also be utilized as a source of on-the-spot interviews with parents and children. However, attendees would reflect some degree of bias towards the TOTS program by virtue of their participation.

Data from 2007 TOTS surveys and program staff interviews demonstrates growth in the number of spin-off activities, or activities provided by school staff or School Councils during TOTS Week for their own school communities.

Discussion Related to Short- and Long-term Increased Awareness

The increased participation of schools is itself an indicator that in the short-term, children's and families' awareness of the TOTS message (increase physical activity, decrease screen time) is raised. Increased participation of individuals up to 2007 is another indicator. When combined with data from the few sites that collect partially completed log sheets, there is even more evidence that even more individuals attempt to take part. Taking part and attempting to take part are indicators that awareness is raised in the short term. Site-based data, including artifacts, historical documents and program staff interviews augment and strengthen the evidence of short-term, raised awareness. School-based data, moreover, suggest that there is longer term raised awareness of the TOTS message. Both principals and parents felt there is potential for longer term awareness, and it was acknowledged by a few parents that it is up to parents to continue the message throughout the year.   It is encouraging to note that school-based data indicated that TOTS has become an annual expectation. This would seem to demonstrate longer-term awareness does occur, and although that awareness may not be at the forefront of their thinking at all times, it obviously is within their consciousness because they expect the program to recur annually.

Evidence from interviews and focus groups reflects participants' claims about what they do, not necessarily their actions. However, parents in particular seemed to know what the correct answers were. Although few took the time to participate in the focus groups, those that did clearly think about the concepts involved in the TOTS program beyond the five-day challenge. Focus groups were held during the spring of 2007 but did not necessarily take part during TOTS Week. Random telephone surveys (as Perth has shown) could provide clearer indicators of whether or not there is long-term raised awareness as a result of TOS.

Long-term behaviour change is much more difficult to measure and would require longitudinal studies of specific families, utilizing precise measurement apparatus and tools for recording actual amounts of screen time and physical activity. As well, being in such a program itself would still not guarantee that the behaviour would be sustained after the conclusion of the study.

Factors Influencing Participation versus Non-Participation

Students who took part in focus groups represent older children and youth (i.e., up to age 14). Their reasons for not participating tended to focus on favourite TV shows and their unwillingness to miss an episode. Parents and principals tended to predict that student reasons for not participating would be related to internet use; however, students did not

focus on the internet specifically. Instead they tended to focus on their need for computers to complete homework. This echoed concerns of work-at-home parents who criticized the TOTS program and the full five-day requirement, noting that their children would be confused by seeing their parents using computers during TOTS Week. Some principals as well noted that computers are indispensable in their work and questioned whether computers can be eliminated, even for five days. These results suggest that some discussion around the legitimate use of screened devices needs to take place and that the TOTS message needs to be refined to reflect the increasing need for computers in the lives of both children and adults. A clearer distinction needs to be made between necessary and recreational / entertainment uses of computers.

Results from all data sources indicate that support for the TOTS program and for the concept of substituting physical activity for screen time is strong. Parents of younger children indicated a desire to do what was right and healthy for their children, but that they needed choices and flexibility in order to be able to accomplish those goals. Many respondents in all three school-based groups asked for greater flexibility in the TOTS program, such as having a choice of which week during the year to run the program or having the program one day per month throughout the school year.

Even in the face of a range of inhibitors to their participation in TOTS, a few focus group students indicated that they planned to continue participating with their families in TOTS 2007.   Supports to participation by students in this age group include a number of circumstances. A few individuals claimed that by participating, they ensure that they sustain raised awareness of others around them and furthermore, they sustain increased physical activity. A few students said that because TOTS is a challenge, they would participate again, because they welcome challenge. Some suggested that they could be role models, help their schools, and so on. However, the majority of student focus group participants also reported consistent high involvement in a variety of physical activities, including but not limited to organized sports. In addition, these students were not randomly selected for focus groups, but identified by their principals as likely candidates for focus groups.

Younger children's participation in the full five-day challenge appears to be related to the degree to which parents are dedicated to having their children succeed at the challenge and to the degree to which parents supervise their children's activities (including homework). Numerous other family-related factors including inclement weather, unexpected occurrences (family illness, child illness, visits to relatives' or friends' homes during TOTS Week, etc., play a part in whether younger children are able to be screen-free for five full days. Young children generally have very little control over whether or not they participate for the full five days. Put another way, the support of younger children's participation is parentally provided, while parents less dedicated to their child's successful participation are often the main inhibitor to the child's successful participation.

School participation is the principal's decision, but most principals claim to involve staff and School Councils in the decision of whether or not to participate. Their claim is

probably accurate, according to recent research on school administrators. As well, school staffs and parent communities expect to be consulted. Principals, staff and parents tend to see TOTS as supportive of the mandated DPA, a trend that has probably increased since TOTS was first implemented, since the focus on DPA in schools has increased in the past five years because of pressure from the Ministry of Education, school boards, the press and families. Principals and school communities increasingly seem to perceive the TOTS program as good for the school in terms of supporting not only DPA but also family togetherness towards a common goal of fitness. TOTS was also referred to as a way to celebrate getting out and getting active in the spring, and as such, can be a spirit-builder for the schools.

