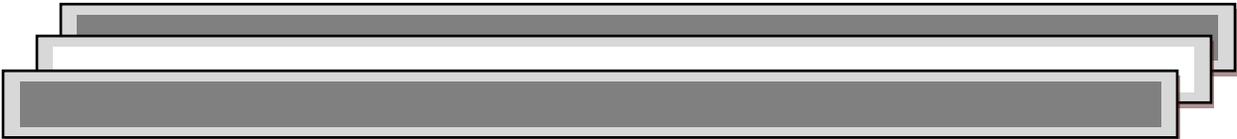




Common Outcomes of Community-Based, Prevention-Focused Parenting Programs:
Terrific Toddlers - APCA



Dr. K. Benzies RN, PhD
Dr. D. Clark, PhD
Ms. L. Barker, RN, BScN

June 2011

ACKNOWLEDGEMENTS

We gratefully acknowledge funding from UpStart: Champions for Children and Youth, The United Way of Calgary and Area; and the Centre for Criminology and Justice Research through Mount Royal University.

The agencies that participated were critical to this project's success. Alberta Health Services (Perinatal Education - Calgary and Public Health Nursing - Okotoks), Parents and Children Together (PACT), Calgary Urban Project Society (CUPS), Calgary Immigrant Women's Association (CIWA), Families Matter, Attachment Parenting Canada, and Closer to Home have all shown outstanding commitment to the development of this survey from the very beginning.

Thank you also to Jen Smith, Hilary Rancourt, Kristen Duke, Preet Dhesi, and Bree Crone who provided valuable research assistance for the project.

DRAFT

Common Outcomes of Community-Based, Prevention-Focused Parenting Programs: Terrific Toddlers - APCA

PROJECT BACKGROUND

The foundations of all the capacities that people need to be successful in life are established in early childhood. The prosperity of Alberta depends on its ability to nurture the next generation of citizens. Wise investments in its youngest members from prenatal to preschool age will pay back that investment through a lifetime of productive and responsible citizenship.

Children develop within families. For young children, parents are the most significant influence on how their child grows and learns. A strong family foundation increases the probability of positive outcomes for children. A weak foundation increases the odds of later problems. Like building a house, it is simply more efficient and cost-effective to build a strong foundation to promote healthy child development than to fix problems after they occur.

All parents need information, support, and guidance to support their child's development. Community-based, prevention-focused parenting programs (P-FPPs) can offer parents a chance to (1) learn how to help their children grow and learn, (2) learn from other parents, (3) build vital social support networks, and (4) create a strong sense of community. Recent research shows that there is a meaningful gap in what parents know and what they need to know to support their child's development. When asked about need for support of their parenting role, parents consistently say they need opportunities to learn about child development and to normalize their experiences. Calgary is known across Canada for its ingenuity and commitment for high quality programs that support parents of young children to develop strong and stable foundations for a healthy future. While more than 60% of first times parents-to-be attend prenatal classes, less than 15% attend a parenting class after their baby is born. In addition, many parenting programs have limited evidence of effectiveness. While the effectiveness of some treatment programs (e.g., Triple P, The Incredible Years) is well documented, these results cannot necessarily be applied to P-FPPs. Most P-FPPs can demonstrate high levels of satisfaction with their programming. However, there is limited evidence about outcomes associated with effective P-FPPs. Weak measurement is a major factor contributing to the lack of evidence about the effectiveness of P-FPPs.

