



FINAL REPORT ON IMPACT EVALUATION OF THE ROVING CAREGIVERS PROGRAMME

Gustavo Perera, Kristin Marin, & Bruce Flowers (July 2019)



Table of Contents

LIST OF TABLES & CHARTS	4
LIST OF ACRONYMS	6
EXECUTIVE SUMMARY	7
1.0 OBJECTIVES OF THE EVALUATION	8
1.1 Background	8
1.2 Programme Design.....	11
1.2.1 Toledo RCP	13
1.2.2 Southside Belize City RCP.....	14
1.3 Funding and Budget	15
2.0 SCOPE OF CONSULTANCY	16
2.1 TOR.....	16
3.0 METHODOLOGY	18
3.1 Conceptual Approach.....	18
3.2 Data and Data Sources.....	19
3.3 Sampling Methodology	19
3.3.1 Sample Population & Size	20
3.3.2. Randomization	20
3.4 Questionnaire Design.....	20
3.4.1 Caregiver Questionnaire: Treatment Group.....	21
3.4.2 Caregiver Questionnaire: Control Group	22
3.4.3 Ages & Stages Questionnaire.....	22
3.4.4 Additional Child Supplement Form.....	23
3.4.5 Educator Survey Questionnaire	24
3.5 Field Work.....	24
3.5.1 Sensitization	25

3.5.2 Training Preparation	25
3.6 Formal Survey – Belize City	26
4.0 EVALUATION SURVEY FINDINGS.....	29
6.0 DISCUSSION ON FINDINGS.....	51
7.0 RECOMMENDATIONS.....	57
APPENDIX:	72

LIST OF TABLES & CHARTS

Figure 1: Context Pyramid

Figure 2: RCP Locations in Toledo

Figure 3: RCP Locations in Southside Belize City

Figure 4: Total RCP Investment by Funding Source – 2009/19

Figure 5: Conceptual Framework for Research Evaluation

Figure 6: Anthropometric Measures (Length): Male Children in Belize City

Figure 7: Anthropometric Measures (Length): Male Children in Toledo

Figure 8: Anthropometric Measures (Length): Female Children in Belize City

Figure 9: Anthropometric Measures (Length): Female Children in Toledo

Figure 10: Anthropometric Measures (Weight): Male Children in Belize City

Figure 11: Anthropometric Measures (Weight): Male Children in Toledo

Figure 12: Anthropometric Measures (Weight): Female Children in Belize City

Figure 13: Anthropometric Measures (Weight): Female Children in Toledo

Figure 14: Belize City: Caregivers and Child Participation in Learning Activities at Home

Figure 15: Toledo: Caregivers & Child Participation in Learning Activities at home

Figure 16: Student Language and Speech Performance Levels of the Curriculum

Figure 17: Level of Difficulty with Reading: RCP Children Vs Non-RCP Children

Figure 18: Level of Difficulty in Learning New Things

Figure 19: Level of Difficulty Remembering Things

Figure 20: Belize City Ages & Stages – Problem Solving

Figure 21: Toledo Ages & Stages – Problem Solving

Figure 22: Child Performance Compared to Peers – Based on Report Card

Figure 23: Does the Child Adhere to rules in the classroom

Figure 24: Difficulty Controlling Behavior

Figure 25: Level of Difficulty Making Friends

Figure 26: How Frequent Child Appears to be Anxious, Nervous or Worried

Figure 27: Belize City Ages & Stages – Communication

Figure 28: Toledo Ages & Stages – Communication

Figure 29: Belize City Ages & Stages – Gross Motor

Figure 30: Toledo Ages & Stages – Gross Motor

Figure 31: Belize City Ages & Stages – Fine Motor

Figure 32: Toledo Ages & Stages – Fine Motor

Figure 33: Belize City Ages & Stages – Personal Social

Figure 34: Toledo Ages & Stages – Personal Social

Figure 35: "your participation in the Roving Caregivers Programme has changed the way you discipline your child now"

Figure 36: Adults use several ways to teach children right behavior or to address a behavior – Toledo

Figure 37 Adults use several ways to teach children right behavior or to address a behavior – Belize City

Table 1: Toledo RCP Villages by Population, Number of Households, and Community Assets

Table 2: Table 2: RCP Start-up Funding Source by Selective Years

Table 3: Sample Population and Size

Table 4: Treatment & Control Areas for Evaluation Survey

Table 5: Caregiver Questionnaire- Treatment: Structure and Variables

Table 6: Caregiver Questionnaire – Control: Structure and Variables

Table 7: Ages & Stages Evaluative Score Card

Table 7a: Ages & Stages Evaluative Score Card – Score Interpretation Code

Table 8: Additional Child Supplement Form – Questionnaire

Table 9: Educator Survey Questionnaire

Table 10: Survey Rosters- Belize City and Toledo

Table 11: Expected Length and Weight of Children by Sex and Age in Months

LIST OF ACRONYMS

BOOST	Building Opportunities for Our Social Transformation
COMPAR	Community and Parent Empowerment Programme
CPA	Country Poverty Assessment
CCD	Care for Child Development
CCT	Conditional Cash Transfer
DHS	Department of Human Services
ECD	Early Childhood Development
GOB	Government of Belize
IDB	Inter-American Development Bank
LSMS	Living Standards Measurement Survey
MDGs	Millennium Development Goals
MHDSTPA	Ministry of Human Development, Social Transformation and Poverty Alleviation
MICS	Multiple Indicator Cluster Survey
MOH	Ministry of Health
NPA	National Plan of Action for Children and Adolescents
NPESAP	National Poverty Elimination Strategy and Action Plan
RCP	Roving Caregivers Programme
RCG	Roving Caregivers
SISB	Single Information System of Beneficiaries
SPS	Social Protection System
UNICEF	United Nations Children's Fund
UWI	University of the West Indies

EXECUTIVE SUMMARY

The Roving Caregivers Programme under the Ministry of Human Development, Social Transformation and Poverty Alleviation has been operating in Toledo and Belize City for several years. It is a home-based Early Childhood Development programme aiming to strengthen the capacity of families to nurture their children. Strong evidence indicates that early childhood stimulation leads to better performance in future learning and an overall improvement in several areas of a child's development, namely their cognitive, socio-emotional and physical development.

The purpose of the impact evaluation is to ascertain whether the design and implementation of the Roving Caregivers Programme had an impact in the named areas of a child's development. The evaluation takes on both a quantitative and qualitative design, using various research tools to gather data. Treatment and control groups were identified, with impact being established if there were significant positive differences in the treatment group compared to the control group. The control group was selected based on similar socio-economic and macroeconomic contexts, identified through close geographical proximity to the treatment groups and common ethnic composition to account for the cultural contexts. Research tools included Caregiver Surveys, Focus Groups with Rovers, Anthropometric Measurements, Ages and Stages Questionnaires, and Educator Surveys.

Generally, impact is most evident in the Toledo District regarding the cognitive development of children, most likely due to introducing the English language in creative ways from an early age. An area showing somewhat positive results has been discipline whereby parents are using alternative forms of discipline. There is significant room for improvement as they continue to use physical forms of punishment as well, highlighting the need for more innovative techniques to discuss this topic and encourage behaviour change.

Parents value the programme highly and can identify the benefits to their children although those positive effects are not clearly evident in the results. The effectiveness of the programme, though, could be significantly improved by developing and implementing a clear programme design and Standard Operating Procedures.

Recommendations involve both the process of implementation of the programme as well as policies that guide its direction and future expansion. Rovers themselves were identified to be a critical success factor of the Roving Caregivers Programme and therefore require further skills training and certification as incentives so they remain motivated.

1.0 OBJECTIVES OF THE EVALUATION

1.1 Background

The National Poverty Elimination Strategy and Action Plan (NPESAP) 2009-2013 updated and replaced the 2007-2011 NPESAP and factored in key socio-economic developments prevalent at the time – Belize’s external debt restructuring, oil price fluctuations, the global economic downturn, an ongoing living standards measurement survey (LSMS), and the Country Poverty Assessment 2009 (CPA).¹

Given the multi-dimensional nature of poverty, and to ensure that targeting includes communities and populations outside of the main economic periphery, and within a global standard of measurement, the poverty reduction strategy developed around the universally accepted “Millennium Development Goals” (MDGs).

In terms of Social Protection, a 2004 report cited a range of threats affecting the lives of the poorest and incipiently vulnerable population sectors. Some major deficiencies in social protection that the report identified included the working poor, abused or abandoned children, child labour, abused women, older persons, and disaffected or excluded youth.²

The NPESAP 2009-2013 proposed three targets for strategic and comprehensive intervention; these were rural communities identified in the poverty map as having high rates of extreme poverty – the Toledo District, and the Southside of Belize City.

A key poverty reduction measure contained in the fifth (of five) strategic thrusts is poverty measure number six, which strives to promote parenting education to improve child rearing skills and provide an understanding of the current risks and threats facing youths.

In 2010, the Government of Belize initiated a number of social policy reforms under the rubric of the “*Social Policy Based Loan*” facility from the Inter-American Development Bank (IDB). The specific aim of the reform was to “*improve the capacity to target, coordinate, monitor, and evaluate social safety net schemes (GOB 2014).*” Starting in 2010, the reforms brought on a number of enhancements to existing policies and safety net schemes, introduced new ones and simultaneously saw the development and implementation of system tools for

¹ “National Poverty Elimination Strategy & Action Plan- 2009-2013”, P.B. Mendoza, ABEN Consulting in Collaboration with Ministry of Economic Development, and National Human Development Advisory Committee; September, 2009.

² “Social Protection and Poverty Reduction in the Caribbean”, Caribbean Development Bank (CDB), 2004.

improved management and effectiveness of Social Protection System (SPS), inter alia the “*Building Opportunities for Our Social Transformation (BOOST)*” programme and the Single Information System of Beneficiaries (SISB).³

A key social protection concept advocated by UNICEF, was “*child sensitive social protection,*” which closely aligned with the “*Transformative Social Protection Framework,*” which addressed both economic as well as social vulnerabilities, while acknowledging the need for a comprehensive and integrated approach to social protection.

UNICEF proposed that the following principles be considered in the design, implementation, and evaluation of child-sensitive social protection programmes:

- o Avoid adverse impacts on children, and reduce or mitigate social and economic risks that directly affect children’s lives;
- o Intervene as early as possible where children are at risk, in order to prevent irreversible impairment or harm;
- o Consider the age-and gender-specific risks and vulnerabilities of children throughout their life cycle;
- o Mitigate the effects of shocks, exclusion and poverty on families, recognizing that families raising children need support to ensure equal opportunity;
- o Make special provision to reach children who are particularly vulnerable and excluded, including children without parental care, and those who are marginalized within their families or communities due to their gender, disability, ethnicity, HIV and AIDS, or other factors;
- o Consider the mechanisms and intra-household dynamics that may affect how children are reached, with particular attention paid to the balance of power between men and women within the household and broader community;
- o Include the voices and opinions of children, their caregivers and youth in the understanding and design of social protection systems and programmes.

Within the Social Protection Programmes and Inventory were the following:

³ “Comprehensive Review of Belize’s Social Protection System with Policy Recommendations for System Strengthening”, Final Report, December 2016 – February 2017; Thomas Otter, Elsie Buttersworth, & Carlos Villalobos.

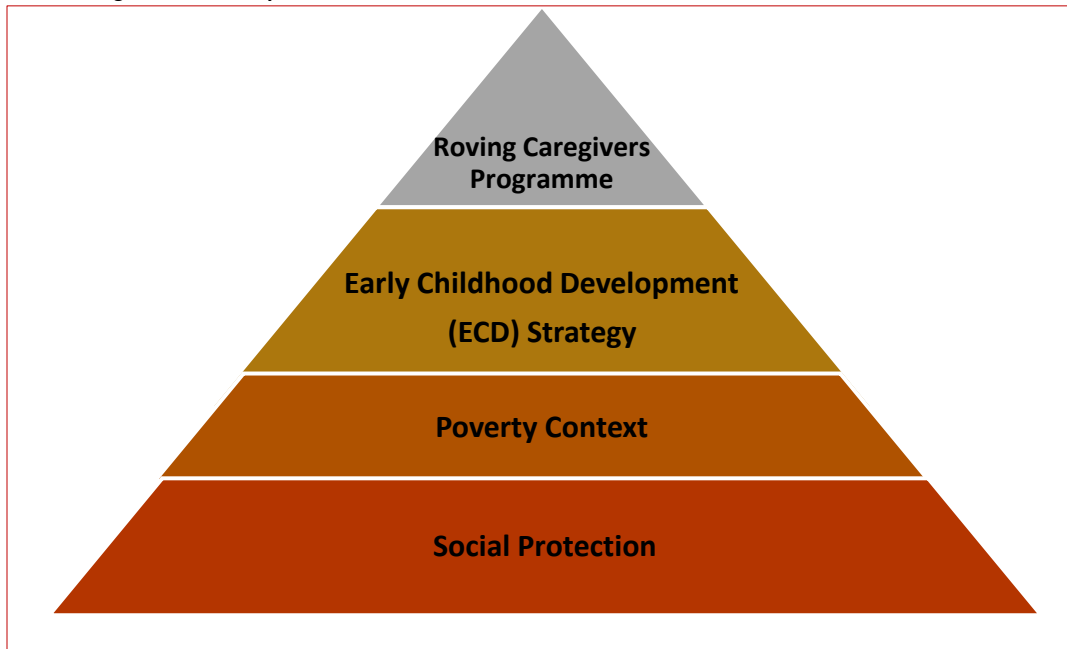
- Non-contributory social assistance programmes – Early Childhood Education & Development;
- Family Support Services – Roving Caregivers Programme.

