Phase One Evaluation: Improving Outcomes for Children with FASD in Foster Care
Final Report

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ABSTRACT

Introduction

In February 2012, the FASD Support Network of Saskatchewan Inc. (Support Network) with the support of the Saskatchewan Ministry of Social Services began implementing training sessions for foster and adoptive parents. The Support Network collaborated with the Community-University Institute for Social Research (CUISR) and the Healthy Children research program at the Saskatchewan Population Health and Evaluation Research Unit (SPHERU) to conduct a program evaluation in order to determine the effectiveness of this training and to explore the experiences of foster/adoptive families in the province. The first phase of evaluation started in May 2012, and the evaluation was done that summer and fall, with the report completed in the spring of 2013. It was focused on process evaluation, which is concerned with whether a program is being delivered the way it is planned. As the evaluation was carried out, significant outcomes related to parents' knowledge and strategies about FASD were measured. It is intended that more in-depth evaluation of long-term outcomes and impacts of the program will be carried out in the future.

Methods

The evaluators and the Support Network developed a research methodology using a participatory research approach that has been informed by researchers, Support Network representatives, and Support Network stakeholders. The evaluation used a mixed-methods approach that involves both quantitative data (i.e. survey responses) and qualitative data (i.e. focus group interviews) to develop a holistic evaluation of the project.

During this initial stage of evaluation, surveys conducted immediately prior to and after the training (pre/post-tests) were used to establish a baseline measurement of the short-term impact of foster/adoptive parents' participation in the program. Telephone interviews were conducted two months following the training to determine whether the training had an ongoing impact on parents' knowledge and parenting strategies. Two focus groups discussions were also held to further illustrate the experiences of parents as they utilized the skills developed during the training session.

Results

A total of 78 participants attended training sessions between the months of May through July 2012, and 59 surveys were completed. Only 36% of parents had received any training prior to the program and the majority of parents' rated their current knowledge of FASD as fair or poor. The training session improved parents' knowledge in a number of important areas:

- general knowledge of FASD
- the lived experience of FASD
- primary and secondary disabilities
- key issues related to parenting
- building supports and strategies
- the "Eight Magic Keys" for developing successful interventions
- finding family supports for parents.

Facilitators and presenters also indicated what elements of the FASD training they believed were most successful, and provided suggestions for improving the program in the future.

There was an improvement in parents' overall knowledge about FASD in the two-month follow-up period after the training. Parents also reported an improved ability to care for children with FASD and in their approach to parenting children with FASD. During the focus group discussion, several themes about the training emerged. Parents discussed how the training made it easier for them to recognize many behaviours and symptoms associated with FASD, and as a result became more confident towards helping children with FASD. Parents also discussed the importance of learning from each other's experience in a group environment. Parents also provided important feedback on how to improve the training.

Conclusion

Overall, the evaluation found that the training session met the needs of the majority of parents. Parents rated the training positively and demonstrated an improvement in knowledge about FASD during the pre/post-test as well as in the follow-up period two months later. The results from the program evaluation will be used to develop recommendations for best practices, improve outcomes for children with FASD in foster/adoptive care, and inform the Support Network of key areas of importance when further developing their training program.

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A Note from the Network:

The FASD Support Network of Saskatchewan is a community based, parent-led provincial organization. When the Network began, very little was known about Fetal Alcohol Spectrum Disorder (FASD). A group of like-minded parents came together seeking support and understanding. Now, many years later, parents and families are still at the core of the Network. A 12-member Board of Directors, made up of both parents and professionals, offer experience and wisdom to help the Network continue to be a vibrant and growing provincial organization.

The vision of the Network is for individuals with FASD and their families to recognize themselves as safe, supported, valued, included and contributing members of the community. We endeavor to meet this vision by:

- Providing information and education to families, agencies and the public
- Promoting early assessment, diagnosis and intervention
- Advocating for support services for individuals with FASD across the lifespan
- Establishing provincial, national and international partnerships
- Working to increase awareness of FASD

FASD is a lifelong, invisible, highly complex, brain-based disability that presents with a diverse set of support needs for each individual and family affected. This, coupled with the reality that a high proportion of Saskatchewan children in care are living with FASD, highlights the need for tailored training for foster parents across the province. The Office of the Children's Advocate further called attention to this issue in its 2007 Annual Report. Within they acknowledged that the province's foster parents require training to establish a better understanding of how to parent, support and advocate for children prenatally exposed to alcohol. The Network, with the support of the Ministry of Social Services, developed this training to enhance the abilities of foster parents throughout the province and to improve outcomes for children with FASD in foster care.

The FASD Support Network of Saskatchewan sincerely acknowledges the following for their generous contribution to the development of the Improving Outcomes for Children with FASD in Foster Care training and evaluation:

- All of the parents who contributed their stories to the training material; it is because of you that those attending the sessions feel understood.
- The Evaluation Advisory Committee, composed of Linda Charlton, Tracey Neudorf, Shelly Thomas Prokop, Tara Turner and David Rosenbluth.

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- The dedicated team at the Community-University Institute for Social Research (CUISR) and the Healthy Children research program of the Saskatchewan Population Health and Evaluation Research Unit (SPHERU), both at the University of Saskatchewan.

Finally, we would like to acknowledge all parents caring for children with FASD as your role within their lives is often complex, difficult and at times thankless. Know that your dedication, willingness to learn and ability to amalgamate information about FASD into practice is inspiring.

Leslie Allen
Executive Director
FASD Support Network of Saskatchewan

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FASD Support Network of Saskatchewan

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1. INTRODUCTION

What is FASD?

FASD is the most common developmental disability worldwide. For example, Health Canada (2006) estimates that approximately 9 in 1000 children are born and diagnosed with FASD each year. Furthermore, Canadian estimates indicate that 300,000 individuals currently have FASD, which amounts to approximately one percent of the population (Health Canada, 2006). However, these rates are thought to be an underestimate, as many individuals live with FASD without ever receiving a diagnosis (Government of Canada, 2007). As demonstrated by these high rates, it is essential for Canadian and provincial governments and organizations to address the public health issue of FASD.

FASD is caused by maternal alcohol consumption during pregnancy, and is "preventable" in the sense that if a pregnant woman does not consume alcohol, a child cannot develop FASD (Health Canada, 2006). However, it cannot be considered 100% preventable, as there are many reasons a woman might drink during pregnancy, such as: not being aware of the pregnancy, misinformation about alcohol use during pregnancy, and/or FASD, or addictions (Poole 2008).

Prenatal alcohol exposure primarily impacts the development of the central nervous system (the brain) (Chudley et al., 2005). Consequently, FASD is a lifelong disability and there is no "cure" (Streissguth, 1997). The interference with the development of the central nervous system caused by prenatal alcohol exposure can impact multiple domains of functioning (i.e., physical, cognitive, behavioural, learning, social) and is strongly associated with mental illness (Chudley et al., 2005). However, appropriate supports and strategies that build on the unique strengths of individuals with FASD can facilitate a higher level of functioning and an increased quality of life (Streissguth et al., 2004).

Children with FASD who are in foster care frequently experience challenges associated with their disabilities, often resulting in negative outcomes such as instability and multiple placements

The Need for Foster Parent Training

In 2007, the Saskatchewan Children's Advocate Office annual report identified a need for Saskatchewan foster parents to have a better understanding of FASD and ways to care for children with FASD. The importance of educating foster parents about FASD-related topics is not surprising, as the literature reveals that children with FASD who are in foster care frequently experience challenges associated with their disabilities (e.g., physical, behavioural, social, cognitive, learning), often resulting in negative outcomes such as instability and multiple placements (Brown, Sigvaldason, & Bednar, 2005). For this reason, caregivers need to increase their understanding of FASD and apply this knowledge to improve the outcomes of children in care (Jones, 2004).

Foster and adoptive parents play a critical role in Saskatchewan, as well as in the lives of

children and youth with FASD. When caregivers are well informed about FASD, they become better equipped to parent, support, and advocate for their children. Empirical research has indicated that there is a need for FASD-related information and training, and that foster-parent trainings are linked to more successful placements and other positive outcomes (Chamberlain et al., 2008). Likewise, when caregivers are knowledgeable about FASD and can comprehend the unique needs of each child, they can utilize individualized strategies that will lead to positive short- and long-term outcomes (Streissguth, 1997). Based on these findings, the Support Network has developed and initiated a half-day foster/adoptive parent FASD training project called *Improving Outcomes for Children with FASD in Foster Care.*

The Support Network's Training Program

The Support Network's training program, *Improving Outcomes for Children with FASD in Foster Care,* is the primary means of addressing the needs of foster/adoptive parents of children with FASD. The Support Network developed the educational materials for the training and it was implemented in collaboration with the Saskatchewan Ministry of Social Services. It is mandatory for all Saskatchewan foster families and is optional for interested adoptive families.[1]

The three-hour training is designed to be engaging and interactive, with the purpose of providing foster/adoptive parents with:

   a)   an understanding of FASD as a disability;

   b)   strategies for parenting children who have been prenatally exposed to alcohol;
   c)   knowledge of avenues of support for the family and child.

This combination of information about FASD, strategies, and support/advocacy is intended to provide caregivers with a strong foundation of knowledge to build upon when working with children who have been prenatally exposed to alcohol.

The program is administered in a single-day seminar format, and multiple locations/ bookings will occur over the year to service various geographic locations. Well-qualified and trained presenters deliver the half-day foster parent FASD training to participants using a standard PowerPoint presentation and Presenter Guide to disseminate information in a consistent manner.

The Support Network has also developed an accompanying Parent Guide that is intended to be used both during and following the training. A representative from the Ministry of Social Services acts as the facilitator for each session. The partnerships established between the three parties (Support Network, Social Services facilitators, and educational presenters) are integral to the design of the program, as each group takes a different role in the implementation of successful trainings.

Benefits of Evaluating this Training Program

The primary objective of Phase One of the evaluation of the *Improving Outcomes for Children with FASD in Foster Care* project was to examine the process of the delivery model for a FASD program currently being administered to foster parents of children with FASD. This study also begins to develop baseline measurements of the program outcomes. In doing so, it is possible to determine the level of efficacy of the current implementation of

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[1] Note that throughout the remainder of this report, we use the term "foster families" to identify those receiving the training, as it was made mandatory for foster families.

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the program. Further, based on these results, the Support Network will be able to make informed decisions about appropriate modifications that could be utilized to increase the effectiveness of the program in the future.

The Support Network will benefit from the evaluation research completed as part of Phase One of the training evaluation in a number of ways. First and foremost, the data collected and analyzed will enable the Support Network to pinpoint the areas of strength and weakness, and to proceed accordingly. To promote a stronger understanding of the process and implementation of the foster parent FASD training program, some questions worthy of consideration include:

- Is the program implemented in a way that is consistent with the model developed for conducting the training?
- What is effective in the process of the training?
- What components of the process could be modified to increase the success of the training in the future?

This Phase One evaluation will also provide an initial understanding of the outcomes of the foster parent training. Key questions may include:

- Is the information useful?
- Is the knowledge acquired being applied in everyday parenting practices?
- What parenting information/strategies have been most valuable?
- What information about parenting children with FASD was omitted from the training?

Finally, it will provide valuable data that the Support Network can disseminate as they see fit, and that the evaluators can disseminate to provincial and national organizations.

The Evaluation Team

In addition to collaborating with the Saskatchewan Ministry of Social Services, the Support Network also engaged Dr. Nazeem Muhajarine as a principal investigator to oversee the development of Phase One of the program evaluation. Dr. Muhajarine is a social epidemiologist, and professor and chair of the department of Community Health and Epidemiology in the College of Medicine at the University of Saskatchewan. He also leads the Healthy Children research program at the Saskatchewan Population Health and Evaluation Research Unit (SPHERU). The evaluation project also involves collaboration with the Community-University Institute for Social Research (CUISR). CUISR staff provided supervision and guidance to two graduate student researchers responsible for conducting the evaluation research, and SPHERU staff provided editorial and knowledge translation services for the production of this evaluation report and accompanying fact sheet.

Summary of the Comprehensive Literature Review Conducted

As part of the evaluation process, we conducted a literature review to examine all types of research related to the training program and its evaluation, in order to see how to best facilitate positive outcomes for children in foster care. We reviewed several kinds of literature: parenting children in foster care generally; parenting children with FASD in foster care; and evaluations of parent training programs for children with behavioural challenges, developmental disabilities, and FASD (not specific to foster children). This review is included as Appendix A on page 37. The Network can use this comprehensive review of relevant research as a guide for all stages of program planning, development, and implementation.

*What is Program Evaluation?**

Patton (1997) defines program evaluation as "the systematic collection of information about the activities, characteristics and outcomes of programs to make judgments about the program, improve program effectiveness, and/or inform decisions about future programming" (p. 23). There are a number of methods of program evaluation, ranging from simple to complex. The commonality to these approaches is the shared goal of increasing the success of programs, as well as to provide opportunities to learn, improve, and share information about program functioning, outcomes, and impacts (Rossi, Lipsey, & Freeman, 2004). There are many types of evaluation to consider, each structured differently and concerned with different elements of a program's functioning (e.g., purpose, type, methods, tools).

The Purposes of Evaluation

Patton (1997) suggested three primary purposes of evaluation: accountability; ongoing development; and generating knowledge. *Accountability* involves making overall judgments about the effectiveness of the program. The importance of accountability is that it assists with determining whether the program is achieving its identified goals and objectives (Patton, 1997). Accountability is especially crucial in evaluation, as it acts as a means to demonstrate to funders, stakeholders, and the public, that the funds provided for the program are being utilized efficiently and effectively (Posavac & Carey, 2007). Currently, the reality is that the majority of funding agencies require an evaluation component to be included as part of the overall program. Solid evaluation data throughout a program can: a) increase opportunities for future funding; b) ensure that the target populations are being reached; c) identify gaps; and d) address strengths and weaknesses.

The second purpose of evaluation, *ongoing development*, emphasizes the internal elements of the program. In particular, evaluation is an ongoing process that can lead to continual and cyclical improvement of programs. By progressing through each phase of the cycle, different data can be collected that, when examined singularly or together, can provide great insight into the overall program and how it can reach its full potential (Patton, 1997). There is a reciprocal relationship between the purposes of accountability and ongoing development, as the former is related to external functions (i.e., funders, stakeholders) and the latter examines internal functions.