Rigorous evaluation of parenting programs requires the use of reliable and valid measures. The 'UpStart Parent Survey' was developed by Calgary parenting program leaders and based on the Common Outcome Indicators of parenting programs identified by the Alberta Centre for Child, Family and Community Research. These common outcomes include parenting knowledge and skills, self-efficacy, mental health, social support, parenting stress, and family functioning, which are linked to effective parenting and should be expected as outcomes of effective P-FPPs. A preliminary study called *Building Safe Communities from the Start* has begun to test the psychometric (measurement) properties of the UpStart Parent Survey. This study was made

possible through funding from The United Way of Calgary and Area, and the Building Safe Communities Project, Centre of Criminology and Justice Research, Mount Royal University (MRU). In addition to providing data for the psychometric study, the study was able to gather information to provide program evaluation reports for each of the participating parenting programs. The **purpose** of this report is to present the results of an evaluation of the Attachment Parenting Canada Association (APCA) Terrific Toddlers parenting program.

The research questions were:

1. What is the effect of APCA Terrific Toddlers on parental perceptions of their parenting **knowledge** and skills?
2. What is the effect of APCA Terrific Toddlers on parental perceptions of the common outcome indicators (parenting **experiences**) of parenting programs?
3. What is the level of parental **satisfaction** with APCA Terrific Toddlers?

METHOD

The project was conducted between April 2010 and March 2011. The project was approved by the Health Research Ethics Board, Mount Royal University and the Conjoint Health Research Ethics Board, University of Calgary.

Participants

Characteristics of participants of the APCA Terrific Toddlers program are reported in Table 1. Nearly two-thirds of participants were female (63.6%). The majority were being married to their partner (81.8%). Just over two-thirds of the participants reported holding a college or university degree (68.2%). The same percentage of participants (68.2%) reported a household income of greater than \$80,000 per year. Nearly all participants spoke English as a first language (95.5%). The majority of participants reported two adults living in the household (86.4%), with one or two children. The majority of participants reported being the birth parent of the child or children for whom they provided care (86.4%).

What do the numbers mean?

Frequency - the number of times that an event occurs within a given period; rate of recurrence

Percent (%) – a numerical expression that includes a percent sign, with 100 assumed as the denominator

n – a symbol designating the total number of participants

Table 1

Characteristics of Participants

Characteristic	<i>Frequency</i>	%
Age		
Under 18	--	--
18-29 yrs	4	18.2
30-39 yrs	16	72.7

40-49 yrs	1	4.5
50 yrs or over	1	4.5
Total	22	100
Gender		
Male	8	36.4
Female	14	63.6
Total	22	100
Marital Status		
Single	2	9.1
Common Law	2	9.1
Divorced/Separated	--	--
Married	18	81.8
Widowed	--	--
Total	22	100
Level of Education		
Less than High School	2	9.1
High School Diploma	3	13.6
Certificate or Diploma after High School	2	9.1
College or University Degree	15	68.2
Total	22	100
Household Income		
Less than \$20,000/year	1	4.8
\$20,000 - \$40,000/year	1	4.8
\$40,000 - \$80,000/year	7	33.3
More than \$80,000/year	12	57.1
Total	21	100
Aboriginal Status		
Yes	1	4.5
No	21	95.5
Total	22	100
English as a first language		
Yes	21	95.5
No	1	4.5
Total	22	100
Ethnic Group		
Aboriginal	1	4.8
Arab/West Asian	--	--
Black	--	--
Chinese	--	--
Filipino	2	9.5
Japanese	--	--
Korean	--	--
Latin American	--	--
South Asian	--	--
South East Asian	--	--
White	18	85.7
Other	--	--

Total	21	100
Number of Adults in Household		
One	--	--
Two	19	90.4
Three or more	2	9.6
Total	21	100
Number of Children in Household		
One	10	47.6
Two	10	47.6
Three or more	1	4.8
Total	21	100
Birth Parent to child in care		
Yes	19	86.4
No	3	13.6
Total	22	100
<i>Total Number of Samples = 22</i>		
<i>N's(sample size) and percentages vary due to missing data</i>		

APCA Terrific Toddlers Program Description

APCA Terrific Toddler (Alberta Health Services, 2009) classes aim to enhance parental knowledge and skills, as well as increase parental confidence. Emphasis is on developmental changes and challenges, parenting styles, discipline techniques, effective communication, and the importance of play for a child. The program was created in 2008 through collaboration between Alberta Health Services 3 Cheers for the Early Years and Families Matters. It is now offered at various locations throughout Calgary. The program is designed for parents and caregivers of children aged 1-4 years. Each session caters to between 6 and 20 children and their parents. Generally, sessions consist of 5 weekly classes, with each lasting 2 hours.