An “*Early Childhood Development (ECD)*” situation analysis conducted by UNICEF between 2008 and 2010 pointed to “*weak coordination and collaboration among key partners for the delivery of integrated ECD services.*”⁴

Against this evolving poverty, social protection, and early childhood development context, the Roving Caregivers Programme (RCP) was launched in 2008, first, in four villages in the Toledo District – San Miguel, San Jose, San Marcus, and Laguna - and later expanded to three other villages, bringing the total to seven and reaching a total of 144 families.

In 2010, the RCP was rolled out in the Southside of Belize City to approximately 209 families⁵.

Figure 1: Context Pyramid



⁴ “Early Childhood Development – National Strategic Plan 2017-2012”, Government of Belize, MoH, MoEYSC, MHDSTPA.

⁵ “Review of RCP Programme in Belize”, Fortuna Anthony, CCSI Consultant, November 2011.

1.2 Programme Design

“The Roving Caregivers Early Childhood Home Visiting Programme is a non-formal early childhood intervention for families with children from birth through age three who do not have access to formal early childhood education. Caregivers or “Rovers” work in their home communities and make regular, weekly home visits to families within the rural community.

The visits involve sharing information with families about early development, health, and safety as well as engaging children in play and specific learning activities. Rovers model appropriate adult strategies to support children’s cognitive, emotional, social, and physical development during a play period with a child or group of neighbourhood children. The Rovers also bring parents together monthly to build relationships, provide encouragement, participate in parent education, and develop ideas for generating income.

Assessment of the Programme should be ongoing and documented in the following manner:

- Rovers plan and report on their home visits.
- Supervisors complete written performance evaluations for each Rover and provide targeted feedback, training, and support.

Roving Caregivers Programme Objectives:

- To offer early stimulation to young children and improve parenting practices in disadvantaged communities.
- To recruit and train caregivers from the communities to assist in the delivery of parent support services.
- To transfer the caregivers’ newly acquired knowledge and skills in working with families and communities to the efforts of a range of local support agencies.”⁶

The current guide for Rovers categorises each home visits into 25 units. Each home visit outlines Key Family Messages for all families, including the following topics:

- Developmental Milestones
- Health, Hygiene and Safety
- Immunisations
- Safe Environments
- Rights of the Child
- Importance of Play

⁶ “The Roving Caregivers Early Childhood Home Visiting Programme Guide for Trainers”, Caribbean Centre for Development Administration, 2009.

- Nutrition
- HIV/AIDS
- Gastroenteritis
- Abuse and Neglect
- Resolving social conflicts
- Self-Control
- Transitioning into school environments

Each home visit also includes family messages specific to new-borns, infants and/or toddlers, as well as activities to build relationships among the families. Each visit also includes specific activities for the children to achieve a developmental outcome according to their age, including communication and language, motor development, sense of self, social relations, creative representation, movement, exploration and early logic.

During the inception stage of the RCP consultancy, a review of the Belize RCP Programme Design (logic model) was intended – programme goals, inputs, outputs, and intended outcomes and impact along with key monitoring and evaluation indicators. However, and because the programme was rolled out as an “*informal childhood development initiative*” a formal logic model with the expected results chain was not available.

1.2.1 Toledo RCP

The Toledo District has a population of 30,785 and has the highest levels of indigent poverty in the country. The male to female ratio is almost 1:1 and the average household size is 4.7 in rural areas and 3.9 in the town.

The population density is around 7 persons per km² making it easily the most sparsely populated district in the country, with the rural population spread over 50 villages. Forty-three percent (43%) of the Toledo population is under the age of 15⁷.

In March 2008, the Government of Belize, with funding support from UNICEF, piloted the RCP in four villages in the Toledo District and expanded it to seven villages in 2009. See map on the right.

Figure 2: RCP Locations in Toledo

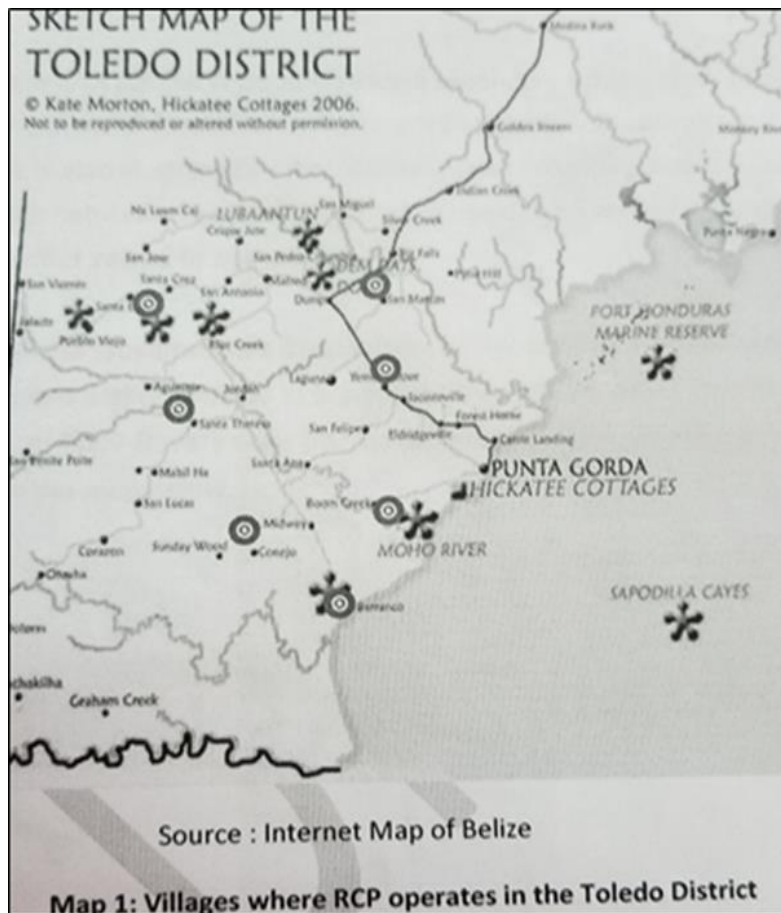


Table 1: Toledo RCP Villages by Population, Number of Households, and Community Assets

Village	Population	# of Households	# Preschool	# Primary School	Clinics Available	#Community Health Workers	Playground/ Park
San Marcos	623	96	1	1	Only mobile clinic	0	0
San Miguel	537	96	1	1	Only mobile clinic	1	0
Blue Creek	366	65	1	1	Only mobile clinic	1	0
San Jose	849	175	1	1	Only mobile clinic	1	0
Midway	240	42	1	1	Only mobile clinic	1	0
San Felipe	353	59	n/a	1	Only mobile clinic	1	0
Santa Anna	290	48	n/a	1	1 public Clinic	1	0

Source: Belize Population and Housing Census 2010 Country Report; Statistical Institute of Belize, 2013.

The total number of registered births of children ages 0 to 4 in the Toledo District is 4,288.

⁷ "Belize Population and Housing Census 2010 Country Report", The Statistical Institute of Belize, 2013.

1.2.2 Southside Belize City RCP

“Southside” Belize City is beset by social dysfunctions which manifest in high incidences of poverty, family breakdown, domestic violence, drug use and drug trafficking. Violent crimes linked to gangs and gang activities continue to be a major social challenge. In 2009, UNICEF collaborated with the Government of Belize in one of several social interventions on Southside Belize City.

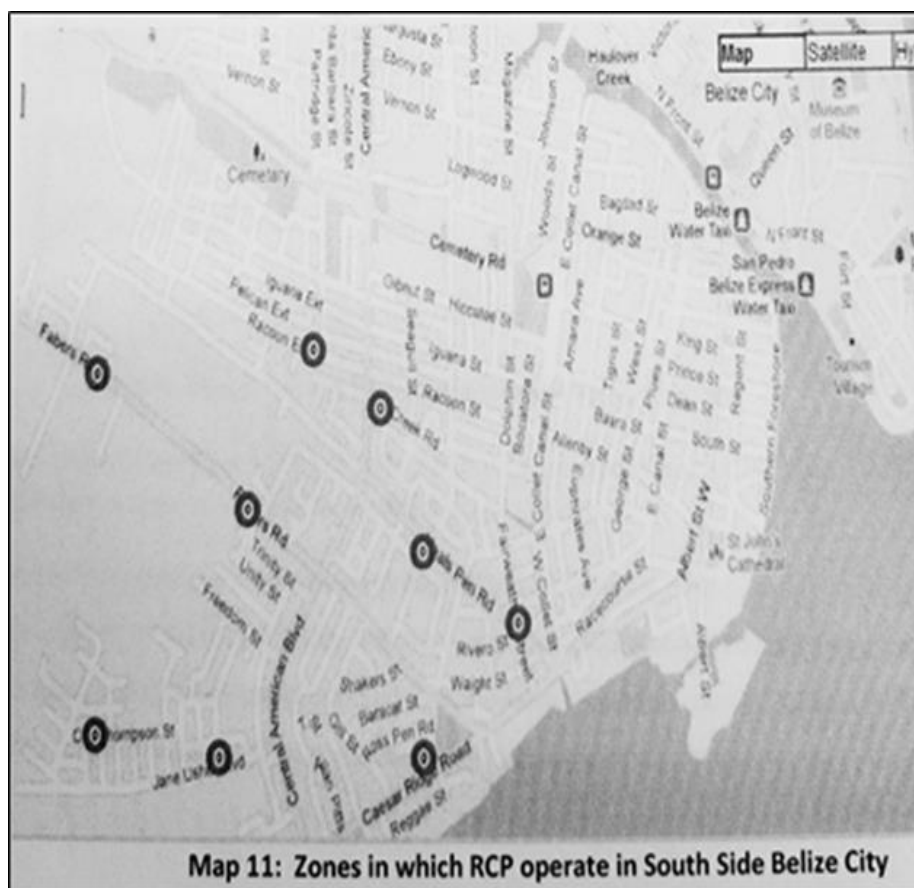


Figure 3: RCP Locations in Southside Belize City

A cohort of new Rovers were trained and the RCP rolled out on Southside Belize City in 2010.⁸ See map with RCP locations.

⁸ “Review of RCP Programme in Belize” – Fortuna Anthony, CSI Consultant, November 2011

1.3 Funding and Budget

Total investment into the RCP Programme beginning in 2009 and through to 2019 totalled BZ\$1.2 million (circa). See Table 2 below.

Table 2: RCP Funding For Period 2009 - 2019

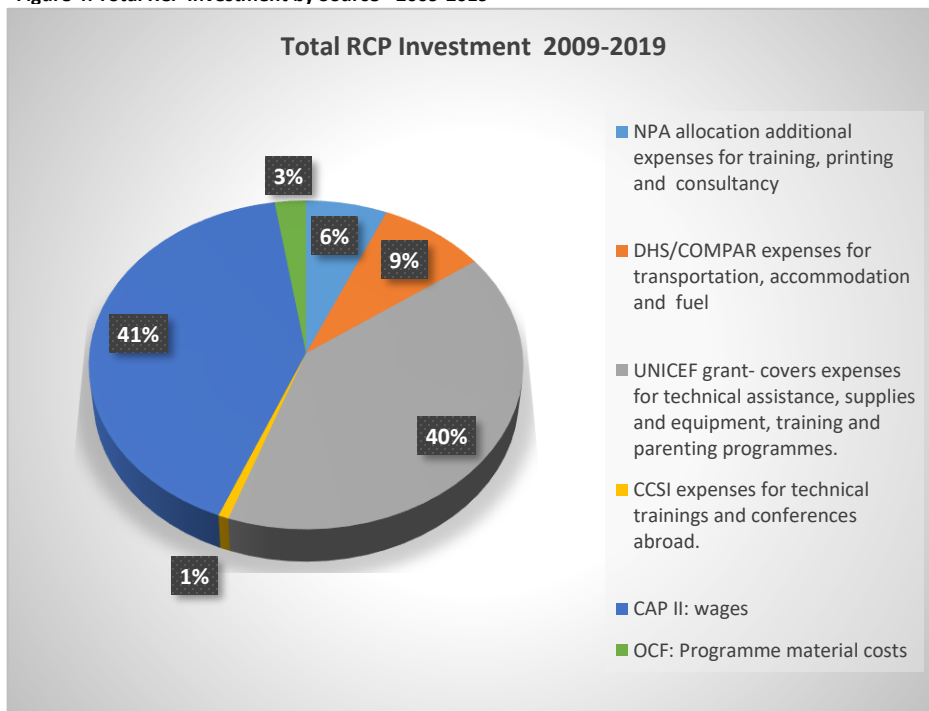
Funding Source	2009-2011	2012	2017	2018-19	Total RCP Funding 2009-2019
Total	BZ\$343,748.00	BZ\$266,025.00	BZ\$166,908.00	BZ\$409,525.00	\$ 1,186,206.00
NPA allocation additional expenses for training, printing and consultancy	BZ\$52,155.00	BZ\$24,804.00	BZ\$0.00	BZ\$0.00	\$ 76,959.00
DHS/COMPAR expenses for transportation, accommodation and fuel	BZ\$31,776.00	BZ\$70,000.00	BZ\$0.00	BZ\$0.00	\$ 101,776.00
UNICEF grant- covers expenses for technical assistance, supplies and equipment, training and parenting programmes.	BZ\$251,217.00	BZ\$171,221.00	BZ\$0.00	BZ\$56,305.00	\$ 478,743.00
CCSI expenses for technical trainings and conferences abroad.	BZ\$8,600.00	BZ\$0.00	BZ\$0.00	BZ\$0.00	\$ 8,600.00
CAP II: wages	BZ\$0.00	BZ\$0.00	BZ\$166,908.00	BZ\$323,663.00	\$ 490,571.00
OCF: Programme material costs	BZ\$0.00	BZ\$0.00	BZ\$0.00	BZ\$29,557.00	\$ 29,557.00

UNICEF grants, which covered expenses associated with technical assistance, supplies and equipment, and training and parenting programmes totalled BZ\$478,743 accounting for 40% of total RCP investment in the 10 year period.