The final element of evaluation, *generating knowledge*, entails sharing evaluation findings with others (e.g., researchers or program planners) (Patton, 1997). The end goal of knowledge dissemination can lead to better program planning, as each stage of the program process must be clarified and documented. Knowledge sharing is particularly important if the program has been found to include effective approaches or the identification of strategies for overcoming common obstacles. As information is shared with researchers and professionals, it contributes to the existing body of knowledge on evaluation (in general) and other programs that are designed to address similar issues (Patton, 1997). Building a strong research foundation about evaluation and various health-related programs is essential to the advancement of the field.

The Benefits and Value of Program Evaluation

The value of program evaluation cannot be overstated. Many of the benefits of evaluation can be extended from the fundamental purposes of evaluation (Patton, 1997). For instance, Patton (1997) indicates that accountability, ongoing development, and generating knowledge are key purposes of evaluation, which is echoed in similar literature (e.g., O'Connor-Fleming, 2006). Thus, the primary benefits of evaluation is that it allows researchers and professionals to: a) gather and provide information about the current status and potential future of a program to diverse audiences (e.g., funders, public); b) initiate and sustain the evaluation cycle to achieve the best possible process and outcomes; and c) disseminate critical knowledge to individuals planning new programs, evaluating programs, or developing/build on evaluation theory (Patton, 1997; Rossi et al., 2004). Together, these are the major outcomes of evaluation, offering a rationale for continuation of programs, a means of achieving program goals, and the capacity to form a reciprocal relationship in the evaluation field.

*** A more detailed description of program evaluation can be found in Appendix B on page 49.*

2. HOW THE TRAINING PROGRAM WAS EVALUATED

Researchers and the Support Network staff identified process evaluation as the most appropriate means of assessing the Support Network foster parent FASD training program in this first phase.[2] This approach allows us to understand the current delivery and implementation of the foster parent training at a specific point in time.

Although there are a multitude of approaches to process evaluation (e.g., Green & Kreuter, 2005; Issel, 2008; Rossi et al., 2004), we decided to follow the comprehensive, six-stage model proposed by Saunders, Evans, and Joshi (2005), as we determined it was a good fit to the evaluation goals and objectives of the Support Network training program.

In Stage One, we described the program with an evaluation framework and logic model (Saunders et al., 2005). In Stage Two, we wrote a complete outline of program delivery and the specific elements that make up the program. The program components that should be considered in this outline include:

- *fidelity* (the quality of intervention, and if it was delivered as originally intended)
- *dose delivered* (completeness of intervention)
- *dose received* (extent to which participants received and used materials and resources)
- *reach* (participation rate)
- *recruitment* (procedures used to attract and retain participants)
- *context* (environmental aspects influencing implementation or outcomes).

In Stage Three we formulated potential evaluation questions pertaining to

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[2] For more information on program evaluation, see the box on page 4, and Appendix B on page 49.

implementation based on the six program components in Stage Two. For instance, relevant questions could examine the number of participants, if the correct targets are being reached, or if the program functions are performed adequately.

In Stage Four, we developed the methods necessary to carry out the process evaluation and answer the questions posed in Stage Three. Stage Four also involves planning methods of data collection and synthesis, as based on program resources, characteristics, and context.

In Stage Five, we assessed the resources and context identified in Stage Four and used this information to structure the evaluation to account for these key factors.

In Stage Six, we finalized the evaluation plan so the actual evaluation could be conducted.

Developing the Evaluation Framework

The evaluation for the FASD training program is based on a comprehensive evaluation framework and logic model. We developed both the framework and logic model through a participatory research process that addressed the concerns of all involved stakeholders. The framework is based on the literature review outcomes and other identifiable measures suggested by the research team and committee.

The Evaluation Framework is a wide-ranging outline and plan for the complete evaluation of all aspects of the FASD training session. It is organized into four main sections:

- Benefits and impacts
- Short- and long-term implications for practice
- Experiential shortcomings

- Consistency and value of services delivered

This framework identifies the anticipated ends to the research and facilitates the evaluation process by asking pertinent research questions, developing measurable indicators, and determining the appropriate data sources and methods of data collection.

The evaluation framework outlines the steps needed to measure the strengths and weaknesses of each program element and ways to improve program effectiveness. An evaluation framework emphasizes the following guiding principles: a) using evidence as a basis for decision-making and public health action b) achieving social equity through public health action c) demonstrating results through outcomes d) and being accountable (CDC, 1999). The framework is also designed so that program evaluation is integrated into routine program operations in order to understand the overarching research questions in the framework.

Several key questions need to be considered when designing an evaluation framework and measuring a program's success on the basis of evidence:

- What is the current situation that we intend to impact?
- What will it look like when we achieve the desired situation or outcome?
- What components of the program will be considered when judging program performance?
- What data will be used to indicate how the program has performed?
- What conclusions regarding program performance are justified by comparing the available evidence to the published literature?

- How will the lessons learned from the inquiry be used to improve public health effectiveness?

We used a knowledge integration approach to develop this framework, bringing together all knowledge users to determine research questions and methodology, gather data, and interpret results in order for the findings to have a greater chance of being put into policy and practice. We reviewed the Support Networks' documents, trainer manual, and parent workbook, and consulted with the Advisory Group and with project coordinators to establish a set of guiding principles and overarching research questions so we could identify measurable outcomes to assess.

The program evaluation used a mixed methods approach, drawing on both survey research tools (a quantitative method) and focus groups (a qualitative method). Mixed methods approaches enhance the overall strength of a study compared to using either qualitative or quantitative methods separately (Creswell & Plano Clark, 2011). The quantitative method used a pre and post-intervention observational study design where data on foster and adoptive parents' knowledge was collected before and after the training session. Pre-test/post-test designs are used to measure the degree of change occurring as a result of interventions (Bickman & Rog, 2009). However, pre-test and post-test differences should be interpreted with caution since there is no true control group in this study. We conducted an interim follow-up telephone survey for participants two to three months after the training, in-depth interviews and focus group discussions with a number of participants and other stakeholders, and content analysis of questionnaires. We also observed and participated in various training sessions and meetings.

Table 1: The Evaluation Framework[3]

BENEFITS AND IMPACTS: *broader benefits and impacts of the FASD training program*			
Evaluation Questions	**Indicators**	**Data Sources**	**Methodology**
Was there an increased level of awareness and understanding at the community level about children living with FASD?	Change in level of understanding following training session compared to at baseline	Pre/Post Questionnaire	Survey
Are foster and adoptive parents more aware of the services and supports available? Is there an increase in usage of available online tools and other support resources?	Access of website by parents Updates to content of website	Website	Content Analysis
Do parents feel they have received sufficient support and training?	Reported satisfaction with current training and resources	Focus Groups	Content Analysis
SHORT AND LONG TERM IMPACTS: outcomes measures around short and long term impacts for participants			
Evaluation Questions	**Indicators**	**Data Sources**	**Methodology**
What is the retained knowledge on FASD specific issues in the following months after training?	Change in level of knowledge following training session	Pre/Post Questionnaire	Survey
Is there a perception of personal growth as a result of training?	Parent satisfaction Parents who identified that training met their expectations Parents who reported achieving their goals in caring for children with FASD	Focus Groups	Content Analysis
Did the training session build on foster/adoptive parents existing strengths to increase capacity to protect and nurture children with FASD?	Increased knowledge compared to at baseline (e.g. more aware of the resources, changed attitudes about parenting children with FASD, etc.)	Pre/Post Questionnaire	Survey
What is the impact of training on parenting strategies?	New or improved skills/strategies described by parents	Phone Interview, Focus Group	Content Analysis

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[3] References for the evaluation framework: Bickman L & Rog DJ (2009); CDC. (1999), Creswell, JS & Plano Clark, VL (2011).

EXPERIENTIAL SHORTCOMINGS*: the process of program delivery for any potential experiential shortcomings*

Evaluation Questions	Indicators	Data Sources	Methodology
What components of the process could be modified?	Barriers to acquiring knowledge and applying strategies identified Potential changes identified	Post-Event Facilitator Survey, Post-Event Presenter Survey	Content Analysis
What are the perceived strengths/weaknesses of the training and method of program delivery?	Description of delivery mechanisms Potential efficiencies identified Comparison of current training program to those of other similar programs	Post-Event Facilitator Survey, Post-Event Presenter Survey, Literature Review	Content Analysis
What critical information was omitted from the training?	Key areas identified by parents, trainers, and facilitators	Phone Interviews, Focus Groups, Post-Event Facilitator Survey, Presenter Survey	Content Analysis

CONSISTENCY AND VALUE OF SERVICES DELIVERED: *further questions about the process around program delivery*

Evaluation Questions	Indicators	Data Sources	Methodology
What is the participation in training session community?	Number of parents attending training	Attendance records	Descriptive statistics
Is the training implementation aligned with the training model developed?	Presenters and facilitators provided with sufficient materials (workbooks / resource materials) Consistent messages delivered to target audiences.	Post-Event Facilitator Survey, Post-Event Presenter Survey	Content Analysis
What is effective in the process of training?	Suggestions for change/improvement Lessons learned	Post-Event Facilitator Survey, Presenter Survey	Content Analysis
How were the trainer manual and parent workbooks used?	Degree of use reported by parents	Phone Interviews, Focus Groups	Content Analysis
Did the foster/adoptive parents utilize the workbooks?	Level of satisfaction with the materials	Phone Interviews, Focus Groups	Content Analysis
What impact did the workbook have on parenting strategies for children with FASD?	Number of parents who reported achieving their parenting goals	Phone Interviews, Focus Groups	Content Analysis

Developing a Logic Model

We also developed a Logic Model (Figure 1, below) linking the various relationships among the key components of the Support Network's strategy and short- and long-term objectives which also serves as a roadmap for evaluation. As a planning tool, the logic model determines whether the training session aligns with the Support Network and stakeholder's overall vision, goals, and objectives. The logic model also helps to identify the most important desired outcomes. As an evaluation tool, the logic model determines appropriate evaluation questions.

Logic models are used to illustrate how a program or intervention achieves its goals by describing the relationships among inputs, activities, and the potential impact and outcomes that a program hopes to achieve (Green & Kreuter, 2005). Each of the following components of the logic model is clearly linked to the overall goal of improving outcomes for children with FASD:

Inputs: The first component is the *inputs*, which are the various resources available to support and implement the program.
Activities: Inputs are used to design *activities* such as planning an event or designing a program for a specific population.
Outputs: The direct products of a program activity are referred to as *outputs*. Examples include successfully carryout out a training session or delivering a service.
Impacts: The intended accomplishments of the program for organizations and communities are the program's *impacts*. These can be divided into short, medium, and long-term outcomes. Short-term outcomes are the immediate results of the program and are typically measured by changes in knowledge, attitudes, and intentions. Intermediate outcomes include changes that follow the short-term outcomes and include changes in practices and behaviours. Long-term outcomes result in changes in health, social, and environmental conditions.
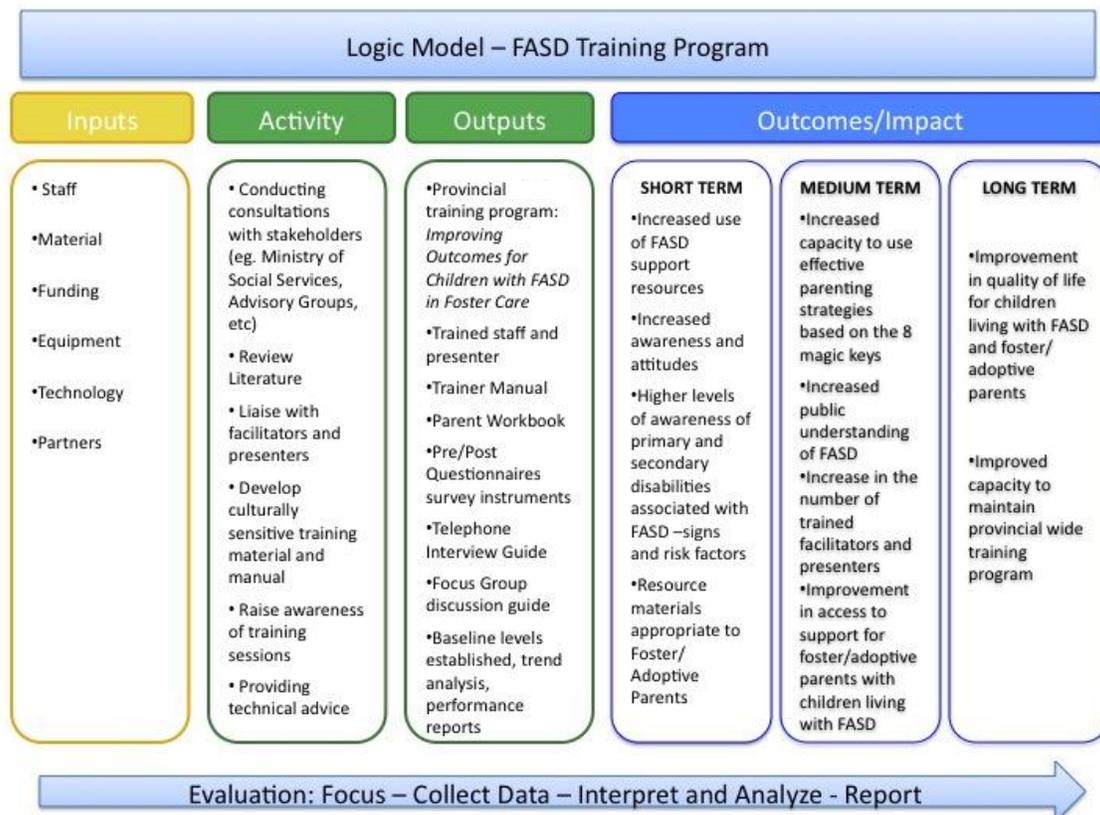

Figure 1: Program Logic Model

The Support Network and the research team have used this logical model as a reference point in this evaluation project for communicating the purpose of the program, describing the inputs and activities, and measuring expected results. In reality, different program components may have dynamic interrelationships and do not always follow a sequential order. However, a logic model can serve as a roadmap about how the program is expected to work and the theory and assumptions underlying the program.