Measurement

UpStart Parent Survey. The UpStart Parent Survey was designed as a brief, paper and pencil, self-report measure of common outcomes expected of community-based, prevention-focused parenting programs (Alberta Centre for Child Family & Community Research, 2007). The survey takes about 15 minutes to complete. The UpStart Parent Survey was divided into three subscales: Parenting Knowledge/Skills, Parenting Experiences, and Program Satisfaction. The Parenting Knowledge/Skills subscale included 10 items that capture knowledge of concepts such as, child appropriate growth and development, acceptable discipline strategies, child health and safety, and dealing with everyday challenges. The Parenting Knowledge/Skills subscale used a 7-point Likert scale with responses ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). Scores on individual items were summed to create a subscale score. The theoretical range of scores is 10 to 70 with higher scores indicating greater parenting knowledge and skills. Each item on the Parenting Knowledge/Skills subscale offered a *Not Covered* response option for concepts that were not addressed in the program curriculum.

Using a similar 7-point Likert scale, the Parenting Experiences subscale included 11 items that captured common outcomes of parenting programs including self-efficacy, mental health, social support, parenting stress, and family function. Scores on individual items were summed to create the subscale score. The theoretical range of scores was 11 to 77 with higher scores indicating more positive experiences as a parent.

Finally, the Program Satisfaction subscale includes 7 items that capture satisfaction with the program on a 5-point Likert scale. Scores on individual items were summed to create the subscale score. The theoretical range of scores is 7 to 35 with higher scores indicating greater satisfaction with the parenting program.

The Parent Knowledge/Skills and Parenting Experience subscales were designed as a post-test/retrospective pre-test. That is, the parent reports a “today” (post-test) score and a “before this program” (retrospective pre-test) score for each item. A post-test/retrospective pre-test (Howard et al., 1979), design is recommended when the goal of program evaluation is (1) the assessment of individual perceptions of change, (2) establishment of trust, (3) conservation of limited program time, and (4) provider guided reflection on personal growth related to the program (Griner Hill & Betz, 2005). Pragmatically, it is simpler, convenient, and expeditious to administer a single questionnaire during the last session of the program that includes both post-test and retrospective pre-test ratings. Serious biases can be introduced by true pre-test questionnaires administered in a hurry prior to the first session by a program provider who views it as an obstacle to building rapport and trust with program participants. Post-test/retrospective pre-tests provide parents with an opportunity to reflect on how much they have learned at the end of the program. If the goal of program evaluation is to determine parental perception of change as a result of the program, then a post-test/retrospective pre-test is more appropriate because it explicitly asks parents to think about how much they have changed. However, a post-test/retrospective pre-test design does not provide a true estimate of the mean program effect, but a relative ranking of participants’ change scores (Henry, Moffitt, Caspi, Langley, & Silva, 1994). Given its pragmatic advantages, the post-test/retrospective pre-test is clearly the design of choice for the UpStart Parent Survey.

The internal consistency reliability (Cronbach’s alpha) was .87 for the Parent Knowledge and Skills subscale, .91 for the Parent Experience subscale, and .94 for the Program Satisfaction subscale. A Cronbach’s alpha of .80 is considered satisfactory on scales used for research purposes.

Procedures

Parenting Program Leaders were oriented to the project by the research team. Parenting Program Leaders then advised their program facilitators and staff about the project to gain their support and assistance. Participants in APCA Terrific Toddlers completed the UpStart Parent Surveys at the end of the last parenting program class. Program facilitators were available to answer any questions, then collected the surveys and mailed them to the research office in the stamped, addressed envelope provided.