The MHDSTPA/GOB invested just under half of a million dollars or BZ\$490,571 representing 41% of total RCP investment. This total derived from CAP11 Budget Item and covered wages paid for the period 2009-2019.

Just under a quarter of a million dollars (BZ\$216,892), derived from other streams – DHS/COMPAR (9%), NPA allocations (6%), OCF (3%), and CCSI (1%).

Figure 4: Total RCP Investment by Source - 2009-2019



2.0 SCOPE OF CONSULTANCY

2.1 TOR

The Early Childhood Development National Strategic Plan 2017 - 2021, Output 2.1 calls for children to grow up in safe and protective (home, school, and community) environments. To ensure quality and impact of the programmes under this output, this impact evaluation has been commissioned and will be used to guide the expansion of the RCP.⁹

The ECD RCG Steering Committee, primarily comprised of MHDSTPA officers, including the Program Manager Ms. Diana Pook, Mrs. Lliani Arthurs - Director of the Department of Human Services (DHS), Mark Antrobus – Social Planner, Els Arnold - Statistician, and Elishah St. Luce - Social Protection Specialist.

This committee was charged with the supervision of the Impact Evaluation, providing the data and guidance to ensure the following questions were answered:

- i. Are the beneficiaries nutritionally healthy?¹⁰ This should include measures of height for age, weight for age, and weight for height (following the MICS methodology)
- ii. Do children in the program participate in more activities that support early learning at home, including reading books, looking at picture books, telling stories and singing songs?
- iii. Are the children developmentally on track with respect to literacy and numeracy?
- iv. Do RCG children perform better at school, in terms of scorecards and the national BJAT Examination?
- v. Are the children developmentally on track with respect to social-emotional behaviours, which can include how children interact with their peers, and can focus on the task at hand without getting distracted?

The evaluation should also examine the effect of the program on the primary caregivers of the beneficiaries, to determine:

⁹ “Early Childhood Development National Strategic Plan 2017-2021”, Government of Belize, 2017.

¹⁰ **Note** – nutritional health was determined by measures of height for age, weight for age, and weight for height, using the MICS methodology.

- i. Do caregivers have a better knowledge of ECD and the importance of positive early childhood stimulation because of the program?
- ii. Do caregivers engage equally with their children with respect to developmental activities?
- iii. Has the program improved parents parenting competencies, and has it changed parents' views with respect to disciplining their children?

Finally, the impact evaluation should, along with a review of similar home based ECD programs (regionally and internationally) and of recent evidence and research into nurturing care (especially in different household contexts including violence, health risks, and low levels of parenting ability) provide policy and programme design recommendations, including but not limited to:

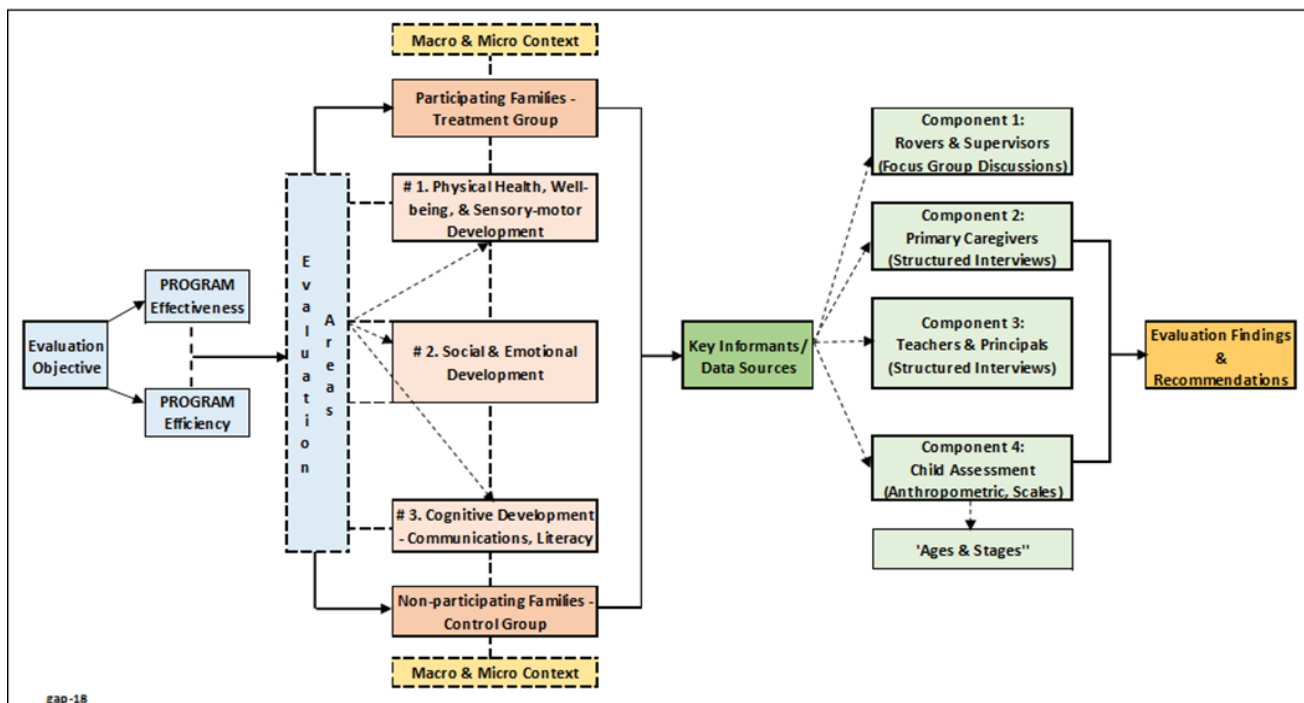
- i. Beneficiary targeting design: are there more efficient and effective methods of selecting the target population?
- ii. Program timeframe: is the current three-year model the best duration for such a program, and is the current programmes scheduling and frequency of home visits optimal?
- iii. Program integration and referral: is RCG an integrated program in the wider array of program delivery within the Ministry, how are referrals made to other services (internal and external), and are these referrals made in a timely and systematic manner (especially for those most at risk children, e.g. those differently abled)?
- iv. What are the programmatic costs per beneficiary, and are there efficiency gains that can be made?
- v. Are the RCG curriculum and the materials used with parents and children, appropriate and relevant (in respect to language, age, differently abled children, and gender)?
- vi. Are children prepared for the transition from the play environment to a structured pre-school learning setting?

3.0 METHODOLOGY

3.1 Conceptual Approach

The design of the impact evaluation research was consistent with the objectives outlined in the Terms of Reference (TOR). The overarching evaluation objective was to gauge the overall effectiveness and efficiency of the RCP by assessing outcome impacts in three main evaluation areas: (1) Physical health and well-being including sensory motor development, (2) Social and emotional development, and, (3) Cognitive development including communications and literacy skills.

Figure 5: Conceptual Approach for Evaluation Research



Two groups - treatment and control – were selected for the study using simple randomized sampling and macro and micro context similarities and dissimilarities between both groups. In Belize City, both treatment and control groups were located on the Southside of Belize City so that macro-context similarities were easily established. In Toledo, control villages were located close by to treatment villages with similar population characteristics.

3.2 Data and Data Sources

Qualitative data sources included key contextual findings derived from a desk-top review of relevant literature on early childhood development including the roving care-givers programme evaluation in Saint Lucia, national poverty and children strategic documents, and World Bank best practices on ECD.

Additional qualitative data derived from two separate focus group discussions held with ROVERS (including Supervisors), in both Belize City and Toledo. Other qualitative data came from the caregivers' and educators' surveys using semi-structured questionnaires in both households and schools.

Quantitative data sources included measures of child performance against UNICEF approved cognitive development and anthropometric standards using the *'Ages and Stages'' Questionnaires (3rd Edition)*, developed by Squires and Bricker.¹¹ Four areas of evaluation included:

- I. Physical health, well-being and sensory-motor development
- II. Social and emotional development
- III. Cognitive development
- IV. Communication, language, and literacy development.

3.3 Sampling Methodology

In theory, the RCP Programme Logic Model, if it had been formulated, would have clearly defined the targeted outcomes – short, medium, and long term. A corresponding monitoring and evaluation design would have also provided clear indicators to inform both operational and impact evaluation studies, more-so if it was accompanied by a baseline survey.

The absence of both the RCP Logic Model and a baseline survey meant that a good counterfactual – treatment vs control groups – was not available to inform the sampling methodology for the impact evaluation. However, and because the RCP beneficiary groups in the programme roll out were concentrated in specific areas in both Toledo and Southside Belize City, control groups were easily identified using macro-context similarities.

¹¹ "Ages & Stages Questionnaire, Third Edition (ASQ-3TM), Squires & Bricker", Copyright 2009, Paul H. Brookes Publishing Company.

3.3.1 Sample Population & Size

The target population for the RCP evaluation research comprised of 832 beneficiaries registered in the SISB; of this total, 351 or 42% lived in Southside Belize City and 481 or 58% lived in seven villages across the Toledo district. See Table 3 below.

The survey was a non-scientific survey so that sampling was selective (purposive) in nature which also made it possible to work with the budget allocation for the study.

Table 3: Sample Population & Size

Location	Population (SISB Database)	Treatment	Control	Sample
Belize City	351	75	75	150
Toledo	481	75	75	150
TOTAL	832	150	150	300

3.3.2. Randomization

Simple random selections were done for both Belize City and Toledo treatment groups comprised of 75 households each. In Belize City, the treatment group concentrated in the Port Loyola electoral constituency as this had the highest concentration of RCP families, while in the Toledo District, the beneficiaries spread over seven villages.

Table 4 below shows the distribution of control groups for both Belize City and the Toledo District.

Table 4: Treatment & Control Areas for Evaluation Survey

RCP Location	Treatment Areas	Control Areas
Belize City	Port Loyola	Lake I, Collett, Queen Square, Albert, & Mesop
Toledo	San Miguel, San Marcus, San Jose, Blue Creek, Santa Ana, Midway, San Felipe	San Pedro Columbia, Jacinto, Na'huan Cu, Mafredi, Conejo, Sunday Wood, Forest Home

3.4 Questionnaire Design

The evaluation survey applied a range of questionnaires for both the Treatment and Control groups. The questionnaires comprised of the following:

- I. Caregivers Survey
- II. Ages and Stages

- III. Additional Child Supplement Form
- IV. Educator Survey

The questionnaires were administered to primary caregivers in both treatment and control groups. Ages and Stages questionnaires applied to children between the ages 0 to 5 and additional child supplement forms filled out for each additional child that fell within the age range 6 to 10.

3.4.1 Caregiver Questionnaire: Treatment Group

The caregiver questionnaire was a semi-structured questionnaire made up of seven sections as described in Table 5 below.

Table 5: Caregiver Questionnaire- Treatment: Structure and Variables

Section	Code	Variables
Identification	ID01-ID09	Household information – location, primary caregiver, size of HH, nationality, education level, employment status, and children between ages 0 to 10 (including those in the RCP).
Recruitment	R1-R5a	Recruitment process – awareness, enlistment process, and satisfaction with RCP.
Understanding ECD	UECD 1- UECD 9a	Understanding of ECD, interest and involvement with child activities, discipline, effect of RCP on child behaviour, influence of RCP on approach to child discipline.
Perceptions	PER 1 – PER 15a	Effectiveness of Rovers, adaptation, appropriateness, parenting, special needs, and wider support (Ministry and other agencies).
Willingness to Pay	WP 1- WP1a	Willingness to participate and pay for RCP services.
Demographic	Demo 1- Demo 4a	Household income, decision makers on hh expenditure, home ownership status, visit to clinic during pregnancy.
Ages & Stages (if applicable)	Ages & Stages 6 to 66 months	Child performance & development – physical health (using anthropometric measures), social & emotional, cognitive, communication, language, & literacy.
Child Functioning & Parental Involvement	CFPI- 1 CFPI – 8 (if older than 66 months)	Ability to perform activities with ease, communication, emotional, parental involvement at school.

3.4.2 Caregiver Questionnaire: Control Group

The caregiver control questionnaire was mostly similar to that of the treatment group but with a few exceptions. The recruitment section (R1-R5a) did not apply because the children would not have participated in the RCP. See Table 6 below.

Table 6: Caregiver Questionnaire - Control: Structure & Variables

Section	Code	Variables
Identification	ID01-ID09	Household information – location, primary caregiver, size of HH, nationality, education level, employment status, and children between ages 0 to 10 (including those in the RCP).
Understanding ECD	UECD 1- UECD 9a	Understanding of ECD, interest and involvement with child activities, discipline, effect of RCP on child behaviour, influence of RCP on approach to child discipline.
Perceptions	PER 1 – PER 15a	Effectiveness of Rovers, adaptation, appropriateness, parenting, special needs, and wider support (Ministry and other agencies).
Willingness to Pay	WP 1- WP1a	Willingness to participate and pay for RCP services.
Demographic	Demo 1- Demo 4a	Household income, decision makers on hh expenditure, home ownership status, visit to clinic during pregnancy.
Ages & Stages (if applicable)	Ages & Stages 6 to 66 months	Child performance & development – physical health (using anthropometric measures), social & emotional, cognitive, communication, language, & literacy.
Child Functioning & Parental Involvement	CFPI- 1 CFPI – 8 (if older than 66 months)	Ability to perform activities with ease, communication, emotional, parental involvement at school.