Recommendations for Conducting an Outcome Evaluation at a later date

This Phase One evaluation occurred over a very short period of time. The timeframe makes it difficult to complete a "full" outcome evaluation, as these are generally longer-term and focused on specific measurable outcomes (Rossi et al., 2004). However, the literature review in the previous section provides a number of potential outcomes that might be incorporated into a more comprehensive outcome evaluation, conducted at a later date (referred to in this report as "Phase Two"). In addition, information derived from participants in Phase One will be useful in narrowing down and specifying outcome variables, as well as providing a baseline measurement that can be used to understand outcomes in other stages of the evaluation cycle.

Process Evaluation Methods

The program evaluation uses a mixed method approach, utilizing both qualitative and quantitative research tools. The benefit of a mixed methods approach is that the overall strength of the study is greater when research knowledge is gathered through both qualitative and quantitative methods.

Quantitative: Pre/Post-Test: Foster Parent Surveys

The first component of the evaluation used a pre/post-test to collect data on foster and adoptive parents' knowledge before and after the training session using a validated, quantitative survey instrument. The pre/post-test determined baseline levels of parents' knowledge on different issues related to FASD, as well as the changes that occurred within the individual after the program.

At the beginning of each training session, facilitators and presenters allotted 15 to 20 minutes of time for each participant to fill out a pre-survey on their knowledge of FASD issues. Immediately following the training session, participants spent another 15 to 20 minutes to fill out a nearly identical survey, modified to use appropriate post-test language. Surveys were chosen because they could be easily administered at the beginning and end of each training session and standardized questions ensured precision in gathering data on trends, attitudes and opinions of foster/adoptive parents. At the end of each training session, facilitators and presenters also completed a questionnaire to determine the perceived strengths and weaknesses of programming and to identify potential areas for improvement. A total of 78 participants attended the trainings and 59 questionnaires were completed at the beginning and end of the training sessions. However, only 56 pre and post survey pairs were returned.

Quantitative: Post-Event Facilitator and Presenter Surveys

There were eight training sessions held from May to July 2012, with a facilitator and a trainer at each one. Presenters and facilitators were sent surveys following each training session. They were asked to respond to open-

ended questions pertaining to the content, quality, successes, and limitations of the training. With these surveys, we intended to gather information about alternative perspectives from the presenters who conducted the training, and the facilitators who viewed the training from an administrative perspective.

The presentations were delivered by four presenters and five facilitators. We received completed surveys from four presenters and two facilitators.

Qualitative: Telephone Interviews

In the next step in the evaluation, we used qualitative methods consisting of semi-structured telephone interviews and focus groups. Telephone interviews were conducted with participants two months after the training session. The purpose of the telephone interviews was to determine whether parents were satisfied with the training session, as well as whether the training was delivered effectively and efficiently, resulting in improvements in their knowledge and parenting strategies. The responses from parents were used to establish the strengths and weaknesses of the training and link program inputs and activities to outcomes. Out of the 59 total participants, 36 parents consented to being contacted for a follow-up interview and provided a contact phone number.

When parents were phoned, we started with a concise explanation of the evaluation project and obtained their verbal consent. We left voice messages for parents who did not answer our initial call, and we made three separate attempts to contact parents over a two-week period. The phone interviews were semi-structured, and lasted approximately 15 minutes each. We interviewed 26 parents, which corresponds to a response rate of 72% of all parents who provided a contact number (and 44% of all possible participants).

Qualitative: Focus Groups

Focus groups allowed for more in-depth answers and allowed the interviewer to provide clarification for participants if they did not understand a question or needed further explanation on a particular issue. Additionally, interviewers could directly address any respondents' questions, probe for more details, seek more reflective replies, and ask more complex questions.

Five participants took part in two focus groups (one in Regina, one in Saskatoon) and each lasted approximately 1 hour and 15 minutes. Participants were recruited during the interim follow-up period during the telephone interviews.

There were three participants in the Regina focus group, all of whom were female. One mother had been a foster parent for two years with her first child, a two year old. Another mother had been a foster parent for 13 years. The third mother of the Regina focus group had been a foster parent for 38 years and had raised a foster child from infancy to adulthood (18 years of age). In Saskatoon, we interviewed two experienced foster parents (one mother, one father) who had cared for children with FASD for over 10 years.

The focus groups in Regina and Saskatoon were held in a conference room at a public library and a meeting room at the University of Saskatchewan, respectively. One of the research assistants moderated the focus groups. Consent was obtained from all participants, and participants were informed that their responses would be protected. All participants also agreed to respect the confidentiality of others, and not to disclose any details of the discussion to anyone outside of the group. The moderator also informed participants that the session would be recorded for later analysis and ensured that participants were comfortable with this recording.

The research assistant began by introducing the group members to one another and explained that the purpose of the focus group was to understand the experiences of the foster parents following the training as they applied their new knowledge and skills to caring for children with FASD. Participants were encouraged to interact with each other in a casual manner or in the same way they would interact with their peers outside the research setting. Given that some participants were already acquainted with one another from prior training sessions, we found that participants were comfortable in the presence of other participants.

The research assistants conducting the focus groups used a semi-structured discussion guide to frame and explore the following topics: how parents perceived the training; what knowledge and skills parents took away from the training; how parents had applied new strategies in their parenting; and how training sessions could be improved. The moderator guided the focus group discussion by prompting and encouraging other group participants to respond to comments brought up by others as well as point out agreements and disagreements among group participants. The moderator also monitored the time during the discussion and ensured that the participants stayed on track. Both focus groups were audiotaped and the data were transcribed and then analyzed using thematic analysis – a conventional technique for qualitative data.

Limitations of these Evaluation Methods
The evaluation of the FASD training program employed different research methods to collect both quantitative and qualitative data. The different methods followed the evaluation framework guiding the project to measure the effectiveness of the training program. There were limitations with each of these methods.

We encountered several challenges when administering the *pre-/post-tests* during training. There were time constraints at some sessions, which made it difficult to allocate 15 minutes each for both pre- and post-tests.

Additionally, participants may have experienced a response burden filling out a very similar survey two times during the session.[4] We had a lower completion rate on the post-test, and this could have resulted in some response bias in that some participants may have completed them as they felt they gained more knowledge than those others who did not complete them. However it is also possible that those who completed the post-test may have differed in some other way from those who did not complete the post-tests (for example, a foster parent had some specific comments about the presenter and wanted to make sure that this was recorded). The lack of a control group also makes it difficult to know how much pre-post differences in knowledge were a result of the training program. Finally, completing a nearly identical pre/post-test may make participants aware of the items being measured and an increase in score may result from simply taking the test again, irrespective of the event or intervention.

There were also a few challenges with the *telephone interviews* conducted two months after the training session. As we were unable to reach all of those who had consented to interviews and provided phone numbers, there may be a selection bias in the responses of those who were reached. Another drawback of phone interviews is that it is sometimes difficult to get people to elaborate on their responses over the phone. Since respondents cannot see or read the questions,

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[4] The pre- and post-tests were structured to find out about the same information prior to and following the training. For this reason, both tests included very similar questions, with the primary distinction being the tense.

complicated or long questions are not appropriate for telephone surveys. In general, questions need to be kept simple and brief since there is a lack of non-verbal communication, which may result in unintentional interruptions or misunderstandings on either the participant or interviewer's part.

The *focus groups* were interactive discussions among several different foster parents; however, the focus group results have some limitations. Since the focus groups included a small sample size and participation was not random, the responses do not represent the opinions of all foster parents. Different group dynamics during the discussion can also yield

unreliable results. For example, some parents may hesitate or have a reluctance to share their true opinions especially on sensitive topics if they are uncomfortable speaking in a group environment.

One additional limitation in interpretation of results from telephone interviews and focus groups is that many parents indicated that they had continued learning about FASD in the two months following the training. On one hand, this is positive because the training incited increased interest on the topic. On the other hand, this makes it challenging to interpret the level of knowledge as entirely attributable to the original training.

3. EVALUATION RESULTS AND INTERPRETATIONS

The analysis of the Support Network foster parent FASD training has been divided into two sections: quantitative and qualitative. The data collected in the pre- and post-event surveys was analyzed using statistical analysis, while the results from qualitative analysis were analyzed using basic thematic analysis to draw out and assess key themes. In terms of response rate, 50 pre- and post-surveys were included in analysis, while qualitative data was derived from two facilitator surveys and three presenter surveys, telephone interviews, and focus groups. Due to a low response rate in some categories, it can be difficult to generalize participants' responses to a wider audience or the entire program.

Quantitative Results: Foster Parent Survey Data

Eight training sessions were delivered during the months of May through July 2012. Locations included Regina, Prince Albert, Lloydminster, Saskatoon, Meadow Lake, and North Battleford. 16 participants (32%) identified themselves as a member of an ethnic or Aboriginal community (e.g., Cree, First Nations, Metis).

All the participants were foster parents, but nine participants indicated that they were also adoptive parents. One participant indicated that she was a care provider and not a foster or adoptive parent. The majority of parents (85%) were either currently parenting a child with diagnosed/suspected FASD or had parented a child with diagnosed/suspected FASD in the past. The average number of children with diagnosed/suspected FASD that foster parents had parented was 3.6 children. However, several parents indicated that they had parented too many children with diagnosed/suspected FASD to remember. A summary of the parent participants is shown in Figure 2.

Average age	48 yrs
Member of an ethnic or Aboriginal minority	
No	34 (68%)
Yes	16 (32%)
Average number of children with diagnosed/suspected FASD parented per foster parent	3.6
Previously received training about FASD	
No	32 (64%)
Yes	18 (36%)

***Figure 2: Profile of parents attending FASD training** (n=50)*

Prior to the training session provided by the Support Network, only 36% of the parents had received training about FASD. The level of exposure to FASD Support Network content was also very low. Only 20% of parents had accessed the Support Network's website in the past to gain information about FASD or FASD-related services and only 16% had ever used the Support Network's other resources. As a result, parents rated their overall level of knowledge about FASD as fair (Figure 3).
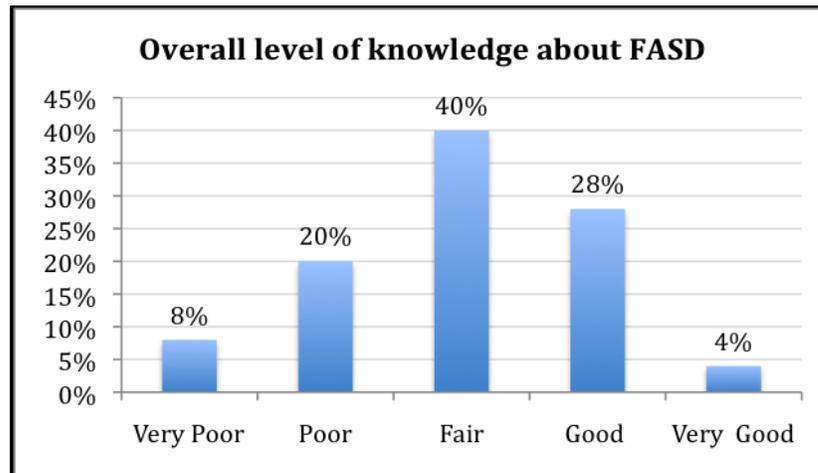
Figure 3: Overall level of knowledge about FASD

Overall, parents showed a large improvement in their knowledge about FASD, specific issues related to primary and secondary disabilities, key issues related to parenting and building supports for children, and finding family supports for parents as a result of the training session. Parents' general knowledge about FASD improved in terms of their understanding the definition of FASD, history of FASD, assessment and diagnosis, factors leading to FASD, and the implications of pregnancy, fetal development and prenatal alcohol exposure (Figure 4). The greatest improvement was in the area of assessment and diagnosis, with 67% of parents indicating that they have good or very good knowledge following the training session compared to 20% on the pre-survey. A large improvement in assessment and diagnosis is a considerable finding given that the prevalence of FASD is underestimated and many individuals go undiagnosed. However, this was still lower than other areas, signaling that there is room for improvement.
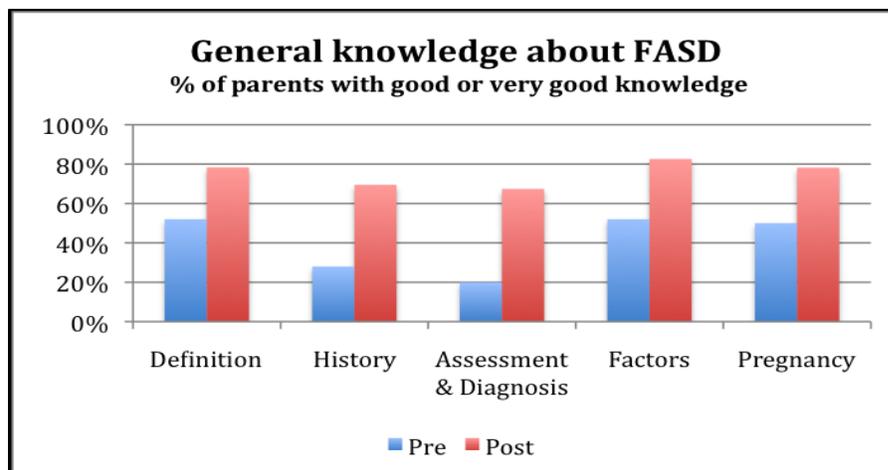
Figure 4: General knowledge about FASD