Data Analysis

Data were examined for errors, outliers and missing values. Missing values (up to 20% or 2 missing items per subscale) were replaced with the mean score for the participant on that subscale. Scores for each subscale were summed to create a subscale total score. Descriptive statistics (frequency/percentage and mean/standard deviation) were used to report scores on Parenting Knowledge/Skills, Parenting Experiences, Program Satisfaction, and demographic variables. “Today” (post-test) and “Before This Program” (retrospective pre-test) scores on Parenting Knowledge/Skills and Parenting Experiences were compared using paired (dependent samples) *t*-tests. Data were analyzed using SPSS 19.0 for Windows. The *p* value to determine significance of statistical tests was set at 0.05.

What do the numbers mean?

Mean – a measure of central tendency, found by summing all scores and dividing by the number of subjects

Standard Deviation (*SD*) - the degree of variability in a set of scores

p value – the probability that the obtained results are due to chance alone

n – a symbol designating the total number of participants included in an analysis

RESULTS

Parenting Knowledge/Skill

On average, participation in APCA Terrific Toddlers significantly improved Parenting Knowledge/Skills. See Table 2. Standard deviations at post-test (*SD* = 4.46) were smaller than at pre-test (*SD* = 6.27) suggesting that participation in the program reduced variability in parenting knowledge over the duration of the program.

What do the arrows mean?

Horizontal – there is less than a 1 point difference in the pre-test and post-test scores

Up – there is a 1 point or more increase in the pre-test and post-test scores

Down – there is a 1 point or more decrease in the pre-test and post-test scores

Parenting Experiences

On average, participation in APCA Terrific Toddlers significantly improved Parenting Experiences. See Table 2. Standard deviations at post-test (*SD* = 8.49) were smaller than at pre-test (*SD* = 9.71) suggesting that participation in APCA Terrific Toddlers reduced variability in parenting experiences over the duration of the program. It could be said that participation in APCA Terrific

Toddlers levelled the ‘playing field’ and that parents/caregivers were more alike than different in terms of parenting knowledge and skills after participation in the program.

Program Satisfaction

On average, participants in APCA Terrific Toddlers were highly satisfied with the program, scoring 31.86 out of a possible 35 points. See Table 2.

Table 2

Summary of scores on the UpStart Parent Survey Subscales

Scale	<i>n</i>	Pre Test		Post Test		Direction of Outcome
		Mean	<i>SD</i>	Mean	<i>SD</i>	
Parenting Knowledge/Skill	22	54.91	6.27	63.73	4.46	<.001
Parenting Experience	22	58.95	9.71	66.36	8.49	<.001
Program Satisfaction	22	-----	-----	31.86	3.62	-----

Table 3

*Summary of Item Scores on the UpStart Parent Survey Parenting **Knowledge/Skill** Subscale*

Item	<i>n</i>	Pre Test		Post Test		Direction of Outcome
		Mean	<i>SD</i>	Mean	<i>SD</i>	
I am aware of how children change as they learn and grow.	22	5.14	1.13	6.45	0.51	↑
I do things with and for my child to help him or her learn.	22	5.86	0.94	6.55	0.60	--
I know how to discipline my child without hitting or spanking.	22	5.27	1.45	6.45	0.74	↑
I know how to set clear limits for my child.	22	4.50	1.19	5.82	1.00	↑
I can get my child to cooperate without yelling.	22	5.09	1.48	6.18	0.73	↑
I make time to play or talk with my child.	22	6.23	0.69	6.68	0.57	--

I know how to keep my child healthy.	22	5.91	0.81	6.50	0.51	--
I know how to keep my child safe.	22	6.23	0.92	6.73	0.46	--
I make time to read with my child every day.	22	6.00	1.07	6.41	0.80	--
I know how to handle the everyday challenges of things like sleep, toileting, food dislikes, etc.	22	4.68	0.95	5.95	0.84	↑