3.4.3 Ages & Stages Questionnaire

As was mentioned earlier in the report, the Ages & Stages Questionnaire is an adapted pre-designed model developed by Squires & Bricker. The questionnaire applied to children from ages 6 months to 66 months and measured child performance using overall scores attained in five evaluative areas – communication, gross motor, fine motor, problem solving, and personal social.

Scores ranged from a low of 0 to 60 with five-point intervals and each evaluative area had a cut-off point or score. These points vary depending on the age of the child and the ages and stages Questionnaire applied. See Table 7 below for a sample of the scorecard.

Table 7: Ages & Stages Evaluative Score Card

Evaluative Area	Cut-off	0	5	10	15	20	25	30	35	40	45	50	55	60
Communication	22.77													
Gross Motor	41.84													
Fine Motor	30.16													
Problem Solving	24.62													
Personal Social	33.71													

Figure 7a: ASQ Score Interpretation

	If the child's score is in this area, it is above the cut-off and his/her development appears to be on schedule.
	If the child's score is in this area, it is close to the cut-off but there is a need to provide learning activities and monitor.
	If the child's score is in this area, it is below the cut-off and further assessment with a professional may be needed.

3.4.4 Additional Child Supplement Form

The Additional Child Supplement Form (ACSF) combined three sections of the Caregiver Treatment questionnaire – namely, the UECD, CFPI, and Anthropometric measures (height and weight) and was administered to each additional child in the household that was older than five years but not older than 10. See Table 8 below.

Table 8: Additional Child Supplement Form - Questionnaire

Section	Code	Variables
Identification	ID01-ID09	Household number and name of child
Understanding ECD	UECD 1- UECD 8a	Understanding of ECD, interest and involvement with child activities, discipline, effect of RCP on child behaviour, influence of RCP on approach to child discipline.
Child Functioning & Parental Involvement (if older than 66 months)	CFPI- 1 CFPI - 8	Ability to perform activities with ease, communication, emotional, parental involvement at school.
Anthropometric Measures	Indicators	Age, Weight, Height

3.4.5 Educator Survey Questionnaire

The educator survey questionnaire applied to both treatment and control groups and for children who were attending school. See Table 9 on the following below.

Table 9: Educator Survey Questionnaire

Section	Code	Measures
Identification	ID01- ID09	Educator/Household number, Office held by educator, and name of child.
Cognitive Abilities	CA 1 – CA - 4	Communication, physical activity, comparative performance (report card).
Socio-emotional Behaviour	SEB-1 SEB -4	Follows instructions, emotional behaviour, and socialization with peers.
Physical Abilities	PA – 1 PA -4	Participation in physical activities, comparative physical performance, physical impediment.
Perceptions	PER – 1 PER - 9	Educator perceptions on ECD, attitude toward ECD, awareness of Ages & Stages, parent participation in school related events.

3.5 Field Work

Recruitment efforts started on the 10th and 11th October with interviewing of potential recruits in Belize City and Toledo. The potential recruits for Belize City were referred by members of the RCP Committee while those from the Toledo District were referred by the Youth Services Department in Punta Gorda.

Consistent with the MICS Methodology for conducting anthropometric measurements, the enumerator teams consisted of two members – one enumerator and one supervisor. The final rosters, after screening and evaluation are shown in Table 10 below:

Table 10: Survey Rosters: Belize City & Toledo

Area	Enumerators	Supervisors
Belize	<ul style="list-style-type: none"> • Nzinga Castro • Chelcy Ottley¹² 	<ul style="list-style-type: none"> • Ernestina Alvarez • Ashley Castro
Toledo	<ul style="list-style-type: none"> • Keron Acosta • Lisa Augustine • Edlavlyn Garbutt • Leon Higinio 	<ul style="list-style-type: none"> • Luveanna Bol • Tanisha Lino • Shyla Jones • Avinell Winright

¹² **Note:** Miss Chelcy Ottley was initially recruited to perform data entry but eventually replaced Candice Ferguson, enumerator who dis-continued due to illness.

3.5.1 Sensitization

In keeping with culturally appropriate norms for consultations in rural Toledo, letters were sent to the Alcaldes of the 14 villages (7 treatment and 7 control) informing them of the planned RCP Evaluation Survey and requesting their cooperation in informing, and encouraging their communities to participate in the survey.

3.5.2 Training Preparation

Immediately after the selection of the survey teams, the consultants began to develop the questionnaires for the survey; this was a participatory process since it allowed for ongoing review, critique, and inputs from representatives of the RCP steering committee.

3.5.2.1 Training

The two-day training event was held on the 6th and 7th of November, 2018. On day one, Ms. Paulette Wade – UNICEF, effectively delivered both theory and application training on how to conduct anthropometric measures using the MICS methodology by systematically working through the anthropometry manual. Immediately following the theory session, and as part of practical application, all 10 team members visited the Young Women Christian Association (YWCA) where they conducted simulation exercises with pre-school students, using the UNICEF measurement boards and scales.

On day two, and in the first morning session, Ms. Diana Pook, RCP Programme Manager, trained the teams on the Ages and Stages Questionnaire – design and application. In the second morning session, lead consultant, Kristin Marin, provided a step-by-step review of the training manual provided to all participants. The manual served as instructions for interviewers covering topics of Confidentiality, Finding and Re-visiting Households, Guidelines for a Successful Interview and an overview of the surveys themselves.

In the afternoon, support consultant, Mr. Gustavo Perera, provided more of a walk-through of the Treatment and Control questionnaires.

Because the actual design of the questionnaires were still being updated with inputs from the RCP focal points within the MHDSTPA until the eve (past mid-night) of the training, this did not allow time for the completion of the instruction manuals for use by the teams since the manual was still being developed. However, the teams were asked to administer the questionnaires in pairs followed by discussions on issues that needed clarification.

3.5.2.2 Piloting of Survey – Belize City

On Sunday, 11 November, 2018 the survey piloted in Belize City. The goal was to conduct eight household interviews – four in the treatment area and four in control area. The targeted households in the treatment area were randomly selected from the list of treatment beneficiaries while the control were randomly selected in the field.

The immediate challenge in the field with respect to treatment households was the fact that the beneficiaries selected for participation in the pilot had moved from the address listed in the MHDSTPA database. A second challenge was the discrepancy in addresses where, and in some instances the address was listed with a double-digit house number when, and in fact, the actual residence was a four-digit lot number.¹³ As a result, other beneficiaries were chosen using the sample frame (household list) to identify other households in the pilot area.

The Belize City team effectively administered the questionnaires and anthropometric measures. Based on the pilot experience, further modifications were made to the treatment and control questionnaires.

3.5.2.3 Piloting of Survey in Toledo

On the 16th and 17th November, 2018, the survey piloted in the Toledo District. On the morning of the 16th, the four teams (eight members), were apprised of the modifications that were made to the treatment and control questionnaires and these were systematically worked through prior to going into the field. In addition to this, a further review of the methodology was done including logistical arrangements and team leadership.

In the afternoon, the teams travelled to San Felipe where three treatment households were interviewed – questionnaires and anthropometric measures. The MHDSTPA office in Punta Gorda assigned a Rover to accompany the survey team to assist with locating and identifying treatment households and beneficiaries.

On day two, the survey team visited the Forest Home village (control area) where interviews and measurements were conducted at three households. The teams effectively administered both the treatment and control questionnaires.

3.6 Formal Survey – Belize City

The formal survey commenced in Belize City on 12th November. However, and based on the pilot experience (relocation of beneficiaries), an adjustment

¹³ **Note:** This challenge became more manifest during the formal survey so that much time was spent, first, on trying to verify in advance the beneficiaries' current location by calling and setting up of appointments. The effect was that it took considerably more time to collect the data than was previously anticipated.

was necessary for the canvassing of beneficiary households. The teams were instructed to make telephone calls to targeted households in the treatment area to verify that first, the beneficiaries still lived at the location, and second, to make appointments for implementing the surveys to ensure that the children were present for the anthropometric measures.

This methodology required more time for data collection since, and on many occasions, the contact numbers had changed and time to contact extended. In other instances, teams had to schedule their visits around the times given to them by caregivers which resulted in them having to make multiple visits.

Because household data collection activities were still ongoing even as the school had closed for the Christmas holidays, the educator survey was pushed back to January when school resumed.

The collection of data for both Treatment and Control households were completed in early February as was the Educator Surveys¹⁴.

3.7 Formal Survey - Toledo

The formal survey was implemented in Toledo during the period 21 November to 2 December, 2018. At the outset, the teams developed a data collection plan that created high likelihood of completion of the survey within both time and budget goals. Appropriate travel arrangements were made to ensure that the teams would be able to leave early each morning to work designated areas (treatment and control). The MHDSTPA office in Punta Gorda again assigned Rovers to accompany the teams to the villages where they worked.

The teams achieved their targets within the stipulated time and budget. Fortuitously, it was easy to identify targeted treatment beneficiaries with the assistance of the Rovers and, because the caregivers were almost always at home, interviews were done on first attempt. Furthermore, this made it easier for the teams to conduct the educator surveys on the same day.

¹⁴ **Note:** The educator survey was implemented after school re-opened in January; however, this was a very busy time for some teachers who intimated that they could not grant interview times and suggested that the survey forms be left with them. So as not to further delay the data collection effort, the decision was taken to have some teachers self-administer the surveys.

3.8 Constraints

Several unanticipated constraints led to the extension of the proposed work plan dates. These include the following:

RCP Database

- At the start of the consultancy, an official, integrated list of beneficiaries of the RCP was not readily available.
- Start dates for majority of beneficiaries were incorrect as the start date was identified as the date the child was entered into the online system rather than the date the beneficiary started the programme. The actual programme start day was therefore missing for the vast majority of families.

Families in Belize City

- Treatment homes (beneficiaries) moved without indicating a forwarding address. It is noted that there is no existing mechanism to update their records regularly or in the event that families move from their current address
- Children were often unavailable despite Enumerators visiting homes several times.
- In one case, most recent height and weight measures taken by family doctor (or last visit), were used.

3.9 Lack of Buy-in

Due to the extended time allocated for locating treatment homes, the Educator Surveys in Belize City were delayed until schools re-opened after the Christmas vacation. It is also worth mentioning that several educational institutions did not buy into the exercise despite being provided with a letter from the MHDSTPA on the importance of the exercise, leading to delays in filling in the survey or some forms not being filled in.

4.0 EVALUATION SURVEY FINDINGS

Main Findings: Belize City & Toledo Comparative

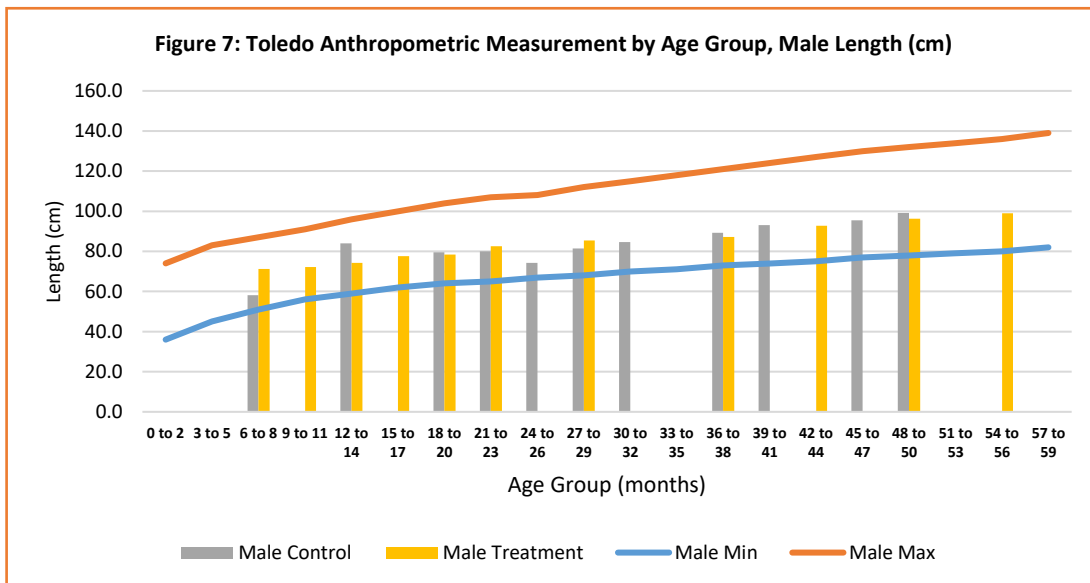
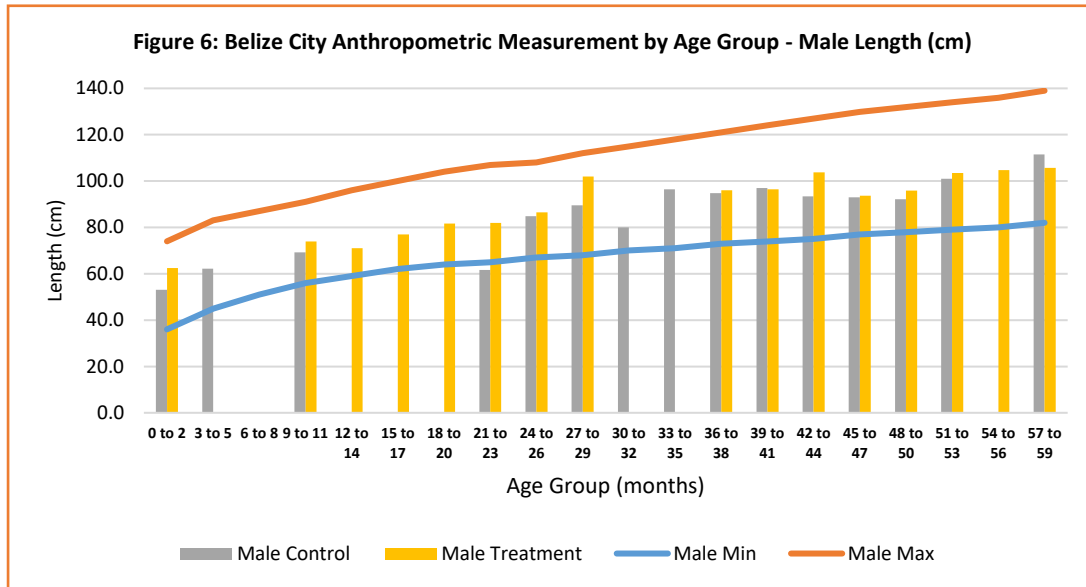
Evaluation Question 1: "Are the beneficiaries nutritionally healthy?"