Inhibitors to school participation tend to be related to busy school schedules that are packed with too many activities. Principals ultimately must select among many school events, some required and some, like TOTS, optional. The key, however, is that many more schools in southwestern Ontario choose to participate in TOTS than choose not to participate.

Discussion about Program Materials and Incentives

Program materials in this section encompass all materials sent to schools and other community supporters and participants. The program materials encompass an impressive array of letters, instructions, forms, surveys, promotional materials and additional support materials from related programs. TOTS curriculum materials are included in this section, as are prizes and incentives. Program materials received positive reviews from principals and, with a few minor modifications suggested by a few parents, the materials that are sent home were also praised. All principals who recognized the package materials and had used them applauded the degree of organization and preparation that goes into them. The resources package as it has been distributed is obviously a key factor in the decision for schools to participate.

Throughout the years of collaboration, the six sites have developed a common look for program materials, yet have maintained site-based individuality in terms of information provided. Log sheets demonstrate the common layout and graphics including the TOTS character, which was developed and copyrighted by Middlesex-London. The layout includes a chart for children to complete, a list of possible prizes, rules and community activities. Some log sheet information is necessarily differentiated by site (e.g., community activities would differ from site to sites). The common look has contributed to wide-spread recognition of the TOTS program and message, as demonstrated in school-based data collected for this evaluation. A comprehensive collection of materials from all six sites is contained in the Southwest Turn Off The Screens Manual which was developed as a requirement of this evaluation.

Evidence from principal interviews (both TOTS and Non-TOTS) clearly indicated that schools are satisfied with the resources package; however, no data were available related to the previously used curriculum package. Use of the new curriculum package will be up to each site. However, if it is distributed to schools, an evaluation tool, such as the

rubrics designed for the in-depth evaluation should be distributed along with the curriculum and teachers asked to respond. Principals seemed to indicate that a more comprehensive curriculum package would help generate interest among some teachers who have not supported TOTS to the fullest. As well, it was felt that such a package would be a support to novice teachers. Some pre-announcement to schools might be useful to advertise that a new curriculum package is coming in 2008, in order to generate interest in using it and in returning an evaluation rubric form to the sites.

Grand draw prizes were not seen as a motivating factor by parents or students, and most principals echoed that. The possibility of winning a grade prize tended not to be a motivator for many students and parents, even in TOTS participating schools, because either they were not aware, or their awareness of prize draws was vague. Overwhelmingly, all three school-based groups wanted to see small prizes or tokens for all participants. Prizes on such a scale would be time-consuming and complicated for the sites to accomplish. However, there is merit in looking at possibilities around the concept of token prizes for all participants. Perhaps in-kind contributions could cover the cost, and grand prize draws be eliminated. Other possibilities probably exist and should be explored. The certificate or ribbon for all participants is typical of public schools, where token prizes are linked to promoting self-esteem. For example, many schools award a participation ribbon as well as prize ribbons during their annual track and field meets.

Summary

Turn Off The Screens has been a successful program across the southwest region for a number of years (up to six years' successful implementation in some counties). Parents and children confirm that the program is an annual expectation. Evidence clearly indicates that the program meets its short-term object to increase children's and families awareness of the need to reduce screen time and increase physical activity of children. Evidence is less clear but indicative that the program also meets its short-term goal of actually increasing physical activity and decreasing screen time in the short term.

As well, evidence from schools suggests strongly that the program can fit seamlessly with elementary schools' regular curriculum and that it supports DPA. Furthermore, parents', children's and principals' comments suggest that longer term awareness of the TOTS message is raised. This conclusion is also supported by other sources of data, such as site-based interviews and artifacts. Long-term raised awareness could possibly be monitored by means of random telephone surveys to parents of elementary aged children several months after the program implementation.

Longer term behaviour change involves a complex set of factors and measurement techniques.

Recommendations

Because team members collaborated in the interpretation of results and the writing of the evaluation report, merged, summarized data were shared throughout the evaluation. Consequently, some early recommendations were developed and were in the process of

being implemented at the time of submission of the final report. These early recommendations were not the result of any failure in the program per se, but were mainly the result of ongoing changes in the social and technological environments of the target population. The increasing abundance of electronic, screened media devices and their increasing availability to children are examples of reasons why any program with similar longevity (up to six years in parts of southwestern Ontario) needs to adapt over time.

A number of recommendations emerged from principal, parent and student requests. In some cases, similar changes and adaptations were suggested by program staff throughout the process of the evaluation. Other recommendations resulted from comparisons of datasets from different data sources, including the literature review.

Early Recommendations and Subsequent Action by Partnership

The following early recommendations are listed along with the responses that had been put in motion as of the writing of this report:

Recommendation 1: Change program so that it will not coincide with school board PA Days.
Action Taken: Dates have been set for TOTS 2008 which take school board schedules into consideration and TOTS Week will not coincide with PA Days.