The training session also resulted in improvements in knowledge of primary and secondary disabilities associated with FASD. Primary disabilities are lifelong and permanent and are caused directly by prenatal alcohol exposure. The pre-survey showed that over half of the parents had good or very good knowledge about behavioral disabilities (Figure 5).
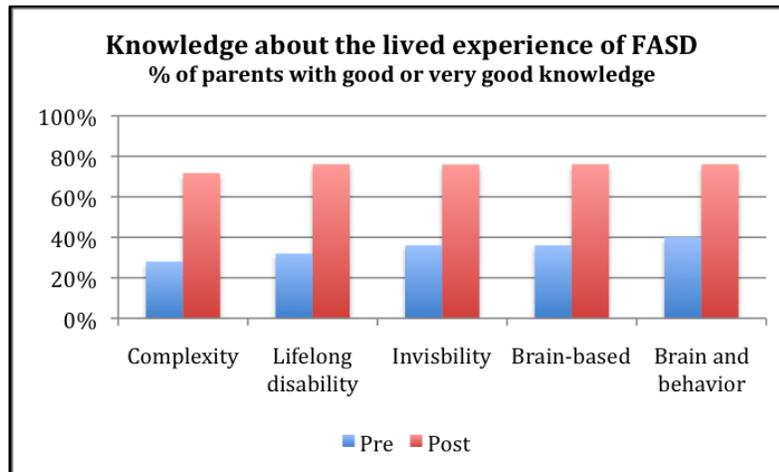
Figure 5: Knowledge about the lived experience of FASD

However, initial knowledge about cognitive, physical, and sensory disabilities was low prior to training. The training session increased parents' knowledge in all different primary disabilities, highlighting the different facets of FASD (Figure 6).
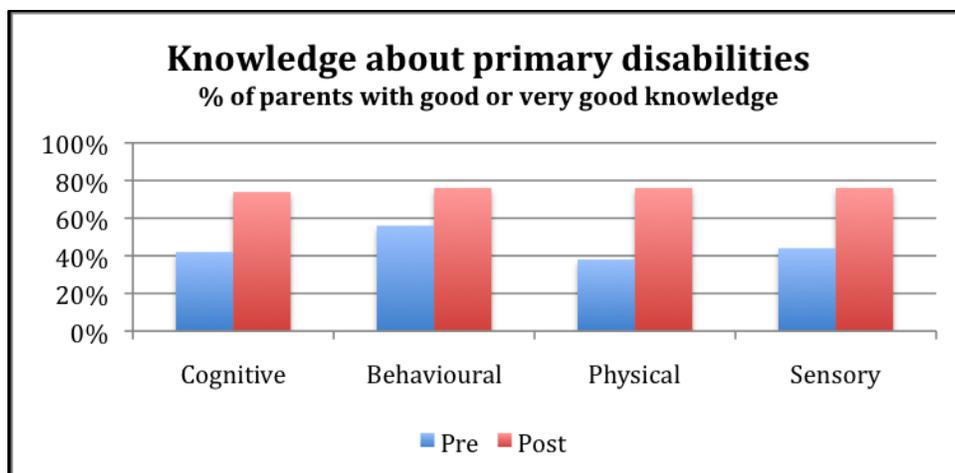
Figure 6: Knowledge about primary disabilities

Secondary disabilities are specific problems that may arise in individuals with FASD as they age and mature. Parents demonstrated a good understanding of secondary outcomes such as mental health difficulties, risk of addictions, conflicts with the criminal justice system, education and employment difficulties, housing issues, relationship difficulties, and risky sexual behaviors. One particular item that was addressed during the training was the impact of "good fit", or what works or does not work based on a child's strengths, abilities, interests, and struggles. In the pre-survey, less than 20% of parents indicated having good knowledge about a child's ability to integrate or find what works and the corresponding impacts. This increased to more than 60% in the post-test.

Parents were also assessed on their current level of knowledge about key issues related to parenting and FASD. Parents showed the highest level of knowledge in dysmaturity, which requires recognizing the difference between chronological and developmental age (Figure 7). The relatively higher knowledge in recognizing dysmaturity also reflects parent's high knowledge in the physical aspect of primary disabilities compared to the cognitive, behavioural, and sensory aspects.

Parents' knowledge about mental health following the training was lowest among all secondary disabilities (Figure 7). Given that mental health is an invisible illness, parents' low levels of knowledge about mental health may have important implications in caring for children with suspected or diagnosed FASD.
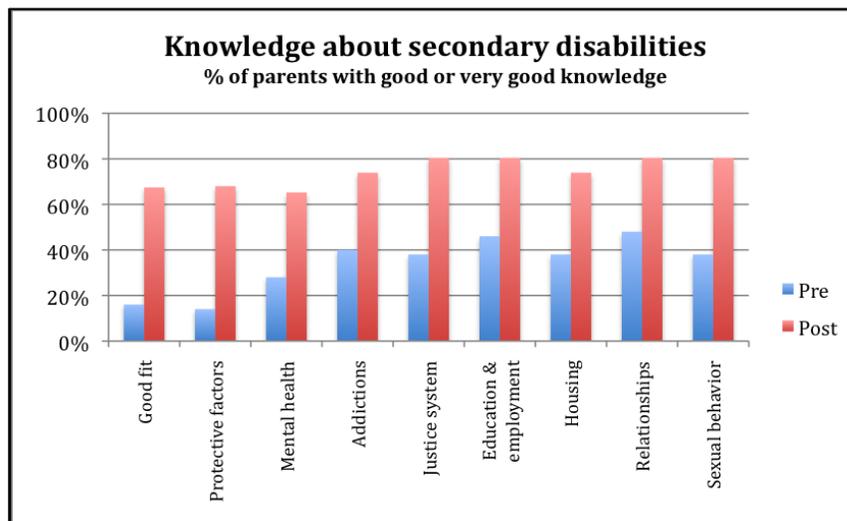
Figure 7: Knowledge about secondary disabilities

The smallest improvements were made in areas such as understanding a child's previous traumatic experiences, as well as their loss of history or how their life was experienced in a disjointed way that resulted in a loss of personal history. Addressing the broader contextual factors of a child's upbringing includes understanding prior traumatic experiences and loss of history, which is challenging if parents have lower levels of knowledge in these areas (Figure 8).
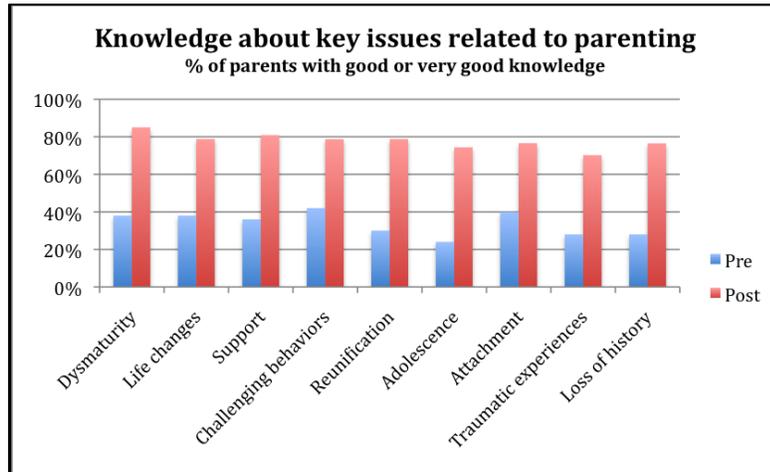
Figure 8: Knowledge about key issues related to parenting

Measures of parents' knowledge about building supports for children with FASD and strategies based on the *Eight Magic Keys: Developing Successful Interventions for Individuals with FASD* approach used in the workbook and training demonstrated the different approaches that parents take to improve the lives of children living with FASD. On these keys, parents scored lowest on their knowledge about ways to comfortably talk to children and youth about FASD. For example, post-survey scores revealed that only 72% of parents had a good or very good knowledge in talking to children and youth, compared to over 80% of parents who had good or very good knowledge about having positive attitudes with children (Figure 9).
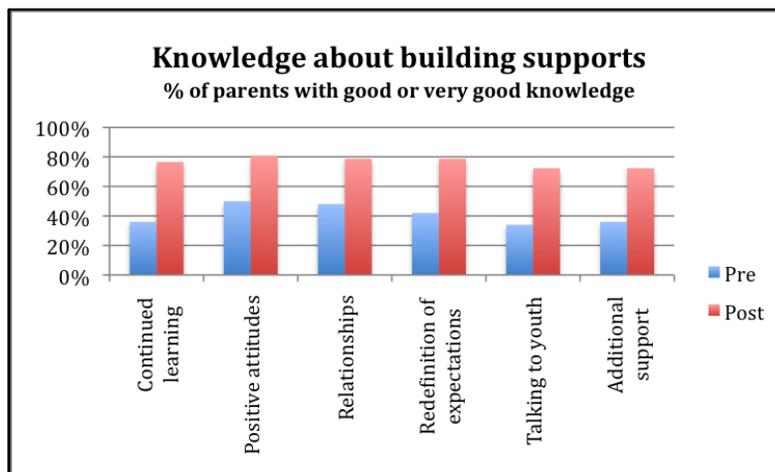
Figure 9: Knowledge about building supports

On the "Eight Magic Keys" strategies, parents scored lowest on the concreteness item (focusing on concrete vs. abstract concepts) compared to other measures such as having daily routines in the post survey. The lower scores on talking to children and describing things in concrete concepts is perhaps indicative of parent's needs for training on different communication techniques such as visual aids, which parents showed high levels of improvement between pre- and post-survey scores (Figure 10).
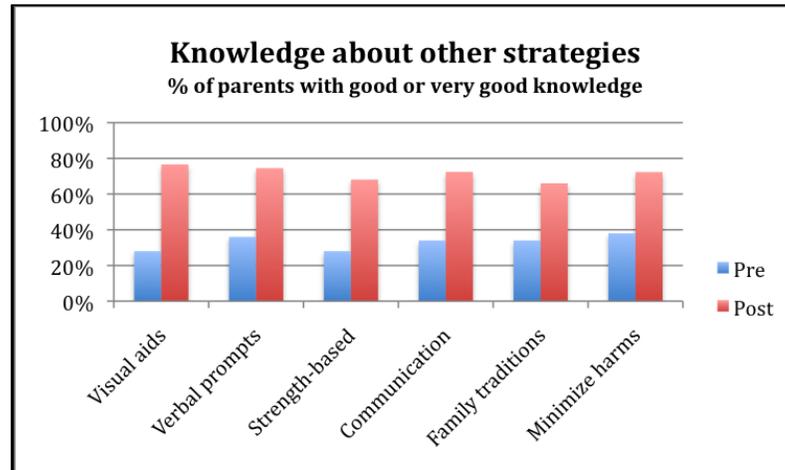
Figure 10: Knowledge about other strategies

Finally, parents showed a substantial improvement in their knowledge about family supports available for themselves. Approximately 80% of parents had a good or very good knowledge about how to seek support and different self-care practices compared to less than 30% prior to the training (Figure 11).
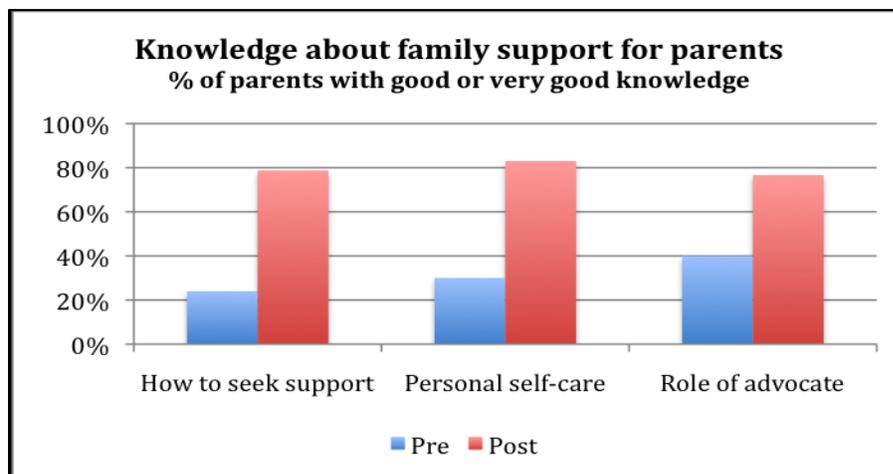
Figure 11: Knowledge about family supports for parents

Quantitative Results: Facilitator and Presenter Survey Data

Between May 2012 and July 2012, eight training sessions were held, with a facilitator and a trainer at each session. There were five facilitators and four presenters in total, as some delivered more than one session. The evaluators received completed surveys from four presenters and two facilitators.

To make the best use of this survey data, a very simplistic form of thematic analysis was used. Responses to each question were analyzed to extract themes, and once categorized it was possible to clarify these themes for further analysis and interpretation.

There are a number of points of interest that emerged from facilitator/presenter data. First, both presenters and facilitators indicated that the content was satisfactory, and all information that intended to be presented was presented in practice.

Second, presenters and facilitators were asked to indicate what elements of the FASD training they believed were most successful. Facilitators focused on the external successes of the program, including "getting the word out there" and "making everyone not feel alone" (realizing others are out there and dealing with it too). Presenters emphasized the internal successes of the training such as setting (good location, working equipment, room set-up) and the inclusion of specific content that they felt was most important (e.g., strategies for caregivers, identification of primary/secondary disabilities and their impact, practical information with direct application to parenting). The positive responses from the presenters and facilitators could be loosely divided into two categories related to the evaluation: internal (linked to process); and external (linked to outcomes).

Thus, facilitator and presenter responses were consistent with the goals of the evaluation and

highlighted both internal and external features (despite not directly focusing on these two categories). Due to the small number of participants, it is not yet possible to expand on this finding. It may be explored in later phases of evaluation to determine its validity.

Highlights of suggestions from facilitators focused on: a) incorporating more engaging means of knowledge dissemination (e.g., multimedia such as video); and b) integrating more group or small group discussion so that parents have greater opportunity to learn from each other.

Finally, presenters and facilitators were asked to suggest ways in which the training could be improved. As the evaluation tools focused primarily on program delivery, it is not surprising that recommended improvements from presenters and facilitators were primarily internal (process oriented).

Highlights of suggestions from facilitators focused on: a) incorporating more engaging means of knowledge dissemination (e.g., multimedia such as video); and b) integrating more group or small group discussion so that parents have greater opportunity to learn from each other.

Presenters indicated that potential areas of improvement could involve: a) ensuring that trainers were supplied with extra participant resource packages (in case of late registrations); and b) increasing the length of sessions so that they felt "less rushed." Similar to facilitator responses, presenters also indicated that there was a need for a more interactive structure (e.g., more time for introductions, group discussions, questions).