The method used to determine the nutritional health status of beneficiaries in both Belize City and the Toledo District, was the Anthropometric measures using the MICS methodology. A contrast to the MICS 2015/16 reporting methodology founded in the calculations of standard deviations and mean "Z Scores" to determine – "underweight," "stunted," and "wasted" nutritional status of children. In the case of the MICS this was possible because of the relatively large number of children measured (2,426 under aged five), compared to 200 cases for Belize City and Toledo combined.

Table 11: Expected Length and Weight of Children by Sex and Age in Months In editing the recorded length and weight of children to ensure that no data entry errors are made, the following values are used as the minimum and maximum expected values. The ranges are dependent on the sex and age of the child and are given in centimetres for the length (height) of the child and kilograms for the weight of the child.								
Age in Months	Length/height (cm)				Weight (kg)			
	Males		Females		Males		Females	
	Min	Max	Min	Max	Min	Max	Min	Max
0–2	36.0	74.0	36.0	72.0	0.5	10.0	0.5	9.0
3–5	45.0	83.0	44.0	80.0	1.0	13.0	1.0	12.0
6–8	51.0	87.0	50.0	86.0	2.0	15.0	2.0	14.0
9–11	56.0	91.0	54.0	90.0	3.0	16.5	2.5	15.5
12–14	59.0	96.0	57.0	95.0	4.0	17.5	3.0	16.5
15–17	62.0	100.0	60.0	99.0	4.0	18.5	3.5	17.5
18–20	64.0	104.0	62.0	102.0	4.0	19.5	3.5	18.5
21–23	65.0	107.0	64.0	106.0	4.5	20.5	4.0	19.5
24–26	67.0	108.0	66.0	107.0	4.5	23.0	4.5	21.5
27–29	68.0	112.0	68.0	111.0	5.0	24.0	5.0	23.0
30–32	70.0	115.0	69.0	114.0	5.0	24.5	5.0	24.5
33–35	71.0	118.0	71.0	117.0	5.0	25.5	5.0	25.5
36–38	73.0	121.0	72.0	120.0	5.0	26.0	5.0	27.0
39–41	74.0	124.0	74.0	122.0	5.0	27.0	5.0	28.0
42–44	75.0	127.0	75.0	124.0	5.0	28.0	5.5	29.0
45–47	77.0	129.9	77.0	126.0	5.0	29.0	5.5	30.0
48–50	78.0	132.0	78.0	129.0	5.0	30.0	5.5	31.0
51–53	79.0	134.0	79.0	131.0	5.0	31.0	5.5	32.0
54–56	80.0	136.0	81.0	133.0	5.5	32.0	6.0	33.0
57–59	82.0	139.0	81.0	136.0	5.5	33.0	6.0	34.5

However, the procedures for recording the anthropometric measures were consistent with the WHO Standards of Measurements (MICS Anthropometric Manual). See Table 11.

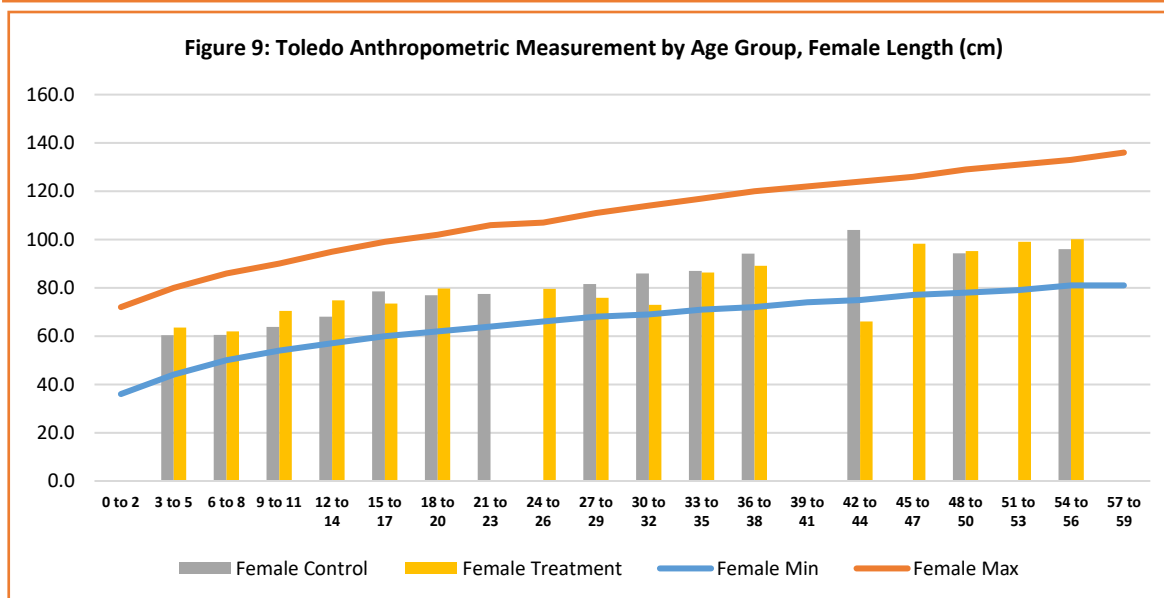
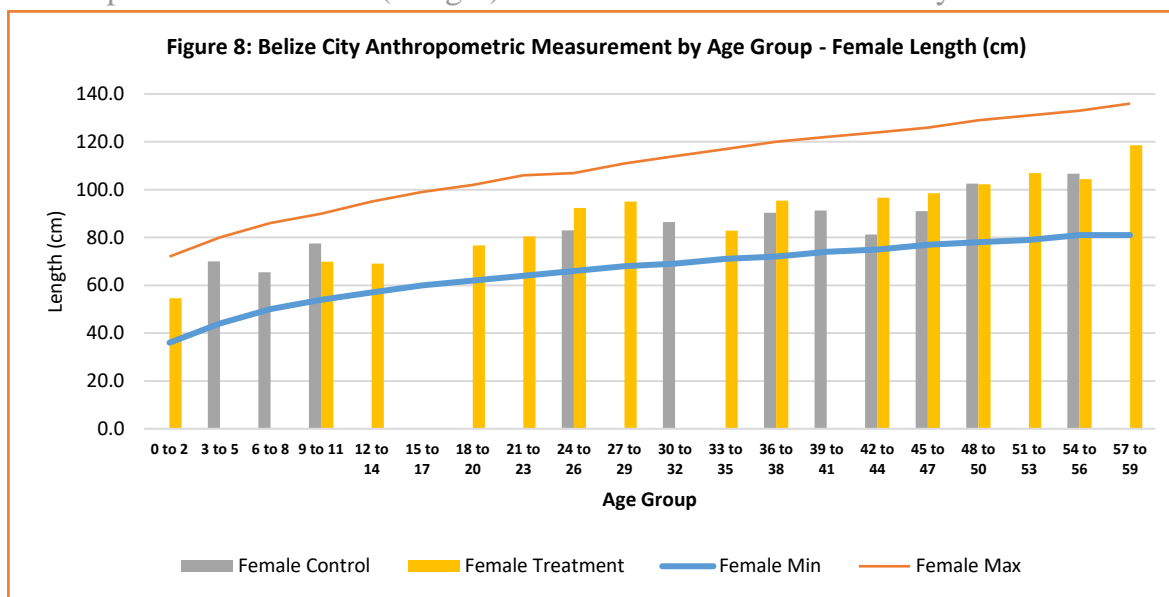
Anthropometric Measures (Length): Male Children in Belize City & Toledo



The results of the anthropometric measures for both Belize City and Toledo showed that male children in both treatment and control groups were well within the maximum and minimum ranges of the WHO indicators; furthermore, there were no significant differences between the measurements of those children in

the treatment to those in the control group and there was no evidence of children being stunted or wasted.¹⁵

Anthropometric Measures (Length): Female Children in Belize City & Toledo

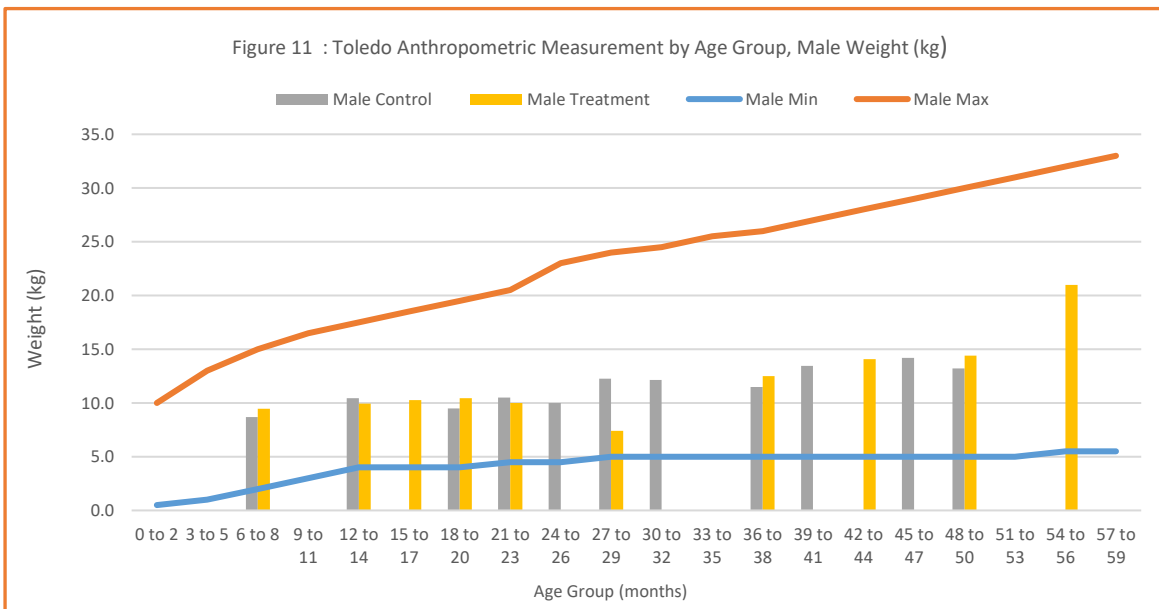
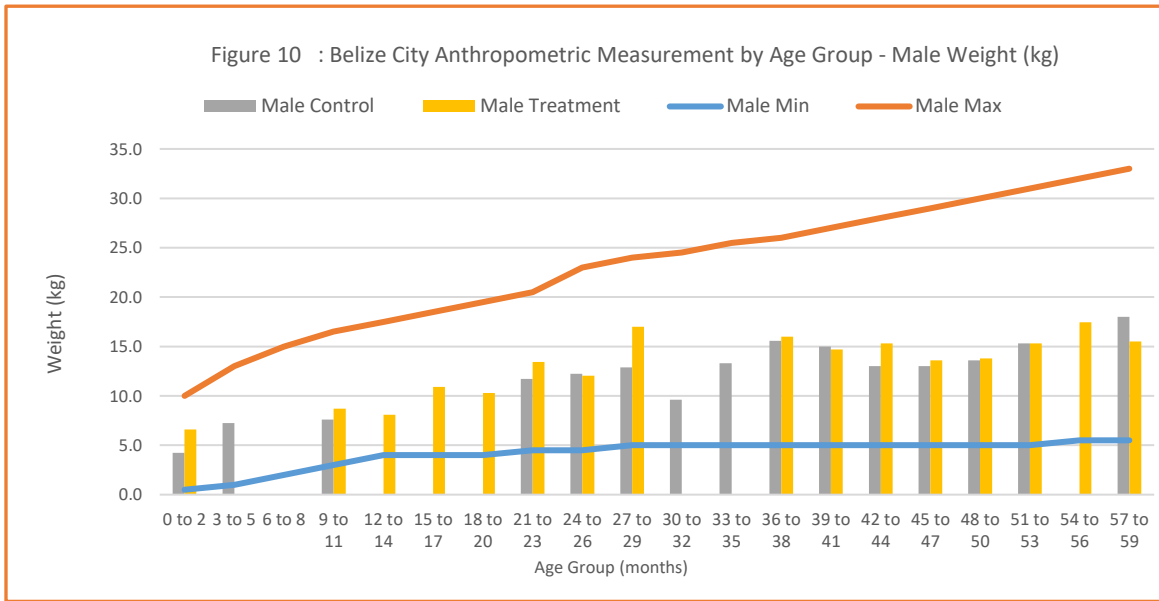


Similarly, to the anthropometric height results for male children in Belize City and Toledo, the results for female children also showed that children in both treatment and control groups were well within the minimum and maximum ranges of the WHO indicators. However, children in Belize City treatment group (24 to 60 months) were taller than their Toledo Counterparts. Another observation in Toledo was one child in (42 to 44 months) in the treatment group where there

¹⁵ **Note:** Some age groups did not have comparisons either for treatment or control; the reason for this is that no children were available for measurements during the study.

was a 9 Cm differential in length and where the child in the treatment group was below the minimum WHO threshold. In this case, the child was nutritionally deficient but it was never flagged up to the supervisor possibly because height and weight were not measured on a regular basis.