Table 4

*Summary of Item Scores on the UpStart Parent Survey Parenting **Experiences** Subscale*

Item	n	Pre Test		Post Test		Direction of Outcome
		Mean	SD	Mean	SD	
I have confidence in my parenting skills.	22	4.95	1.21	6.23	0.75	↑
I feel positive in my role as a parent.	22	5.55	0.96	6.36	0.73	--
I know who to call and where to go in the community when I need help.	22	5.00	1.45	5.73	1.39	--
I know where I can get answers to my parenting questions.	22	4.91	1.41	5.50	1.50	--
I have someone to talk to when I need support.	22	5.95	1.17	6.32	0.84	--
I am able to manage stress.	22	5.18	1.26	5.82	1.18	--
I know ways to meet my family's needs with the money and resources that I have.	22	5.41	1.18	5.91	1.02	--

My emotional health is good (that is, I do not feel anxious, depressed, or irritated).	22	5.68	1.00	6.05	0.84	--
I know how to “speak up” for what my family and children need.	22	5.64	1.26	6.27	1.03	--
I feel supported by my partner in my parenting.	22	5.50	1.54	6.23	1.27	--
In our family we take the time to listen to each other.	22	5.18	1.53	5.95	1.25	--

Table 5

Summary of Item Scores on the UpStart Parent Survey Satisfaction Scale

	<i>n</i>		
Item		Mean	<i>SD</i>
I was welcomed and respected in the program.	22	4.77	0.43
I was listened to in this program and my concerns were understood.	22	4.59	0.50
I was asked what I thought about the program.	22	4.45	0.67
My thoughts about the program were taken seriously.	22	4.41	0.73
I was encouraged to think about how the information applied to my family.	22	4.68	0.48
I received information in this program that was useful to my family.	22	4.45	0.91
I would recommend this program to a friend or relative.	22	4.50	0.91

DISCUSSION

The purpose of this study was to evaluate the effectiveness of community based parenting programs. This is the first evaluation of APCA Terrific Toddlers using the Upstart Parent Survey. There were 22 participants who completed the survey. The UpStart Parent Survey captures common outcomes which are linked to effective parenting and should be expected as outcomes of effective P-FPPs (Alberta Centre for Child Family & Community Research, 2007). These common outcomes include parenting knowledge and skills, self-efficacy, mental health, social support, parenting stress, and family functioning. The results suggest that participants in APCA Terrific Toddlers significantly increased their Parenting Knowledge/Skills and improved Parenting Experiences. Overall, participants were highly satisfied with APCA Terrific Toddlers.

Parenting Knowledge/Skills

All scores on individual **Parenting Knowledge/Skills** items increased in the expected positive direction after participation in APCA Terrific Toddlers. Not all scores increased by the expected 15% (equivalent to 1 point on the scale). Of these scores, many items demonstrated an increase that was near the 15% cut-off. The difference in magnitude of change on individual item scores may be accounted for by several reasons. First, the pre-test scores on most items were already high at pre-test leaving less room for change over time. For example, the pre-test score on the item, "I know how to keep my child safe", was 6.23/7 points at pre-test, and 6.73/7 at post-test. Alternatively, there may be less than expected change in scores because the parenting knowledge/skills content was not included in the program curriculum. Thus, little change would be expected. Finally, the knowledge/skills content may have been included in the program curriculum, but the delivery was inadequate to effect any change. Assessment of program fidelity should be included in future evaluation of this type to assist to explain these results.