The incorporation of evaluation tools required in this study was also a key theme. Specifically, both presenters and facilitators noted that there was a need for: a) more time in the session to allow for completion of surveys; b) better understanding how to lead the evaluation process during sessions; and c) increased clarity about evaluation-related procedures.

To conclude, the areas of improvement in program delivery that emerged from presenter and facilitator data can be categorized as: a) internal; b) external; and c) evaluative. Although these data are derived from very few surveys, it has promise in outlining some areas to consider when planning future trainings.

In summary, a number of central themes emerged from the preliminary thematic analyses of data. First, it was reported that not only was all of the intended information delivered during each training, there was a high level of satisfaction with materials provided by the Support Network for this purpose. The second area of interest was in how responses began to elicit certain themes that could be placed into internal or external categories. Due to the low response-rate, it is difficult to draw concrete conclusions. However, as more data is gathered in future phases, it will be interesting to see whether or not this trend continues to grow. The final element worthy of mention is the prevalence of comments related specifically to this evaluation. Unfortunately, there was some confusion among presenters and facilitators about how to direct the evaluative components of the training. However, the Support Network has taken steps to eliminate confusion, and this will likely dissipate in the future.

Qualitative Results: Interviews and Focus Groups with Foster Parents

Most parents were fostering at the time of follow-up and reported that they had parented an average of 1.7 children with diagnosed/suspected FASD since the training session. The level of experience in being a foster parent varied from being a completely new foster parent to having fostered "too many children to remember." Parents had parented an average of 4.3 children with diagnosed/suspected FASD.

"Learning from each other" was a highlight at some of the training sessions where there was a "variety and diversity of people who shared their experiences." Parents expressed that the group discussions gave them different ideas from other people and allowed them to "bounce ideas off of others."

Perceptions of the Training Session

The majority of parents (81%) had a positive view of the training sessions and felt the training session met their needs. The supportive atmosphere and ability to learn from others during the training was highly valued by parents. "Learning from each other" was a highlight at some of the training sessions where there was a "variety and diversity of people who shared their experiences." Parents expressed that the group discussions gave them different ideas from other people and allowed them to "bounce ideas off of others." As a result, the training session provided a comfortable environment for parents to learn about FASD and strategies for parenting children with FASD.

Some training sessions were characterized by their friendly setting where "the atmosphere was very easy going and very relaxed." The training session was also noted for its ability to provide a form of social support. For example, one parent noted:

> "Before the training, it felt like there was nobody there for me, nobody to turn to."

The idea of being supported was a reoccurring theme expressed by most parents, and parents emphasized the support they received within the group setting as illustrated in the following comments from three different participants:

> "The most encouraging thing for me was getting us all together in the same room. When we got talking, I realized that I had seen many of the things other parents were describing and I did not feel alone"

> "The training exceeded all my expectations. I felt very supported that day, especially the lack of judgment. There were no negative attitudes towards foster parents like I've experienced in the past"

> "That's the nice thing about having people from different background and experiences all together—they share and they learn. I think that's the key piece to that, for sure"

In general, parents described that the training was presented very well and in a way where everybody could understand the information. Parents also mentioned that presenters were:

> "open and listened to [their] questions very well."

Some parents related very well to instructors, who were also foster parents with first-hand experience and knowledge, and these parents were "encouraged and inspired" to learn from experienced instructors. Experienced foster parents also believed that training was especially critical to new parents:

> "Education for foster parents is important even before they get kids because when they get these kids they'll realize "Ah, it's not me. I'm not messing up.

Impact of Training on Knowledge and Parenting Strategies

Parents' improvement in overall level of knowledge about FASD was retained during the 2-month follow up period. Prior to training session, only 32% of parents indicated that their knowledge of FASD was good or very good. In the follow-up period, the percentage of parents indicating good or very good knowledge about FASD had improved to 52% (Figure 12).

The idea of being supported was a reoccurring theme expressed by most parents, and parents emphasized the support they received within the group setting

The gains in knowledge about FASD were broken down into knowledge specific to parenting children and knowledge about strategies to use with children with FASD. More than 70% of parents reported that their knowledge in these two areas were higher two months after the training took place (Figure 13). Parents' confidence level in parenting children with FASD also dramatically increased.

Parents overall level of knowledge about FASD 2 months following training

- Very Poor: 0%
- Poor: 4%
- Fair: 44%
- Good: 35%
- Very Good: 17%
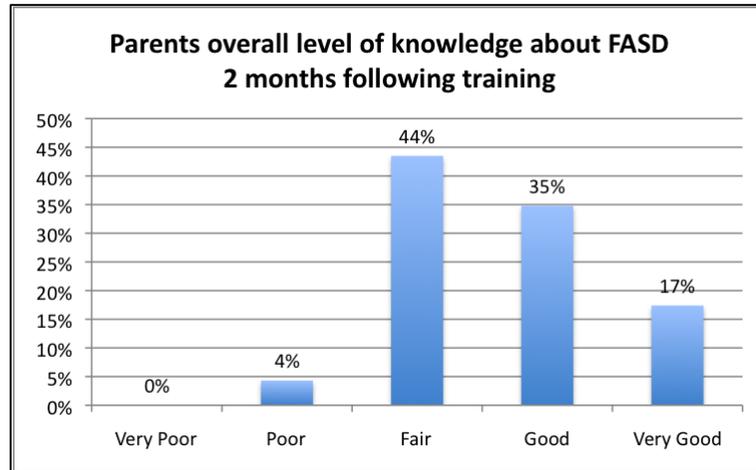
Figure 12: Parents' overall level of knowledge about FASD two months later

% of Parents with higher knowledge and confidence 2 months following training

- Knowledge specific to parenting children with FASD: 70%
- Knowledge about strategies to use with children with FASD: 74%
- Confidence parenting children with FASD: 87%
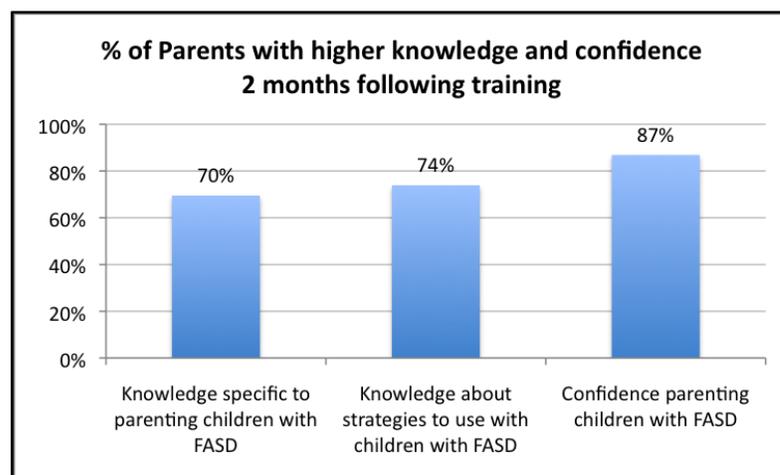
Figure 13: Percentage of parents with higher knowledge and confidence two months later

The training had an impact on both new and experienced fostered parents with many years of experience. New foster parents reported gaining "a great deal of information" and described the session as "very informative." For one new foster couple, this was their first time learning about FASD:

> *"My wife and I didn't really know much about FASD until we took the course. Understanding goes a long way. We feel so much more comfortable with giving directions."*

Parents who had been fostering for over twenty years equally enjoyed taking the course. Experienced parents described the training session as a great refresher course that reminded them and helped them brush up on things they had forgotten. At the same time, the training session helped more experienced foster parents "reaffirm many things that they had learned in the past."

Overall knowledge was seen in several different areas. Some parents were intrigued with learning the "different diagnostic terms and affected brain domains" while others reflected that the training helped them "understand a lot about learning disabilities in children." Recognizing behaviours in children with FASD was a common learning outcome among parents, especially those with little knowledge of behavioural signs and symptoms, as seen in the following statement:

> *"The training really helped me understand my children's behaviors a lot better. Each time you attend a training session it helps you make sense of why behaviors are the way they are."*

The knowledge acquired during the training also translated into skills. Approximately three-quarters of parents found that the training enhanced their ability to care for children with FASD and impacted their approach to parenting children with FASD (Figure 14). However, the greatest improvements were in parents increased capacity to handle challenging behaviours presented by children with FASD.

% of Parents with increased skills 2 months following training

Enhanced their ability to care for children with FASD	71%
Increased their capacity to handle challenging behaviours	81%
Impacted their approach to parenting children with FASD	76%
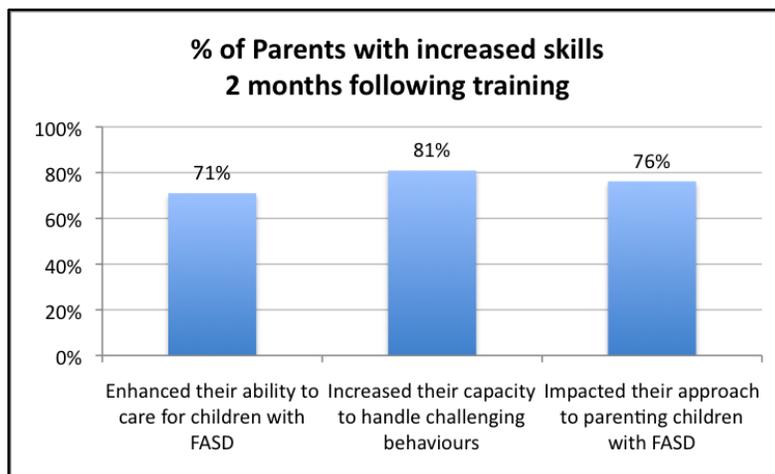
Figure 14: Percentage of parents with increased skills two months later

Parents described their increased capacity in terms of being able to use practical skills. For example, one parent related that she had "gained a lot of hands-on techniques from the training, especially on ways to handle challenging behaviours." Further, for many parents, a lot of behaviours now "made sense" and they felt equipped with many helpful strategies and parenting approaches that they could use day-to-day. Subsequently, parents also felt more confident in "creating a comfortable environment" for their foster children. The impact on parents approach to parenting and their ability to care for children with FASD was demonstrated in multiple ways, from improved communication to accomplishing daily tasks:

> "*Understanding behaviours, being able to communicate, and learning how to deal with children were the biggest things I took away that day.*"

> "*My children have been happy to learn basic skills like using a fork and knife at the table. We've slowly been able to learn skills that can be used daily.*"

In other circumstances, parents were able to apply their skills and knowledge with other family members as well as in different settings. A few parents noted how they were able to better communicate with all their children, whether they had FASD or not, and were able to better interact with each other as a result. In another instance, a parent described in detail how the training had impacted her parenting strategy outside of her home:

> "*I understand where my child's behaviours are coming from so much better now and I have the tools to work with them. For example, we arrive earlier at birthday parties and school now so we have more time to adjust to the new environment. Small things like that have made a big difference.*"

Although parents' reported gaining new knowledge and parenting strategies, many parents realized how broad FASD is in scope. Given that children with FASD have many complex needs, parents felt like "there's still so much more to know. Every individual is unique and as I parent I want to understand more about what can be done." Similarly, parents' admitted that many challenges still exist, but were optimistic and positive about their achievements thus far:

> "*I've tried out many different things that I learned from the training. Not everything has worked, but there are some things that have worked extremely well and been very helpful, especially about children's behaviour*"

On the whole, parents have demonstrated an improvement in overall knowledge and in their ability to parent children with FASD. While parents still face many challenges, the training has provided a strong introduction for new foster parents and new ideas and approaches for more experienced parents.

Evaluating the Parent Workbook

Parents also rated the applicability of the workbook that they received during the training session. The parent workbook contains essential background information about FASD as well as parenting strategies that are illustrated through stories and visuals. Approximately half of the parents found the workbook to be a valuable source of information. Fifty percent of the parents reported that they continue to rely on the workbook as a resource after the training and have been able to apply the workbook material to their parenting of children with FASD.

The stories contained in the workbook appealed to many parents, who recounted how reading other parents' stories made their learning experience "much more personal."

One father affirmed that the parent workbook was:

> *"amazing and had great stories inside it. It was very readable and understandable with real life situations."*

Parents also expressed how the workbook has been a helpful resource in their home because of its readability. For example, by having the workbook, parents' have found it "a lot easier to have family discussions about FASD." The accessibility of the workbook was also highlighted:

> *"it's there, so if you're stuck you can go to that material. The information is there, and if I need it I know where I can go get it."*

The workbook has also been a very accessible resource for other family members, including grandparents. One parent gave the book to grandma, which "helped her greatly when she's around the kids." The parent workbook has also been used as a tool for helping parents advocate for their children in their community. The workbook has facilitated discussions with other people who are involved with children with FASD:

> *"I took the parent workbook to the teacher at school and the occupational therapist who works there. As a result of our discussion, we were able to build a self-regulating room for children with FASD. I feel that I've been able to work with the wider community on this issue."*

On hearing the success stories of other parents, many parents relayed an interest in reading more about FASD so that they could also advocate for their child:

> *"I need strategies on how to communicate to principals and teachers about FASD. FASD extends to so many more people than just the parents and the child."*

The important connection between knowledge and advocacy was evident in many parents' responses, especially in achieving a higher level of credibility when communicating with those in the broader community. For instance, one parent stated: "Parents need the have the skills and credibility to bring up FASD with school teachers. We've got a lot of work [to do] on that part."

Parents' Suggestions for Improving Training

Parents of all backgrounds, whether new foster parents or experienced, overwhelmingly wanted the training session to be longer. In some of the training sessions, parents felt that there was not enough time for a well-rounded discussion before the next topic came up.

One new parent wished that the training sessions were longer because she was completely new to being a foster parent for a child with FASD:

> *"I wish the training sessions were longer. There was so much information and everything was so new."*

Other parents suggested that they would prefer having a full day course or separate sessions in order to better absorb all the information: "It was a lot of information to absorb in one day for somebody new to FASD. I would've preferred having the information presented in two separate sessions instead of one evening."