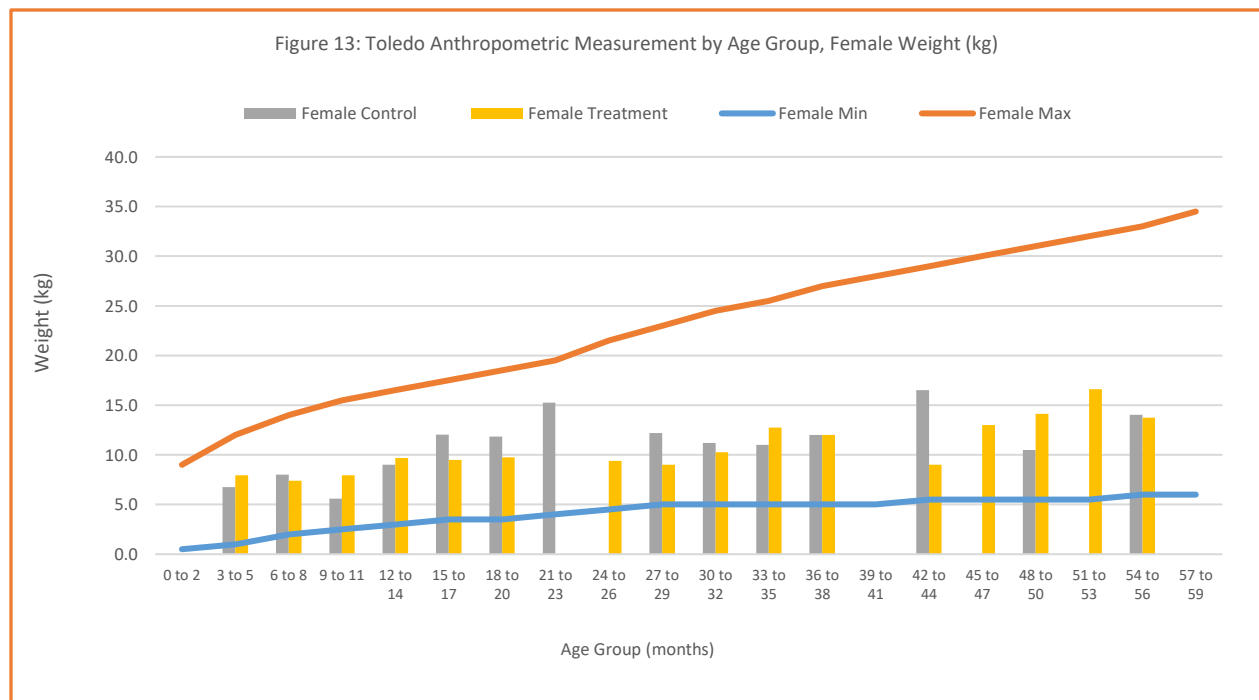
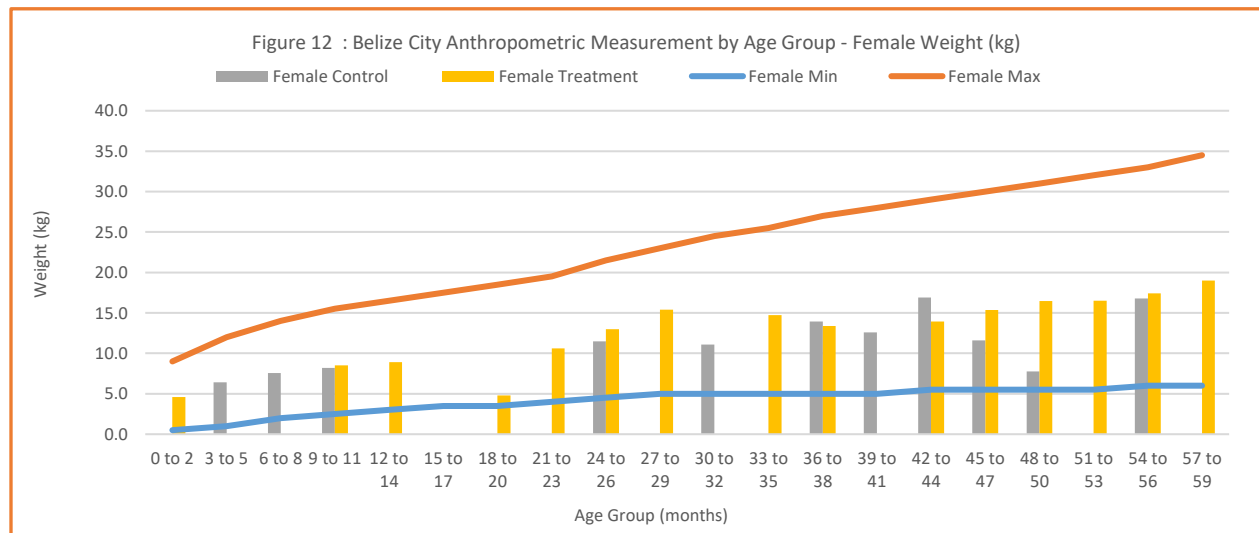
Anthropometric Measures (Weight): Males in Belize City & Toledo



The results for the anthropometric weight measurements for both Belize City and Toledo showed that male children in both treatment and control groups were well within the maximum and minimum WHO indicators and that there was no evidence of stunted or wasted growth patterns.

In Belize City, and for the 57 to 59 months age group, there was a slight weight differential between the control over the treatment child. Conversely, and for the age group 27 to 29 months the differential was in favour of the treatment child. In Toledo, and again within the age group 27 to 29, the child in the control group weighed more than the child in the treatment group by about 5 kilograms (11 lbs).

Anthropometric Measures (Weight): Females in Belize City & Toledo



Overall, female children in both Belize City and Toledo, and for both treatment and control groups, were well within the maximum and minimum WHO indicators and there were no signs of underweight, or stunted growth.

In Belize City, and for the age group 48 months through to 50 months, the children in the treatment group weighed approximately eight kilograms (17.6 lbs) more than the children in the control group. However, and for the age group 42 to 44 months, the control outweighed the treatment by about four kilograms (8.8 lbs).

In Toledo, the results were similar within the age group 48 to 50 months where treatment female weight was approximately 8.8 lbs more than the control counterpart; likewise, in the age group 42 to 44 months, the control outweighed the treatment by about 17.6 lbs.

Evaluation Question 2: “Do children in the program participate in more activities that support learning at home – including reading books, looking at picture books, telling stories, and singing songs?”

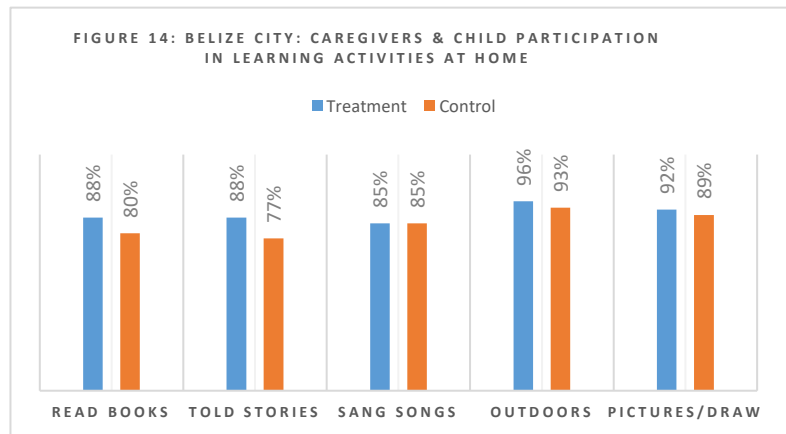
“Literacy learning requires instruction and practice, and this learning occurs across discrete stages. There are five stages of reading development as proposed by Maryanne Wolf (2008);” these are:

- I. The emerging reader (typically six months to six years)
- II. The novice reader (typically between 6 to 7 years old)
- III. The decoding reader (typically between 7 to 9 years old)
- IV. The fluent-comprehending reader (typically between 9 to 15 years old)
- V. The expert reader (typically from 16 years and older)

For emerging readers (six months to six years), the child can, over time, retell a story when looking at pages of book previously read to him/her, can name letters of alphabet, recognize some signs, prints own name, and play with books, pencils, and paper.

The analysis of the responses to this evaluation question revealed that mothers in both Belize City and Toledo, and for both treatment and control groups were the primary caregivers who participated in learning activities with their children at home.

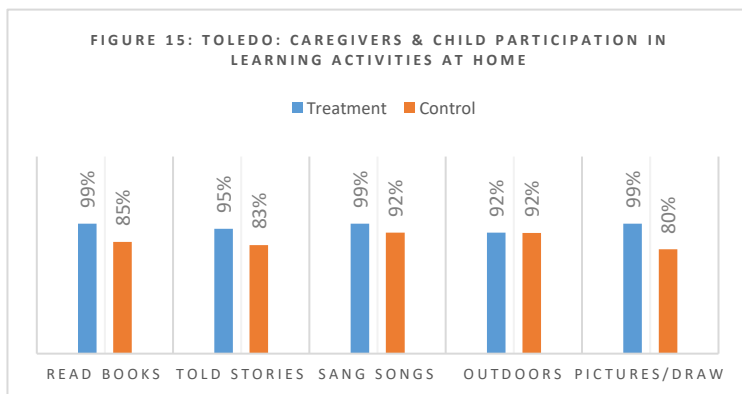
The results also showed that in Belize City, there were only marginal differences between treatment and control groups when it came to children engaging in activities that promoted learning at home although slightly higher numbers in the



treatment group engaged in outdoor activities and picture reading and drawing.

In the case of Toledo, there were only four activity areas where children in the program engaged more in learning activities with the exception of outdoors, but this was only marginally higher level than children in the control group.

In Toledo, and similarly to Belize City, 85% to 90% of learning activities were led by parents who were primary caregivers, more-so by mothers. In Toledo, there is a cultural dimension to literacy – telling stories – where caregivers (parents) tell stories to their children in their own language. Outdoor activities are very common among control group homes.



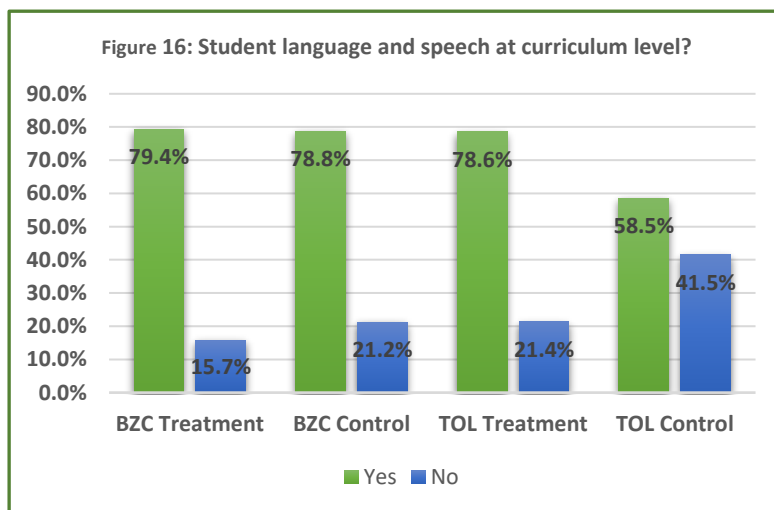
In Belize City, there are higher incidences of “other caregivers” interacting with children than in Toledo.

Evaluation Question 3: “Are the children developmentally on track with respect to literacy and numeracy?”

There were a series of questions asked in both the Educator Survey and Ages & Stages Questionnaires that set out to gauge child development (including cognitive) with respect to literacy and numeracy. The following charts and discussions address these findings.

CA 1. “Is the student language and speech meeting the performance levels of the Curriculum?”

The results showed that, in Belize City, eight out of every ten children in both the treatment and control groups were performing at curriculum level so that there was no noticeable impact by RCP interventions.



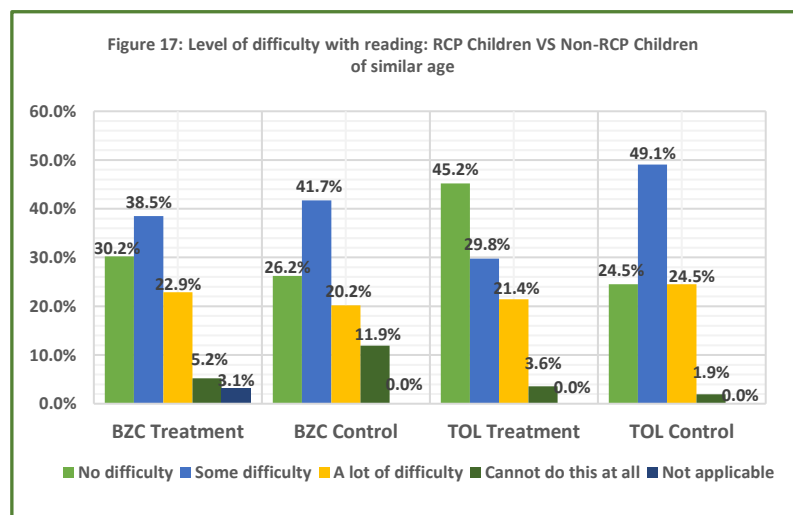
In Toledo however, the impact of the RCP interventions was more manifested with eight out of ten children in the treatment group performing at curriculum level compared to only six out of ten for the control group.