Parenting Experiences

All scores on individual **Parenting Experiences** items increased in the expected direction. Only one Parenting Experiences score ("I have confidence in my parenting skills") increased by the expected 15% (equivalent to 1 point on the scale). The difference in magnitude of change in individual item scores may be accounted for reasons similar to those listed for the Parenting Knowledge/Skills subscale. For example, the item "I feel positive in my role as a parent." demonstrated a 0.81 point increase between pre-test and post-test, falling short of a one point increase. It may be that expectations of a 15% increase in scores are unjustified in P-FPPs and that the cut-off should be lowered. In addition, not all common outcomes of parenting programs as recommended by the ACCFCR may be relevant to programs for parents of toddlers. Given that the sample for this study was generally well-educated with higher than average income, these parents may have already been functioning well in terms of advocacy and managing their money and resources. Thus, little change would be expected on these items.

Program Satisfaction

Consistent with other research, participants in APCA Terrific Toddlers reported a high level of satisfaction with programs. Parents seem to be satisfied with programs that involve parent

groups, as well as an education component (Fielden, 2008; Gross & Grady, 2002; Hallberg, 2003; Jones, 2006; Petersson, 2004). Programs that are aimed towards diverse populations and make a point of dealing with cultural differences are well received (Turner, 2007).

Limitations

The sample size was small; caution is recommended in generalizing the results to all APCA Terrific Toddlers programs. A larger sample would enable sub-group comparisons on socio-demographic variables that might be expected to influence common outcomes associated with parenting programs. In addition, there were no attempts to assess program fidelity in this study. There may be differences in the mode and content offered by different APCA Terrific Toddlers facilitators at each site that might dilute the findings.

IMPLICATIONS

Implications emerging from the UpStart Parent Survey project are as follows:

- APCA Terrific Toddlers is having small, but positive effects on the common outcomes of effective parenting programs. These common outcomes include parenting knowledge and skills, self-efficacy, mental health, social support, parenting stress, and family functioning, which are linked to effective parenting and should be expected as outcomes of effective P-FPPs.
- Funders of APCA Terrific Toddlers may have confidence that the program is demonstrating positive effects on expected common outcomes of effective P-FPPs for parents of young children.

REFERENCES

- Alberta Centre for Child Family & Community Research. (2007). *Common outcomes initiative: Roundtable final report*. Edmonton, AB: Author
- Alberta Health Services. (2009). *Terrific Toddlers: A facilitator's resource guide*. Calgary, AB: Author.
- Fielden, J. M. G., L.M. . (2008). Building social capital in first-time parents through a group-parenting program: A questionnaire survey. *International Journal of Nursing Studies*, 45, 406-417.
- Griner Hill, L., & Betz, D. (2005). Revisiting the retrospective pretest. *American Journal of Evaluation*, 26(4), 501-517.
- Gross, D., & Grady, J. (2002). Group-based parent training for preventing mental health disorders in children. *Issues in Mental Health Nursing*, 23(4), 367-383.
- Hallberg, A. H., A. (2003). Training programme for parents of teenagers: active parental participation in development and implementation. *Journal of Child Health Care*, 7(1), 7-16.
- Henry, B., Moffitt, T. E., Caspi, A., Langley, J., & Silva, P. A. (1994). On the "remembrance of things past": A longitudinal evaluation of the retrospective method. *Psychological Assessment*, 6(2), 92-101.
- Howard, G. S., Ralph, K. M., Gulanick, N. A., Maxwell, S. E., Nance, D. W., & Gerber, S. K. (1979). Internal validity in pretest-posttest, self-report evaluations and a re-evaluation of retrospective pretests. *Applied Psychological Measurement*, 3(1), 1-23.
- Jones, L. (2006). Developing everyone's learning and thinking abilities: A parenting programme the Southern area experience – 10 years on! . *Child Care in Practice*, 12(2), 141-155.
- Petersson, K., Petersson, C, & Hakansson, A. (2004). What is good parental education? Interviews with parents who have attended parental education sessions. *Scandinavian Journal of Caring Sciences*, 18, 82-89.
- Turner, K. M. T. R., M, & Sanders, M.R. . (2007). Randomized clinical trial of a group parent education programme for Australian Indigenous families. *journal of Paediatrics and Child Health*, 43, 429-437.