Parents also said that the higher time commitment for training would not be problematic relative to that of the shorter training and would increase the value of the training:

> *"But you know what? If it's important I'll make the time. If it's a good training, I can give up a day. For us with our kids, if I'm*

going to commit to a 3-hour day...it's just as easy to say 'let's go for extra hours and really get some value out of this'"

The diverse range of foster children led foster parents to suggest having more specific strategies for children of different ages. Parents also stressed the uniqueness of each child, and the importance of flexibility and approaching each child as an individual. Some parents were fostering young children, while others were fostering teenagers and young adults and thus were keen on acquiring appropriate parenting skills for older children:

> *"I would like to learn more about life skills for teenagers and young adults. A lot of the training was geared towards parents with young children, but I'd like to learn about life skills for young adults."*

Parents also expressed a need on learning how to create an environment for everyone in the family since having a child with FASD affects the whole family and all of the child's siblings. Given that many of the strategies focused only on the child with FASD, parents wanted to hear more about "how to create an atmosphere where all family members get along together." Sometimes parents were fostering multiple children of different ages and described the challenges in finding the most suitable strategy, as comments from these two parents demonstrate:

> *"There should be age-specific strategies. I have children that are under 12 and some that are close to 18 and I'd like to learn strategies on how to approach these different age groups."*

> *"There should be a discussion on strategies to handle 4 to 5 children with FASD. Most of the situations covered in the training session only handled dealing with one child, but in reality many households have multiple children."*

The complexity of caring for children with FASD also resulted in many innovative ideas for future training sessions. One mentioned an interest in learning about "setting up a safe environment inside the house, such as what's important to have in the house for children with FASD." Parents also demonstrated an in-depth understanding about FASD and were eager to learn about more wider approaches and strategies to parenting children with FASD, with one asking for "a diet and nutrition component to be part of the training and having a more holistic approach to caring for children," a suggestion that was welcomed by other parents. "Learning more about what to feed children with FASD would be good. I'd like to learn more on diet and nutrition," another said. Essentially, what these recommendations suggest is knowledge about a holistic manner of understanding and parenting children with FASD:

> *"So how can I affect the behaviours of these children [through] their surroundings? The fresh air, exercise, the foods they eat, the foods they don't eat. Those are the kinds of things that make us the holistic piece. It's all the parts that make up the child's behaviour."*

Finally, more experienced parents noted the importance of conveying to new foster parents the longer timeframe and level of effort involved in teaching children with FASD and the practice required to successfully implement these strategies:

> *"The training should realistically cover the type of time and effort that goes into implementing these strategies, especially for foster parents who want to do this long-term."*

However, parents emphasized that all training sessions should be positive and leave parents empowered:

"There should be more emphasis on the positive aspects of parenting children with FASD. There are many challenges, but it is very rewarding and this should be the overall message."

Summary of Results

The training session provided comprehensive knowledge about FASD and relevant strategies for parents that were retained for two months following the training. Parents with different levels of experience demonstrated an improvement in their overall knowledge of FASD. For parents with less experience, the training provided a good background and introduction, and for more experienced parents the training served as a refresher and opportunity to share their experiences with others.

Parents specifically displayed an improvement in knowledge specific to parenting children and knowledge about strategies to use with children with FASD. As a result, the training improved parents' ability to care for children with FASD and impacted their approach to parenting children with FASD. Parents also found the workbook to be a valuable source of information that they have continued to rely on.

The training session met the needs of the majority of parents. During the training, parents felt supported and encouraged by other parents. While parents rated the training positively, they also provided important feedback on how to improve the training. Parents wanted a longer session so that they could learn more and absorb the material better. They were also enthusiastic to learn more comprehensive areas related to FASD such as age-specific strategies, environmental factors, and diet and nutrition.

The high level of knowledge two months after the training is encouraging and demonstrates the achievement of short-term outcomes. Since the training, 80% of parents reported that they have continued to do research about FASD on their own.

4. RECOMMENDATIONS

The completed evaluation utilized many forms of quantitative and qualitative data and followed a rigorous approach outlined in the Evaluation Framework. Using responses from surveys, phone interviews, focus groups, and notes from two research assistants who observed a training session in Prince Albert, several recommendations can be made. To reflect the direction of data collection, as well as the purpose and type of evaluation, recommendations have been divided into three categories: internal (process), external (outcome), and evaluation implementation. Based on the existing data and limited researcher observations, recommendations are presented below:

Internal (Process)
- Review program recruitment strategies to ensure that there is high attendance at trainings and avoiding cancellations;
- Provide facilitators with extra resources for each session in case of last minute registrations;
- Integrate more interactive and/or components into the structure of the training (e.g., group discussions, video clips);
- Consider the time allocated for program delivery: does the current delivery of the program offer enough time for facilitators to get through all required information while addressing the specific needs of the groups (e.g., questions or discussions)?
- Extend the training session from a half day to a full day. This will prevent the session from being rushed, allow for a longer group discussion period as well as let the information better sink in.
- Add new topic areas in the trainings. Parents were interested in learning about age-specific parenting strategies, how to advocate for children with FASD, and nutrition.

External (Outcome)
- Determine concrete strategies for increasing overall awareness of FASD and foster parents. This could be incorporated as a part of a knowledge translation or dissemination strategy for the project;
- Enhance future opportunities for parents to learn more about FASD following the training (e.g., keep in contact and send out information about upcoming workshops or events that may be relevant);
- To further the connections made between foster parents at training sessions, community-based foster parent support groups (formal or informal) could be organized, or an online support forum for all interested foster parents could be developed;
- Provide a list of services that parents can access on their own (e.g. early intervention programs) and descriptions of the nature of services provided.
- Include a list of available Support Network resources and descriptions of them so that parents can quickly request and access these materials.

Evaluation Implementation

- Increase the level of clarity that training participants, presenters, and facilitators have about the evaluation (e.g., general knowledge and how to effectively integrate during training);
- Structure training timeline so that it seamlessly integrates the evaluation components;
- In the future, surveys (i.e., pre- and –post) could be designed with additional open-ended experiential questions in addition to knowledge indicators.
- Incorporate a survey instrument to measure the long-term impact beyond two months following the training;
- Use preliminary findings on outcomes derived from the Phase One study to inform the next phase of the evaluation cycle.

5. CONCLUSIONS

The goal of this report has been to provide an overview of Phase One of the evaluation of the *Improving Outcomes for Children with FASD in Foster Care* foster parent FASD training developed by the Support Network. The report began by highlighting key features related to FASD (i.e., prevalence, etiology), which was followed by a brief outline of the Support Network as an organization and the importance of developing a program that meets the needs of foster parents caring for children with FASD. The next section included the literature review and evaluation framework and logic model. While the literature review provides objective information about topics related to evaluation and facilitating positive outcomes for children in care, the evaluation framework has been specifically developed to fit into the *Improving Outcomes* program. When combined, these two components form a strong foundation of knowledge that was built upon throughout the evaluation process. A description of the methods used in the evaluation (surveys, telephone interviews, focus groups) was reported, followed the statistical analyses and interpretation of quantitative data and thematic interpretation of qualitative results. A detailed description of all elements of the follow-up to the training session are reported, including analysis of key areas such as: acquisition and retention of knowledge; parental retrospective assessments of the value and applicability of the training; post-

training use of Support Resources such as the Parent Workbook; new topic areas of interest; and suggestions and improvements that could be applied to future session. The final section of this report contains recommendations that are based on the integration of all data sources. For ease of understanding and consistency, recommendations are divided into three components: internal (process); external (outcomes), and evaluation implementation.

Overall, the evaluation of the *Improving Outcomes for Children with FASD in Foster Care* program has used a multi-method approach to understanding the experience of foster parents who took place in the Support Network training. Quantitative results have provided an objective measure of the short- and long-term impacts of the training, while qualitative methods enabled participants to "fill in the blanks."

Future evaluations of the training could use these results as a starting point for developing and implementing different types of research.

As a whole, Phase One of the evaluation has led to a collection of significant results, interpretations, and recommendations that will allow the Support Network to identify and build on strengths of the program while making appropriate modifications to optimize the success of this program in the future.

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APPENDIX A: Comprehensive Literature Review

Purpose of the Literature Review

As part of the evaluation process, we conducted a literature review to examine all types of research related to the FASD Support Network of Saskatchewan *Improving Outcomes for Children with FASD in Foster Care* foster parent FASD training program and its evaluation, in order to see how to best facilitate positive outcomes for children in foster care. We reviewed several kinds of literature: parenting children in foster care generally; parenting children with FASD in foster care; and evaluations of parent training programs for children with behavioural challenges, developmental disabilities, and FASD (not specific to foster children).

The FASD Support Network can use this comprehensive review of relevant research as a guide for all stages of program planning, development, and implementation

The first section focuses on the development of positive outcomes in a general foster care context, while the second focuses on positive outcomes for children with FASD living in foster care. The research presented in the "general" discussion is generated by studies that both quantitatively and qualitatively assess the factors that facilitate positive outcomes, definitions of successful foster placements, children's own perceptions of foster care, and factors that are related to the "breakdown" of foster care placements. In terms of FASD and foster care, the existing literature on the ways in which foster parents

can facilitate the most positive outcomes and definitions/factors related to placement success are provided. Unfortunately, there is significantly less information available on FASD-specific outcomes.

However, although there are distinctions between foster parents and foster parents of children living with FASD, many of the general foster parenting constructs are also found in the FASD literature. Consequently, there is evidence for the applicability of some elements pertaining to general foster parenting and parenting of children with FASD.

The FASD Support Network can use this comprehensive review of relevant research as a guide for all stages of program planning, development, and implementation. It also provides direction for the creation of an evaluation that adequately studies the process and outcomes of the Support Network foster parent FASD training.

Research on Parenting Children in Care

Facilitating Positive Outcomes for All Children in Foster Care

A key topic in the literature on foster care is the assessment of the variables and factors associated with positive outcomes for children in care. By examining the presence or absence of these variables and factors, it is possible to develop a foundation of knowledge about what specific variables and factors are the most important to assess in evaluations of interventions for children in foster care.

For instance, one study focused on the development of favourable outcomes for young children (preschool age) in foster care, the promotion of resiliency, and the impact of

the diminishment of "risk factors" for developmental transitions to middle childhood (Healey & Fisher, 2011). In this study, the two key factors measured included emotion regulation and school adjustment (Healey & Fisher, 2011). Emotion regulation can be defined as "the ability to focus attention on the external context and internal response to control how emotions are expressed about the event" (Healey & Fisher, 2011, p. 1823).

The importance of emotion regulation cannot be underestimated, as it is associated with social competency and peer acceptance (Denham et al., 2003; Shipman, Edwards, Brown, Swisher, & Jennings, 2005), as well as positive psychological effects (Denham, Mitchell-Copeland, Strandberg, Auerbach, & Blair, 1997). School adjustment is also related to social and behavioural factors, as well as academic achievement (Healey & Fisher, 2011).The construct of "academic achievement" is not based on an objective level (e.g., high, medium, low); rather, positive impact is linked to the subjective and child-specific outcomes (e.g., IQ or previous academic achievement) (Teo, Carlson, Mathieu, Egeland, & Sroufe, 1996).

Results of the Healey and Fisher (2011) study were consistent with related literature, finding that the most positive outcomes for children in care were associated with: a) active interventions aiming to promote school achievement (e.g., executive function, attention, memory) and self-regulation (emotional and behavioural); b) targeting any identified developmental delays; and c) ensuring that foster families have the resources and tools necessary to create an environment that "buffers" against potential risks and can capitalize on developing children's strengths (Healey & Fisher, 2011). Healey and Fisher (2011) concluded that addressing these factors as early as possible in the child's lifespan can act as a "buffer" that has the potential to decrease potential

problems (e.g., psychological, occupational, social) throughout childhood, adolescence, and adulthood.

…the most positive outcomes for children in care were associated with… ensuring that foster families have the resources and tools necessary to create an environment that "buffers" against potential risks and can capitalize on developing children's strengths

Another important issue addressed in the literature is to define what constitutes a "successful" foster care placement and related positive outcomes. To examine the notion of "success," Brown and Campbell (2007) asked a random sample of 61 Canadian foster parents to answer the question: "What in your opinion is a successful foster placement?" (p. 1010). Using concept mapping as a means of quantitatively evaluating qualitative data (Trochim, 1989), six key concepts emerged: a) security for the child in the home environment (e.g., violence-free, nurturing, sufficient space, clean); b) family connections (e.g., social and emotional connections between family and child, trusting relationships, foster and biological children treated the same); c) strong relationships (e.g., with child and, if possible, birth family); d) positive family change (e.g., sensitivity to child's culture and values, positive overall impact on the family); e) seamless agency involvement (e.g., support prior to, during, and following the placement); and f) growth of child (e.g., child adjustment, feelings of importance, individualized care, overcoming problems/generating solutions, connections to school and community, instillation of positive values) (Brown & Campbell, 2007).

In short, Brown and Campbell's (2007) six key features of "success" are consistent with the body of literature available on promoting positive outcomes for children in care (Buehler, Cox, & Cuddeback, 2003). A unique element of this study was the importance of involving all major "stakeholders" (foster parents, children, birth families, and case workers) (Brown & Campbell, 2007). Another feature was how results demonstrated the ways in which positive outcomes in the fostering context were part of developmental processes (Brown & Campbell, 2007). Finally, this study used mixed methods, quantitatively evaluating direct qualitative data as collected from foster parents, who could then draw on their subjective experiences to offer insight into the definition of "success" in foster placements.

The major implication is that service providers should work with children to alleviate stressors related to apprehension, while foster parents should focus on events associated with the placement itself.

Some research examines how children in foster care experience that care, which provides a different level of understanding about the ways in which children view the positive and negative outcomes associated with foster care. A recent qualitative study by Mitchell and Kucynski (2010) analyzed the experience of the transition to foster care among children and youth (ages 8-15). Using thematic analysis of participants' responses, researchers concluded that children viewed the transition to foster care as two separate events, each evoking different meanings and threats: apprehension and foster home placement (Mitchell & Kucynski, 2010). In the *apprehension event*, the two main stressors were

notification of transfer and home transfer (from original home to foster home). The primary stressors related to *foster home placement events* were primarily relational, involving the change in environment, formation of new relationships, and loss of existing relationships (Mitchell & Kucynski, 2010). The major implication is that service providers should work with children to alleviate stressors related to apprehension, while foster parents should focus on events associated with the placement itself.