Recommendation 2: Provide some options for schools to choose which week of the year in which they implement TOTS.
Action Taken: Changes are being developed to meet this request; details are yet to be determined.

Recommendation 3: Provide options, such as a format that would enable schools to implement TOTS once-a-month or bimonthly basis rather than for one full week in April.
Action Taken: Under consideration, details yet to be determined.

Recommendation 4: Update promotional materials which rely on theoretical research such as "The Facts" an information sheet included in the TOTS school resource packages from sites.
Action Taken: Plans have been considered for regularly updating information sheets; final procedures and revised information sheet yet to be completed.

Recommendation 5: Expand TOTS Curriculum Resource package which has been distributed by Grey Bruce, Huron and Perth so that there is a lesson for every grade level.
Action Taken: Previous curriculum document has been replaced with a new curriculum package designed exclusively for TOTS but based on Ontario Curriculum expectations for every grade level.

Recommendation 6: Request permission to use THCU copyrighted rubrics for

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evaluation of TOTS curriculum document to be included in school resource packages for 2008 with curriculum; ask teachers to use curriculum, and use rubric as a tool for providing feedback on the effectiveness of the TOTS curriculum document.
Action Taken: Request has been sent to THCU for permission to use the evaluation rubrics to have teachers evaluate the curriculum in 2008.

Recommendation 7: Design and distribute monthly newsletter to schools with physical activity / screen reduction / TOTS messages. (**Action Taken:** Under consideration, final action to be determined).

Recommendations Related to Data Collection, Treatment and Reporting Across the TOTS Partnership Sites

The following recommendations are offered as potential methods of streamlining and making data collection, treatment and reporting more consistent across the six sites. Greater consistency across sites would enable assessment and evaluation of outcomes on a broader scale than site by site. In addition, more systematic, planned use of qualitative, anecdotal types of data would enrich the annual assessments of the program. Furthermore, qualitative, anecdotal forms of data enable the participants to collaborate in assessing programs in which they participate.

Recommendation 8: Sites should consider using a standardized template to collect / record annual data common to all sites for ease of comparison of participation rates and patters across the southwest region**.**

Recommendation 9: Consider establishing a bank of anecdotal data for use in reporting successes and lessons learned related to TOTS and other programs.

Recommendation 10: All identifying information obtained through schools or school boards should be redacted from reports before they are released.

Recommendation 11: Review the TOTS logic model if and whenever changes are made to the program, so that the logic model reflects current program objectives.

Recommendations for Further Evaluation and Research

Findings of any evaluation can stimulate questions to be addressed by future research. A component of Turn Off The Screens which was largely untouched in this, and in previous, evaluations is the community activities. In addition, findings of this evaluation suggest that adults and children retain the TOTS messages after the challenge week is over. How well, and for how long they retain the messages are questions which need to be addressed. The community activities themselves provide venues in which on-the-spot interviews with families could be conducted.

Furthermore, the new TOTS Curriculum Resources package needs to be utilized and evaluated by teachers in schools that are participating in TOTS Week. Rubrics for easy evaluation are available and, if teachers could be persuaded to use them, could provide some insights into teachers' experiences of using the new curriculum. As well, the rubrics would indicate areas of strength and areas to improve in the curriculum documents themselves.

Finally, non-participants and those who only participate for part of the TOTS challenge could provide valuable insights into their needs in terms of programming and also could enlighten program organizers about the inhibitors to their success in remaining screen-free for five full days.

Recommendation 12: Utilize community activities as a venue for conducting brief, focused, anonymous; on-the-spot interviews with participating families to deepen the understanding of what motivates people to participate in TOTS and what aspects of the program are most effective.

Recommendation 13: Consider using a telephone survey modeled on questions from the Perth County local risk factor survey for a six-month follow-up to explore how well parents and guardians of elementary-aged school children retain the TOTS messages over time.

Recommendation 14: Sites are encouraged to distribute the TOTS Curriculum Resource Package to a selection of participating schools and to distribute evaluation rubrics to accompany the package as a method of obtaining teacher feedback on the new TOTS curriculum's effectiveness and usefulness to teachers.

Recommendation 15: Sites should consider ways to access information from partial participants focused on increasing our understanding of why children are unable to remain screen-free for five full days. Sites should consider ways to access increased information from non-participants.

This executive summary has been prepared for the Southwest Turn Off The Screens Partnership and provides a summary of the report on the results of the Turn Off The Screens In-depth Evaluation 2007. For further information please contact one of the following Heart Health / Health Units:
- **Healthy at Heart Elgin / Elgin St. Thomas Health Unit,**
- **Grey Bruce Partners in Health / Grey Bruce Health Unit,**
- **Take Heart Huron / Huron County Health Unit,**
- **Healthy Living Partnership Middlesex-London / Middlesex-London Health Unit,**
- **Whole Hearted Living / Oxford County Public Health, and**
- **Healthy Living Perth / Perth District Health Unit.**

**TURN OFF THE SCREENS IN-DEPTH EVALUATION REPORT:
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