Stated negatively, four out of every ten children in the Toledo control group were performing below the curriculum level in the areas of language and speech – double the rate in the treatment group. Further analysis of qualitative data from the educator survey indicated that children who participated in the RCP got early exposure to the English language whereas those children that had not participated in the RCP mostly communicated with their primary caregivers (mother and father) in their traditional languages – Kek'chi or Mopan Maya.

In Toledo therefore, the early exposure to the RCP and by extension the English language enabled those children in the RCP to perform at curriculum levels.

CA 2. “Compared with children of the same age, and using the scales below, please describe the level of difficulty the student has with READING.”

Teachers were asked to describe the level of difficulty RCP children had with READING when compared to Non-RCP children of the same age.



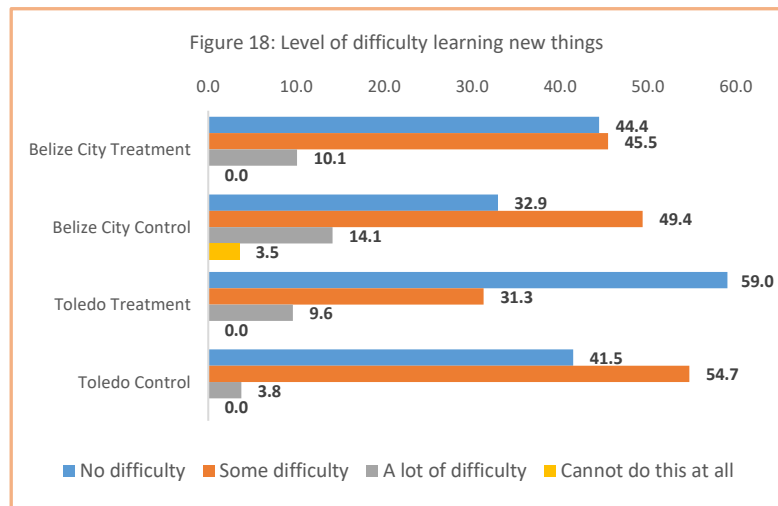
The RCP had more impact in Toledo than it did in Belize City when gauging level of difficulty in reading.

In Belize City, children in both treatment and control groups were experiencing the same levels of difficulties with reading; this was not surprising given the insights from teachers that some students “lacked the foundational skills” for reading and had difficulty ‘sounding’ or ‘pronouncing’ words.

In Toledo, almost fifty percent (50%) of all children in the RCP had ‘no difficulty’ with reading. However, for non-RCP children (control group), the converse was true – one half of all the children in this group had some difficulty reading with another one quarter having a lot of difficulty reading, or stated in another way, a combined almost seventy-five percent (75%) of children in the control group had difficulty reading.

CA2a. “Compared with children of the same age, and using the scales below, describe the level of difficulty the student has with LEARNING NEW THINGS.”

The RCP program had more impact on children in Toledo when it came to learning new things. Almost sixty percent (60%) of children in the treatment group had ‘no difficulty’ learning new things compared to forty-two percent (42%) of children in the control group.



In Belize City, forty five percent (45%) of children in the treatment group had ‘no difficulty’ learning new things compared to 33% in the control group. Almost one half of all children in both the treatment and control groups had ‘some difficulty’ learning new things. Also, in the Belize City control group a small number (3.5%) had learning disabilities.

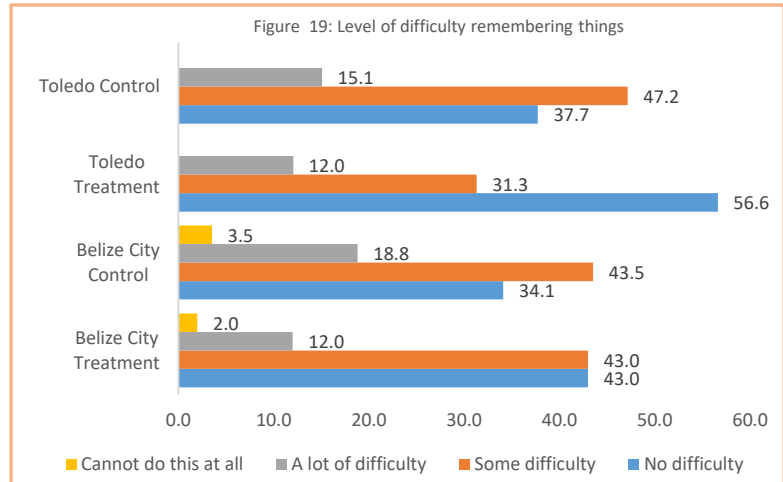
Some of the reasons cited by teachers for learning difficulties included, too many absences, not doing assignments, short attention span, and challenges associated with reading and comprehension, and having problems following instructions. Teachers also cited the need for more parental support and involvement in this area. Some other issues included lack of effort, dis-interest in learning, need for more structure and support at home, and some children just had learning disabilities – ‘‘slow comprehension,’’ ‘‘not prepared for school,’’ ‘‘short attention span.’’

CA2b. Compared with children of the same age, and using the scales below, please describe the level of difficulty the student has REMEMBERING THINGS.

In Toledo, almost six out of every ten children in the treatment group had ‘no difficulty’ remembering things compared to four out of every ten for the control group.

However, almost one third of the children in the treatment group had 'some difficulty' remembering things, with another twelve percent (12%) having 'a lot of difficulty' doing so.

These numbers were higher in the Toledo control group where forty-seven percent (47%) had 'some difficulty' remembering things and another fifteen percent (15%) having a 'lot of difficulty' doing so.



In Belize City, the results were mixed with an almost equal percentage (43%) of children in both the treatment and control groups experiencing 'some difficulty' remembering things. With respect to children who had 'no difficulty' remembering things, the treatment group (RCP) reported forty-three percent (43%) having 'no difficulty' while the control group reported a lower percentage - thirty-four percent (34%). Only in Belize City, and in both treatment and control groups, there was a combined five percent (5%) that 'could not remember things.'

Reasons for this as cited by teachers included, short attention span, easily distracted, and just 'slow.'

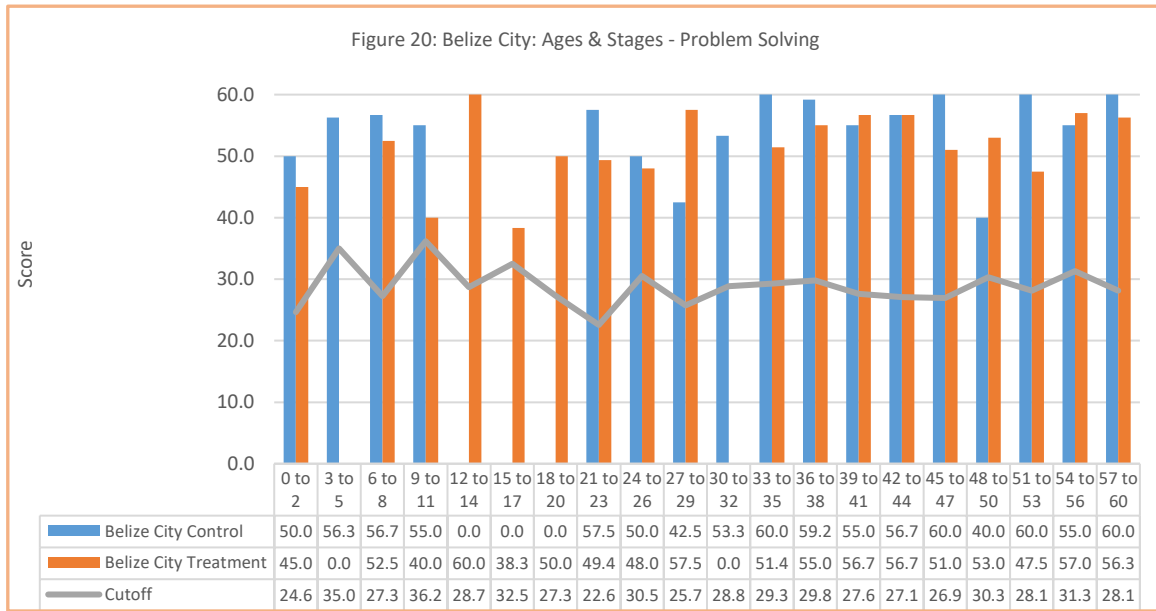
Numeracy: Ages & Stages for Belize City

The Ages and Stages Questionnaires developed by Squires, & Bricker, 2009, tracks the development of children from ages 0 to 66 months around five areas – communication, gross motor, fine motor, problem solving, and personal-social.

For the purposes of assessing the impact of the RCP on numeracy, the results of the ages and stages measures for problem solving were examined. Other measures including social and emotional behaviour are discussed further on in the findings.

The results showed that children in both the treatment and control groups performed well above the cut-off points. While both groups scored well above the cut-off points, the children in the control group scored higher in most age groups with the exception of age groups 42 to 44 months and 54 to 56 months.

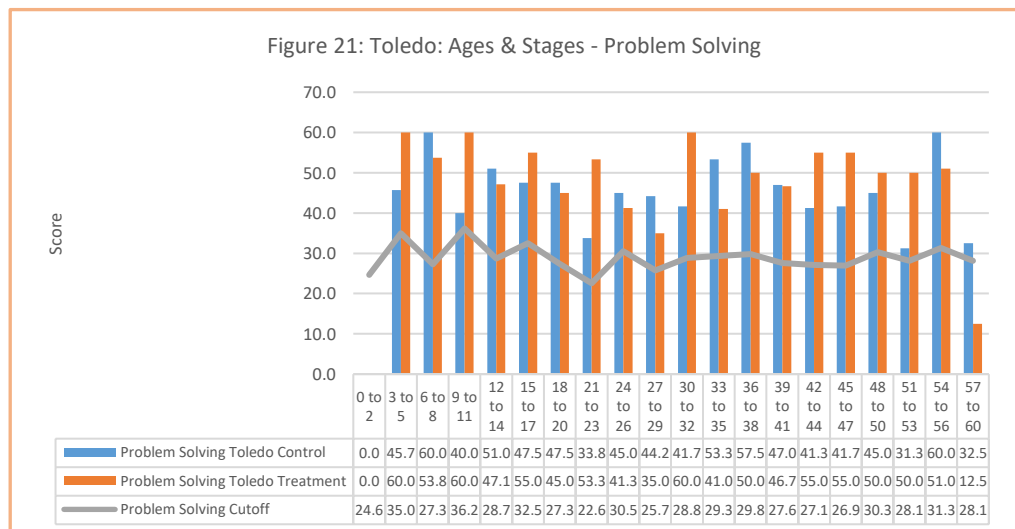
There were no forthcoming assumptions as to the factors that contributed to this result although the observation was made that the RCP manual used by the Rovers did not include activities contained in the Ages & Stages methodology. Another factor gleaned from the qualitative data is that Rover visits are inconsistent. For scores of 0.0, no children were evaluated in these groups. It must also be noted that the sample for each age group was relatively small.



Numeracy: Ages & Stages for Toledo

The overall results indicated that children in both the treatment and control groups scored well above the cut-off points for the ages and stages problem solving measure. The exception was in the age group 57 to 60 months where a child in the treatment group scored well below the cut-off point.

A further analysis of the data found that in this isolated case, the parent had indicated that the visits by Rovers were



extremely inconsistent. No referrals were made for this child to seek further assistance.

Cause for concern arises as this parent specifically indicated that she attended in excess of 10 parenting classes but could not recall most of the lessons taught.

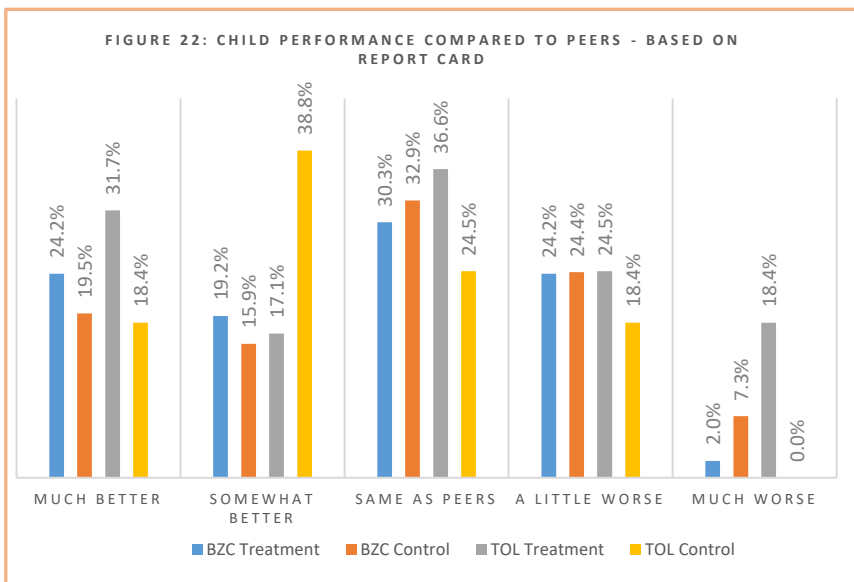
It was also assumed that the inconsistencies in visits and parenting sessions contributed to the mixed results where, in some instances, children in the RCP scored much higher than children not in the RCP and vice versa.