Mitchell and Kucynski's (2010) study also identified a number of domains of ambiguity, each of which elicits stress among foster children in the transition to foster care. The six areas of ambiguity to be resolved included: a) structural ambiguity (understanding about the meaning of foster care); b) placement reason ambiguity (reason for placement into care); c) placement context ambiguity (knowledge of new home environment); d) relationship ambiguity (new people and relationships in new environment); e) ambiguous loss (the level of presence or absence of origin family); and f) temporal loss (how long placement lasts). When identifying the core sources of ambiguity faced by children transitioning to care, the researchers said that "children's reports indicated that all interpretations of ambiguity resulted from insufficient or conflicting cues in the environment that hindered their ability to evaluate their personal well-being, relationships, and matters of significance in their lives" (p. 443). Thus, a crucial role for both service providers and foster parents is to alleviate this ambiguity, providing children with more knowledge of what to expect, especially in relation to the types of uncertainty that have been deemed to be most prevalent.

A final research area that is worthy of addressing is the key reasons that foster parents believe that placements break down. Brown and Bednar (2006) addressed this topic

by asking foster parents: "What would make you consider ending a foster placement?" (p. 1497). The responses to these questions were highly consistent with available information on foster care outcomes. First, parents indicated they would end a placement if the child was found to be a danger to the family (e.g., violent, abusive) (Baum, Crase, & Crase 2001; Brown & Bednar, 2006). A second reason was a lack of child adaptation, which involves either a mismatch between the child's abilities and abilities of the parent, or a child's ability to "fit" well into the home environment (Brown & Bednar, 2006). The third theme that emerged was related to conduct and challenging behaviours (e.g., stealing, refusal to follow rules, destruction of property) (Brown & Bednar, 2006; Lann, Loots, Janssen, & Stolk, 2001). A fourth factor was if the child had complex needs that could not be met by the foster parent (e.g., health/medical needs, inability to access appropriate services) (Brown & Bednar, 2006).

Understanding the factors that can lead to foster placement breakdown or termination can help us understand how, through concerted efforts, some of these issues could be eliminated

The fifth reason was difficulties with social service agencies, including relationships between the parent, caseworker, agency, and the broader child protection system (Brown & Bednar, 2006). For instance, key variables that have been widely found to influence foster care placements include the level of trust and understanding in the relationship between the parent and social worker (Baum et al., 2001; Fisher, Gibbs, Sinclair, & Wilson, 2000), as well as the level and type of support received from the service agency (e.g., minimal "red

tape") (Fisher et al., 2000).

The sixth variable was unsuccessful attempts of a foster parent to resolve issues with the placement, in which the parent feels that ending the placement is the only option left (e.g., no other strategies or approaches that he or she can try) (Brown & Bednar, 2006).

The seventh key factor is based on a change in circumstances such as housing, employment, financial security, location, or age. These are the most "natural" means of ending a placement, and are frequently the least preventable (Brown & Bednar, 2006).

The eighth reason was the health status of the foster parent, be it based on existing or new medical conditions, or health issues rooted in the foster experience itself such as stress or fatigue (Brown & Bednar, 2006). The final theme identified in the study was a lack of community resources (e.g., financial support, child's school) (Brown & Bednar, 2006).

Understanding the factors that can lead to foster placement breakdown or termination can help us understand how, through concerted efforts, some of these issues could be eliminated. For instance, the development of a stronger relationship with the child's social worker, or an increase in training to ensure that parents feel they have the skills and abilities to work with different children could diminish potential placement breakdown.

When the results of the studies examined are integrated, it becomes apparent that a long-term and stable home environment where the child can develop relationships with family members, and foster parents have the opportunity to implement appropriate interventions is linked to the best possible outcomes (Brown & Campbell, 2007; Healey & Fisher, 2011; Mitchell & Kucynski, 2010). By ameliorating problems such as those raised in the Brown and Bednar (2006) study, it may

be possible to provide a stronger foundation that supports the needs of both foster parents and the children in their care.

Facilitating Positive Outcomes for Children with FASD in Foster Care

Due to the nature of the challenges faced by individuals with FASD, it is also useful to examine the perceptions and facilitation of positive outcomes among children in this specific population. It has been noted that a high number of children with FASD are placed in foster care (Habbick, Nanson, Snyder, Casey, & Schulman, 1996) and that one of the most negative outcomes of foster placements for children with FASD is related to placement breakdown (resulting in multiple placements) (Brown et al., 2005). The body of literature on fostering children with FASD also indicates that there are a number of factors that have shown to minimize the number of placements and create a healthy environment for both the parent and child.

The first factor explored in the literature is the foster parents' personality characteristics and parenting style (Brown et al., 2005). Here, research indicates that foster parents who have a calm demeanor, provide a high level of structure, and have stable lives are the most effective at working with children with FASD (Ginuta & Streissguth, 1988).

The second factor is that professionals working with foster parents respect the level of knowledge and expertise that foster parents have about their children with FASD (strengths, challenges, needs) (Ginuta & Streissguth, 1998). Third, foster parents should be provided with specialized knowledge to parent children with FASD (Ginuta & Streissguth, 1998; Weiner & Morse, 1994). The acquisition of this knowledge enables them to feel more competent and have realistic expectations about foster parenting, and it also increases the length of

placements (Burry, 1999; Gianuta & Streissguth, 1998).

Fourth, foster parents need support, which can take different forms (e.g., working with other foster parents of children with FASD, attending counseling sessions) (Aronson & Hagberg, 1998). Finally, foster parents need access to respite, where they have a break from parenting and the opportunity to relax and do things to keep themselves healthy mentally and physically (Brown et al., 2005).

In a qualitative study, researchers measured the major themes that emerged from asking 51 respondents about what would constitute a successful foster parent placement (Brown et al., 2005). Responses were assessed using cluster analysis, wherein themes that emerged were quantified and analyzed using statistical analysis (Trochim, 1989). After applying this method, eight themes related to successful foster parent training and positive outcomes emerged.

The first theme was "social support", sources of which included extended family, community services and programs (e.g., activities in the community), support friends (e.g., other foster parents, friends who would listen to concerns), and support from the foster parent agency (Brown et al., 2005). Second, another overarching theme was "materials" (Brown et al., 2005). Material/resources was a multifaceted category incorporating features ranging from respite to financial needs (e.g., to care for child, to replace things the child has broken) (Brown et al., 2005). The third theme was "structured environment," which involved factors such as constant supervision, development of daily routine, and helping the child to operate within social environments (Brown et al., 2005).

Fourth, foster parents indicated that a relationship with "professionals" was crucial to positive outcomes. For example, they

asserted that it is important to have positive relationships with multiple professionals such as health care workers, caseworkers, and teachers. This research showed that using a teamwork approach that emphasized collaboration between the foster parent and the diverse professionals involved in caring for a child with FASD in the foster care system led to successful placements (Brown et al., 2005).

Brown et al. (2005) stated that the more important elements of personality included "endurance, love, wisdom, patience, dedication, and flexibility" (p. 322), and the ability to continue moving forward despite setbacks

The fifth theme, "additional support", showed the importance of involving other foster parents in their lives as a means of attaining additional support (e.g., parenting advice or support groups). Parents revealed areas where increased support could be valuable, such as strategies for caring for all children (including biological, foster, and foster with FASD), and creating a positive environment for the entire family (Brown et al., 2005). The sixth theme was "understanding FASD" through the development of behaviour management strategies, knowledge about FASD (cause and characteristics), and information on how to best integrate children with FASD into the family. The seventh theme was "personality." Brown et al. (2005) stated that the more important elements of personality included "endurance, love, wisdom, patience, dedication, and flexibility" (p. 322), and the ability to continue moving forward despite setbacks. The eighth and final theme was "organizational skills," such as implementation of structure and appropriate

strategies, the capacity to contend with high stress environment, and firm creation of boundaries (Saunders et al., 2005).

Not surprisingly, there is a significant amount of overlap between existing literature about the features that lead to the most positive outcomes among children with FASD in foster care and the study that measured what factors parents *believed* were most strongly associated with positive outcomes (Brown et al., 2005). For instance, there was overlap between how literature and parental perceptions both emphasized the importance of acquiring increased support from extended family, friends, other foster parents, and professionals. In addition, literature and perceptions meshed in relationship to the necessity of FASD-specific training, and respectful relationships with professionals and different institutions (e.g., health, education, etc.). The importance of materials/resources such as access to programs and funding for the child, and availability of respite for the foster parent were also noted.

Other key factors that were found to be associated with positive outcomes included: having a structured environment, creating a healthy and connected environment for the family, specific personality traits, and strong organizational skills that can be integrated into parenting practice. Overall, the literature and research findings provide a number of outcomes that could be integrated and measured into the evaluation of the Support Network foster parent FASD training.

Finally, the literature based on foster parents generally, and foster parents of children with FASD specifically had many parallels. In fact, for the most part, all of the findings from the general foster parent literature are echoed in the FASD-specific literature. The primary difference between the two kinds of literature is the need for disability specific information, services, and information on the challenges for foster parents of children with FASD. The

existence of this relationship between the two bodies of literature is beneficial, as it provides support for the validity of applying results from a general foster parent context to that of foster parenting children with FASD.

Research on Existing Evaluations of Parent Training Programs

The purpose of this section is to examine the literature on existing evaluations of parent and foster parent trainings. As will become evident, there is only limited information available on these types of interventions. Consequently, reported research must be interpreted cautiously when generalizing findings to the Support Network foster parent FASD training. That said, valuable information could easily be culled from the empirical research available on a variety of caregiver training interventions.

This section will examine three categories of parent training, including: a) general foster parent training, b) parent training for children with developmental disabilities, and c) parent training program for children with FASD. Although none of these topics is a direct match to the Support Network training evaluation, each is relevant to an increase in positive outcomes mediated by parenting practice. In addition, each provides ideas for outcomes that could be measured in later phases of the foster parent training evaluation. The final section describes potential limitations to applying this research to the context of the Support Network training.

Evaluating Foster Parent Training Programs

Currently, there is a gap in the empirical literature evaluating the process and outcomes of foster parent trainings specific to FASD (Nash & Flynn, 2009). However, a series of well-designed studies offer insight into the capabilities of foster parent training to facilitate positive outcomes among children in care. Specifically, these studies assess the impact of a foster parent training program called Keeping Foster Parents Trained and Supported (KEEP). The KEEP model has been demonstrated to have a high level of success at decreasing behavioural problems through positive learned changes in foster parenting practices (Chamberlain et al., 2008; Leathers, Spielfogel, McMeel, & Atkins, 2011; Price et al., 2008; Price, Chamberlain, Landsverk, & Reid, 2009).

…the KEEP program is one of the few that have been evaluated and been found to significantly increase positive outcomes and positive behavioural change

Evaluation of foster parent training programs is rare, and, thus far, the KEEP program is one of the few that have been evaluated and been found to significantly increase positive outcomes and positive behavioural change (Nash & Flynn, 2009). Another unique characteristic of KEEP is the program has been found to retain its positive impact even after modifications to fit diverse populations, context, and environments (Leathers et al., 2009). It seems feasible that the KEEP program could also be extended to foster parents of children with FASD, as long as the unique nature of the social, behavioural, cognitive, and learning needs among children with FASD are accounted for and necessary FASD-specific modifications are made (Premji, Benzies, Serrett, & Hayden, 2006). The specifics of the KEEP program are discussed in the subsequent section.

The Keeping Foster Parents Trained and Supported (KEEP) Foster Parent Training

The KEEP intervention is a 16-week program with a behavioural theoretical foundation (Leathers et al., 2011) that is focused on

targeting protective and risk factors deemed important targets for initiating behavioural change (Eddy & Chamberlain, 2000). Specifically, to address behavioural issues, small groups of parents (approximately 3-10) are provided with instruction on factors such as: a) positive reinforcement, b) use of non-harsh discipline, and c) the importance of monitoring the foster child's location and friendships (Chamberlain, 2008; Price et al., 2008, Price et al., 2009).

In addition, the KEEP training also includes strategies for: a) diminishing power struggles; b) management of peer relationships; and c) improvement of school success (Price et al., 2009). The training is presented using diverse methods, including traditional education, interactive group discussion, role-playing, homework assignments, and multimedia (e.g., video clips) (Chamberlain, 2008; Price et al., 2008).

The KEEP model has been tested with diverse groups of parents from different racial and ethnic groups and environments (i.e., urban children/parents), and the level of effectiveness has remained constant (Chamberlain, 2008; Leathers et al., 2011; Price et al., 2009). The most important finding that has been replicated in these studies is that: changes in parenting practices (e.g., increased use of positive reinforcement) are significantly associated with better behavioural outcomes (e.g., Leathers et al., 2011).

In addition to more general findings about foster parent and child outcomes, other research has examined the use of KEEP on specific outcomes associated with positive foster care placements. For instance, in one study, Price et al. (2008) examined how to best mediate the impact of the disruptions of foster-care placements and the efficacy of a foster parent training intervention in promoting longer-term placements. Research indicates that long-term placements with few

disruptions are crucial to increase child safety, permanency, and well-being (Harden, 2004).

One of the most important factors associated with well-being is stability within the home environment, as this allows for the development of strong nurturing relationships, decreases in negative externalizing behaviours, and disruptions (Newton, Litrownik, & Landsverk, 2000).

The linkage between externalizing behaviours or behavioural problems and disruptions (multiple placements) in the foster care system has been firmly established (Newton et al., 2000; Rubin, O'Reilly, Luan, & Localio, 2007). For this reason, foster parent trainings that address strategies for contending with and decreasing behavioural issues is crucial in reducing negative outcomes such as multiple placements (Price et al., 2008).

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The goal of the Price et al. (2008) study was to evaluate the effectiveness of the KEEP program at decreasing the number of children's placement changes. Results indicated that children of foster parents who had received the KEEP training had significantly more positive exits from foster care (reunification with birth family, relatives, adoption) and increased placement stability relative to the control group. Overall, this study demonstrates how foster parent training addresses negative outcomes (instability/multiple placements and

externalizing behaviours), and substantially increases the likelihood of the positive outcome of increased positive exits into more permanent environments.

In summary, the KEEP training for foster parents provides ways to deal with children's challenging behaviours, and is associated with positive outcomes such as a decrease in behavioural issues, increase in parenting efficacy, and stability in foster care placements. The model emphasizes skill development and knowledge among foster parents, which highlights the necessity of incorporating these two factors into parent training.

The major implication of the evaluation of the KEEP model is that it provides an example about how education and skill development about behavioural problems can positively impact foster children's wellbeing. In short, although the strategies that foster parents are taught in the Support Network training are specific to FASD, there is a strong emphasis on resolving behavioural challenges, which have been strongly associated with multiple positive foster care-related outcomes.

Evaluating Parent Training Programs for Children with Developmental Disabilities

As a consequence of wider acknowledgement of the unique needs of children with developmental disabilities, parent training for parents of children in this population have increased in recent years (Matson, Mahan, & Lovullo, 2009). Although FASD has its own set of characteristics, it has been noted that many types of neurodevelopmental disorders involve deficits in social, learning, emotional, and cognitive domains (Matson et al., 2009). Further, many children with developmental disabilities have a high prevalence of behavioural issues (Matson, Dixon, & Matson, 2005) and experience co-occurring psychiatric disorders (Holden & Gitlesen, 2008). In a review of the developmental literature, research on parent training assessed the

effectiveness of many program delivery methods and materials, finding that increased parenting skills were associated with individual training, group training, and the use of manuals, concrete curriculums, live instructions/presenters, and multimedia (e.g., videos) (Matson et al., 2009). Thus, people developing parent training programs may want to select a number of program elements for integration into the planning and implementation of new programs.

Another study rigorously evaluated the outcomes of a group parent training focused on children with Attention-Deficit Hyperactivity Disorder (ADHD) and defiant/aggressive behaviour (Danforth, Harvey, Ulaszek, & McKee, 2006). This is particularly relevant as children with FASD and ADHD have some similar symptoms, and children with FASD often are diagnosed with ADHD as well (Abele-Webster et al., 2012).

The parent training program that was evaluated involved parents participating in 75-90 minute weekly sessions for an eight week period (Danforth et al., 2006). Regarding content, the training included sessions on: a) the features and etiology of ADHD; b) the reciprocal relationship between child behaviour and parenting practice; and c) skill development (e.g., analysis and strategies for dealing with problematic behaviours) (Danforth et al., 2006). The information provided in the training was delivered using a variety of formats, including formal teaching (descriptions and explanations), modeling, and role-playing (Danforth et al., 2006).

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The evaluation results demonstrated a decrease in externalizing behaviours for children with ADHD, a decrease in parental stress, and increased use of more successful parenting strategies. Finally, a number of advantages to parental group training were noted, such as cost effectiveness and increased support in the group setting (Danforth et al., 2006).

Although the generalizability of this study to group parent training programs of children with FASD may be somewhat limited, the results may be useful to consider when structuring a parent training focused on a very specific disorder.

In summary, there is preliminary evidence for the efficacy of parent trainings for children with developmental disabilities and challenging behaviours. Factors that have been associated with positive outcomes involve: a) the use of multiple methods of program delivery; and b) a dual focus on increasing awareness of specific disabilities and providing strategies that can facilitate improvement of parenting practices. Of significance to the Support Network is the integration of a number of forms of program delivery, the provision of knowledge related to both general education and specific strategic approaches to parenting, and the facilitation of dialogue between group participants.

Evaluating Training Programs for Parents of Children with FASD

Currently, there is very little research on the efficacy of interventions for children with FASD, with most information gathered from studies on other disabilities (without modification), clinical experience, and trial-and-error (Bertrand, 2009; Premji et al., 2006). Developing interventions to meet the diverse needs of children with FASD can be challenging, as it is contingent on many factors, such as specific areas of neurological impairment, health status (mental and physical), age/maturation level, family functioning/environment, and different strengths and weaknesses (Stratton, Howe, & Battaglia, 1998; Streissguth et al., 2004). To account for this lack of scientific validation of interventions for children with FASD, Bertrand (2009) evaluated the process and impact of five programs designed to address the multiplicity of challenges faced by children with FASD.

Of the five programs evaluated, each included a component of parent education/training, and this was indicated to be a key "ingredient" in the intervention process (Bertrand, 2009). However, only one of the five studies explicitly addressed parent-only training, known as Parenting Support and Management, versus education involving both the parent and child, and none shed light on the foster parent experience (Bertrand, 2009). In this program, education was structured in a manner that was consistent with available literature on the reduction of children's problematic behaviours (e.g., Webster-Stratton, 2001). Specifically, the key components of the Parenting Support and Management program included: a) psycho-education about the process of development for children with FASD; b) awareness of FASD; c) actions/strategies that are valuable when working with children with FASD; and d) discussion of challenges, skill implementation, and finding solutions to problems (Bertrand, 2009). The program was designed to be a relatively short-term intervention, involving weekly 90-minute training sessions over a period of 14-weeks.

Results from the evaluation indicated that there was: a) an overall decrease in parent stress; b) an overall decrease in children's problematic behaviours; c) a high level of parent satisfaction with treatment; d) improvement of child's presenting (original) behaviours; and e) confidence that skills acquired would help with future behavioural issues (Bertrand, 2009). Thus, this empirical

evaluation of the Parent Support Management PSM program provides evidence validating the use of parent training as an effective intervention among children with FASD, in terms of decreasing parental stress and children's problematic behaviours. Although the literature evaluating this type of intervention is sparse, it does provide a preliminary understanding of the efficacy of parent-only training/education for individuals caring for children with FASD.

The assessment of this program can help to direct the Support Network in their foster parent training development and implementation. Specifically, it supports the notion that parent-only interventions can be an effective means of transmitting information and attaining positive outcomes for children with FASD and their caregivers.

However, a major difference between the Support Network training and the Parenting Support and Management program is related to delivery (length and depth of program). In particular, while the Support Network training is structured to include a single half-day session for foster parents, the other program is a longer-term intervention with multiple sessions over a 14-week period (over three months). Differences in the "dose-received" by parents (Saunders et al., 2005) could certainly impact the outcomes of parent training initiatives. That said, there is currently no research on this type of program for foster parents of children with FASD, and rigorous evaluation of the Support Network training could address the outcomes or impact of dose-received in program delivery.

Summary of Key Outcomes, and Limitations of Research in this Literature Review

The research reviewed provides information on the perceptions that parents have about what successful foster placements look like,

and on the processes or criteria that facilitate more positive outcomes in foster placements. Based on this review, key outcomes include: family stability; developmental milestones; behavioural changes (parent and child); level of knowledge/awareness; level of disability-specific knowledge/awareness; parenting strategies; number of foster care placements; and numbers of foster care placement breakdowns.

These outcomes can assist with the development of future evaluations designed to evaluate the central outcomes of parent training, including those pertaining to the parent and child as well as those that occur within the foster care context.

However, when making recommendations for the application of the existing literature to the development and evaluation of the Support Network training program, it is important to recognize the limitations of these data.

First, aside from the Parenting Support and Management program, the trainings and outcomes evaluated were related to a population of children who did not have FASD. Due to the specific needs of children with FASD, based on impairment to the central nervous system, caution must be used in extending the results of these studies.

Second, each of the training evaluations included programs that included longer-term interventions (ranging from 8-14 weeks). In contrast, due to logistical and program constraints, the Support Network training must fit within a half-day, and is not delivered over a period of time. Thus, parents do not have the opportunity to utilize their skills and receive feedback/support as the program progresses. That said, it is recommended that the evaluation inquire about the value of knowledge and education in a substantial period following the training to gain more insight into the process and outcomes of the initiative.

Finally, due to the time constraints of the Support Network training, there is less time to rely on the use of multiple methods of program delivery. For instance, because there is a substantial amount of teaching material, group discussions, or the capacity to integrate role-playing is limited.

Despite these limitations, Phase One of the Support Network training evaluation will provide valuable insight into the benefits and challenges of the intervention that can serve as a foundation for the future utilization of this method.

APPENDIX B: Program Evaluation Types and Methods

Types of Evaluation

There are many different types of evaluation, and this section addresses five of the most common. According to Rossi et al., (2004), the five measurable dimensions of a program include: a) the need for a program (needs assessment); b) whether or not it is possible to evaluate a program (evaluability assessment); c) implementation/delivery (process evaluation); d) program outcomes (outcome evaluation); and e) wide-scale program impact (impact evaluation.

Approaches to examining these domains can be divided into two general categories. The first is *formative evaluation*, which focuses on ways to strengthen or improve the project (Trochim, 2006). Formative evaluation is typically undertaken at the beginning of the evaluation cycle and is used to provide data and recommendations that are concrete, practical, immediately applicable, and related to areas such as program delivery or quality of implementation (Rossi et al., 2004).

Types of formative evaluation include: a) needs assessments; b) evaluability assessments; c) process/ implementation evaluation. Process evaluation is the primary type used in the current evaluation. Key features include: a) determining if the program is being implemented as planned, b) gaining an understanding of the successes and challenges of program implementation, and c) finding solutions to address weaker areas (Saunders, Evans, & Joshi, 2005).

Summative evaluation is concerned with broader program components and examines the level of success achieved in meeting outcomes and producing an impact (Issel, 2008). There are two major types of summative research: outcome and impact. A preliminary outcome evaluation is conducted as part of this study's ongoing research and examines the longer-term outcomes of the parent FASD training such as retention and use of knowledge acquired.

The Evaluation Cycle

The concept of the evaluation cycle is key to understanding the cyclical and cumulative nature of program evaluation. Evaluation can be an ongoing process that can occur at various times during a program, with each method building on previous analyses (Green & Kreuter, 2005; O'Connell-Flemming et al., 2006). The accumulation of data in various phases leads to more valid and rigorous evaluations in the future, where previous findings can be built upon.

For instance, the needs assessment is designed to gather information that directs program planning (what is needed, by who, how to achieve it) (Rossi et al., 2004). Once the program is developed, data about the evaluability of the program can be derived. The next step is analysis of program delivery and improvement achieved through process evaluation. Following this, predetermined outcomes can be assessed and measured to determine if outcomes can be attributed to the unique program. Finally, the long-term impact of the overall program can be examined (Rossi et al., 2004).

An essential feature of evaluation is that it can be an ongoing and highly iterative process. For example, during the evaluation cycle, moving back-and-forth between phases of process and outcome evaluations can demonstrate whether the changes identified in the process stage are producing better or worse outcomes (Green & Kreuter, 2005). The ideal and most comprehensive approach to evaluation would be to progress through the five phases, and then follow the impact assessment with a needs assessment, thereby reinitiating the cycle (O'Connell-Fleming, 2006).

Methods of Data Collection in Evaluation

There are two overarching categories of research methodology: quantitative and qualitative. Each method contributes different information, requires a different type of analysis, and has particular strengths and weaknesses (Johnson & Onwuegbuzie, 2004). Congruently, using a mixed methods approach and incorporating both types of data can provide the most insight into the program functioning, outcomes, and impacts (Johnson & Onwuegbuzie, 2004).

Quantitative Data. Quantitative data is numerical, assessed in aggregate, involves close-ended or categorical questions, and is typically analyzed using statistical analysis (Center for Civic Partnerships [CCP], 2007). Quantitative data has been found to be best suited to answer evaluation questions examining the "what," "when," and "who" (CCP, 2007). Quantitative evaluation data is often is derived from surveys/questionnaires which tend to lead to relatively simplistic analysis such as: frequencies (number or percent of occurrences), average response to a question, or measurement of differences between an individual's pre- and post-test scores (Schensul, Schensul, & LeCompte, 1999).

Quantitative Data Collection: Methods and Tools. The most common method of collecting quantitative evaluation data is through the use of surveys or questionnaires (Rossi et al., 2004). The major distinctions between this approach and qualitative-only techniques are that surveys are focused on specific variables and pose close-ended questions (Trochim, 2000). Some of the most common types include: a) dichotomous questions, b) multiple choice, c) Likert-scale ratings (Trochim, 2006). Qualitative methods (open-ended questions) can also be included to supplement quantitative survey data and it recommended that surveys include a mix of open- and close-ended questions (Johnson & Onwuegbuzie, 2004). Thus, when constructing surveys, it is essential to consider the types of questions that will be used and the data that will be obtained (Schensul et al., 1999).

Qualitative Data. The second category is qualitative data, which is primarily descriptive in nature and involves the analysis of responses to open-ended questions. Qualitative data is typically more contextual in nature, answering the "how" and "why" research questions (CCP, 2007). In addition, qualitative data can be collected through a variety of means, such as integration into surveys/ questionnaires, semi-structured or open-ended interviews, or focus groups (Schensul & Schensul, 1999). Data analysis for qualitative evaluation data tends to be more complex than for quantitative. The challenge with qualitative data is there are many possible frameworks for analysis and it is considered less "subjective" (Johnson & Onwuegbuzie, 2004).

Qualitative Data Collection: Methods and Tools. There are many methods and tools that can be used to collect evaluation data. A common approach is to utilize interviews, which can be open-ended or semi-structured (Trochim, 2000). Open-ended interviews are the broadest way to explore a

research question, as they have few boundaries or constraints and tend to be more of an informal "conversation" (Madden, 2010) Typically, this method is used when little is known about a particular topic. Utilizing the semi-structured approach (with pre-defined questions or "script") is more common in evaluation, as it involves a "script" that facilitates simpler analysis, as well as identification of themes, commonalities, and differences between respondents and questions (Schensul et al., 1999). Overall, interviews provide rich and descriptive information that can deepen the understanding of participants' experiences and perceptions.

Focus groups are also a valuable tool for gathering qualitative data. Unlike other types of interviews that involve one interviewer and one interviewee, conducting focus groups entails "interviewing" multiple participants at the same time (Schensul et al., 1999). A unique aspect of focus groups is that they allow the researcher to not only gather multiple perspectives at the same time, but also to observe and record the interaction between participants (Trochim, 2000). In addition, they allow for comparison between populations (e.g., females or males). Overall, focus groups can be an efficient way to collect qualitative data, make comparisons between different populations/demographics, and add depth to the evaluation process.