Evaluation Question 4: "Do RCG children perform better at school, in terms of scorecards and the national BJAT examination?"

The survey results measured against report cards only since there was no uniform criteria that applied to all schools insofar as preparation for BJAT exams.

In Belize City, almost one quarter of the children (24.2%) who were beneficiaries of the RCP performed 'much better' than those in the control group (19.5%); another twenty percent (20%) performed 'somewhat better' than the control group (15.9%).

However, almost one third of the children in both the treatment and control groups performed at the same levels and another quarter in both groups performed "a little worse" than their peers. These results



suggested that the RCP had limited or little impact in Belize City insofar as overall performance of students compared to peers.

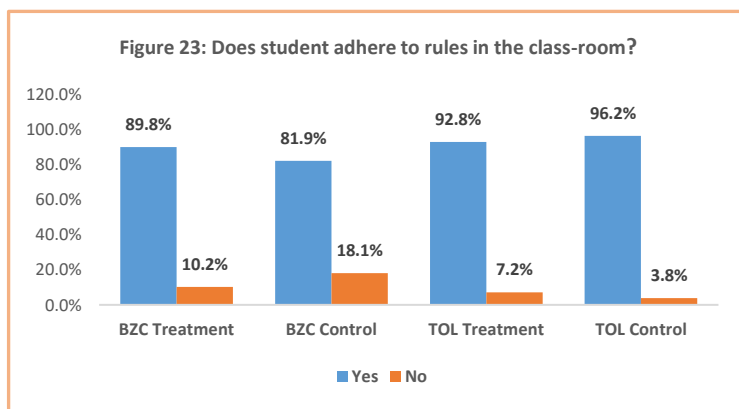
In the Toledo district, the results appeared to follow the Belize City trend although one third of the children in the treatment group (31.7%) performed 'much better' than their peers in the control group (18.4%). However, over one third (36.6%) of children in the treatment group performed 'same as peers' and one quarter (24.5%) performed 'a little worse.'

Evaluation Question 4: “Are the children developmentally on track with respect to social-emotional behaviours, which can include how children interact with their peers and can focus on the task at hand without getting distracted?”

Earlier in the report (CA2b), the issue of child focus and distraction were discussed in the context of the child’s ability to learn new things. Other indicators used to gauge child socio-emotional behaviours included adherence to rules in the class-room, displayed symptoms of anxiety or worry, displayed symptoms of sadness or depression, ability to control behaviour, and ability to make friends. These measures are discussed below.

SEB1: “Does the student adhere to the rules in the classroom?”

Overall, children in both Belize City and Toledo scored very highly when it came to adherence to classroom rules. The percentages for those who did not adhere to rules were minimal although Belize City had slightly higher numbers for non-adherence.

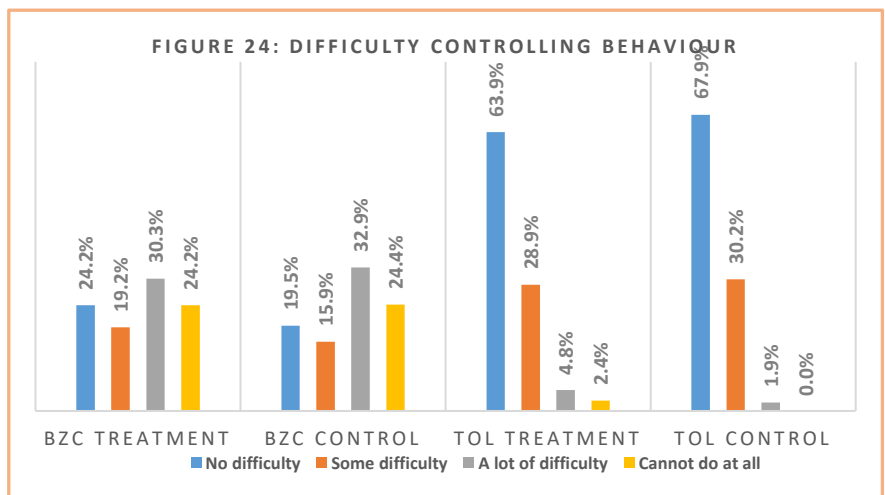


It is difficult to say to what extent the high scores were attributable to the RCP interventions since teachers were also responsible for classroom management.

SEB2: “Compared with children of the same age, and using the scale below, what level of difficulty does the student have controlling his/her behaviour?”

The results for this variable showed that children in Toledo – both RCP and Non-RCP – scored very highly and at comparable levels where almost seven out of every ten children (70%) had ‘no difficulty’ controlling his/her behaviour.

The result for Belize City were a contrast, where only 25% of children in the treatment group had ‘no



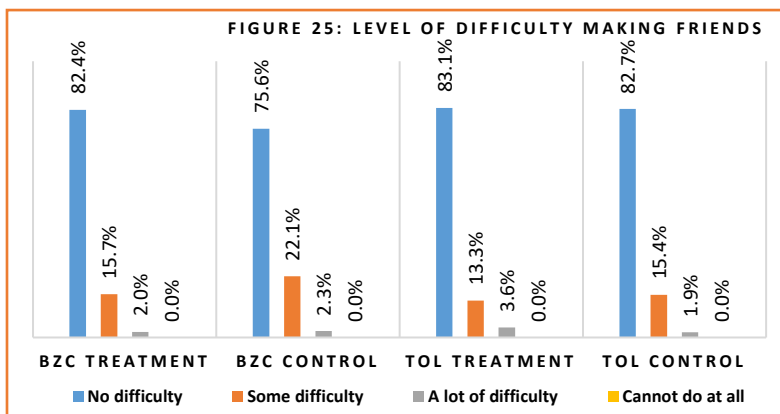
difficulty' controlling behaviour which was marginally higher than those in the control group.

The results also revealed that in both treatment and control groups combined, over one half of children had 'some difficulty' to a 'lot of difficulty' controlling behaviour. Of concern though, was the fact that one quarter of the children in both treatment and control groups in Belize City 'could not control behaviour.' Some teachers expressed the view that some children needed to stay focused and learn to follow instructions, some appeared pre-occupied with other issues at homes – perhaps 'personal problems.'

SEB3: "Using the scale below, please describe the level of difficulty the student has making friends."

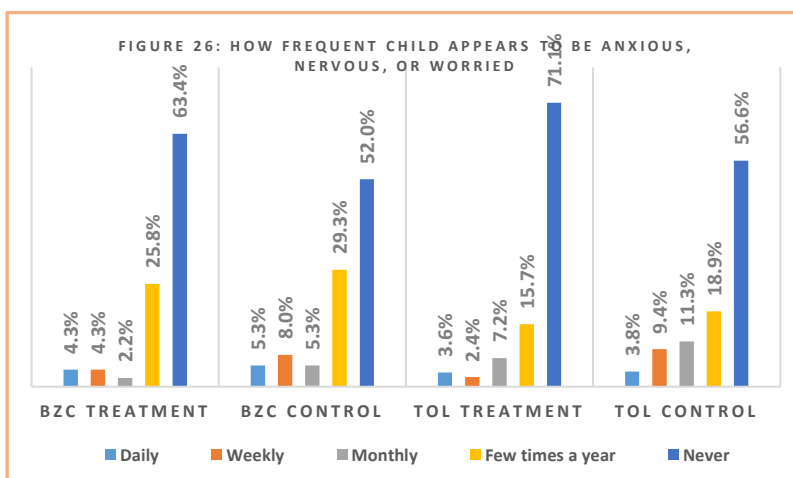
When it came to 'making friends,' the RCP had no substantial impact on children in both Toledo and

Belize City, since both showed that eight out of every ten children had 'no difficulty' making friends.



SEB4a: "Using the scale below, please describe how frequently the student appears to be anxious, nervous, or worried."

Children in the RCP in both Belize City and Toledo registered much higher levels of children who 'never' appeared to be anxious, nervous, or worried. In Belize City, six out of ten children never displayed these symptoms while in Toledo, seven out of every ten children did not do so.



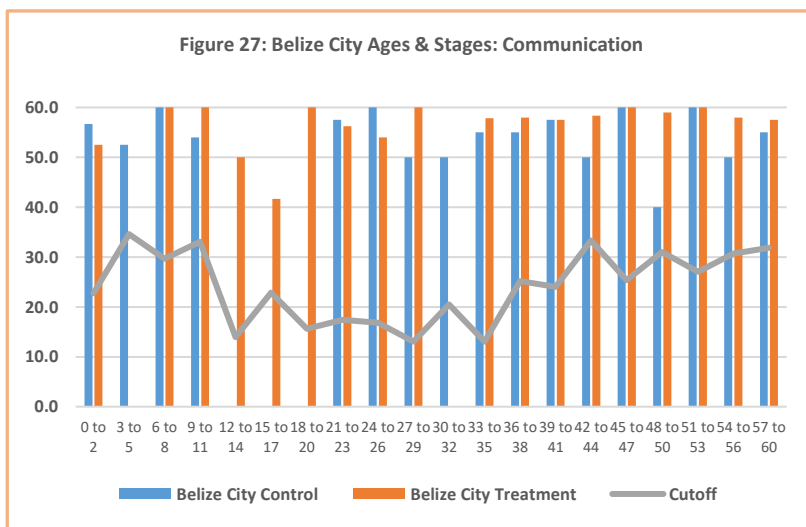
In Belize City, between 25% and 30% of children combined manifested these symptoms a few times a year while small numbers did so on a weekly and monthly basis.

While the educator survey did not ask what the causes of anxious, nervous, or worried behaviour were, anecdotal evidence suggested that some children displayed increased anxiety during and after exams and when it was time to receive report cards.

For those children who displayed these symptoms more frequently – weekly and monthly – factors included domestic and economic issues. Also, these children tended to show sadness or depressed feelings a few times a year.

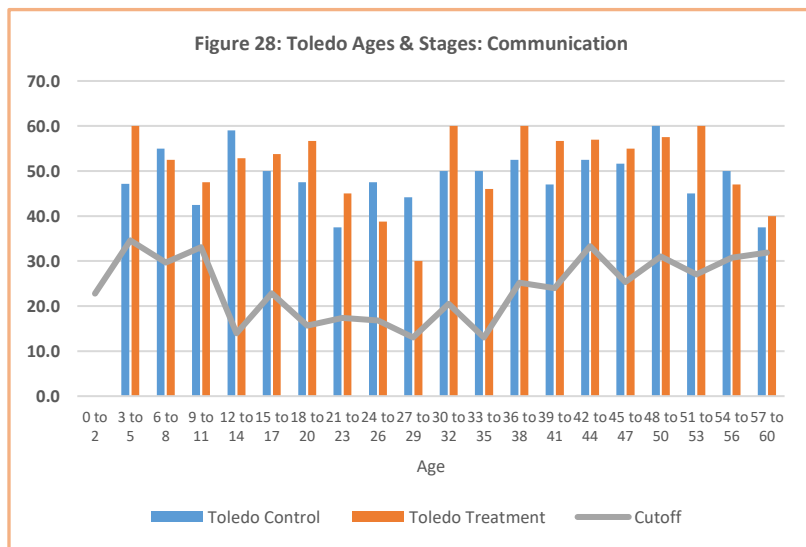
Other Ages & Stages Measures: Communication, Gross Motor, Fine Motor, and Personal-Social Communication.

In Belize City, children in both the treatment and control groups scored well above their respective cut-off points by age group. There were no significant differences in the overall scores for both groups that suggested that the RCP had no noticeable impact on children in the program.



On the overall, both groups averaged between 50 to 60 point scores indicating that children scored high in this area.

In Toledo, both groups scored well above the cut-off points for their respective age groups.



Children in the RCP in the age groups 3 to 5 months, 18 to 20 months, 30 to 32 months, 36 to 38 months, 39 to 41, and 51 to 53 markedly higher than their counterparts in the control group.

Low scores for RCP children were in the 24 to 26 and 27 to 29 age groups.

Gross Motor

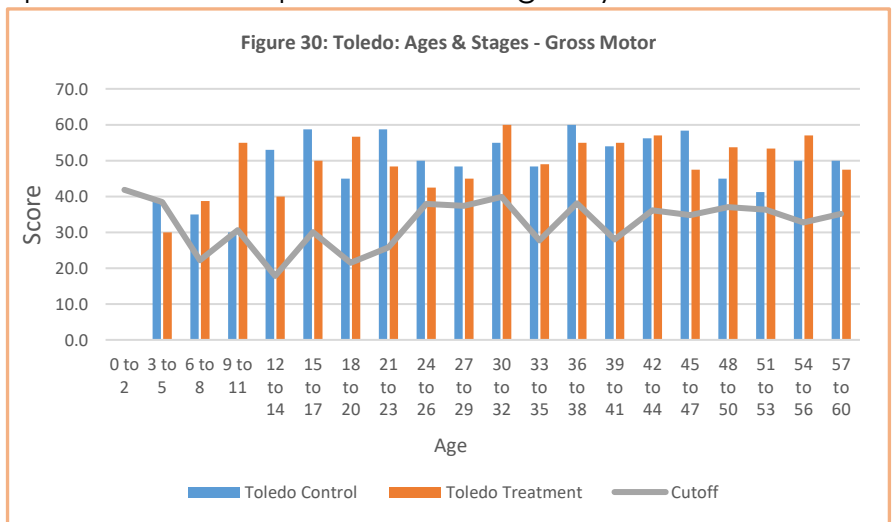
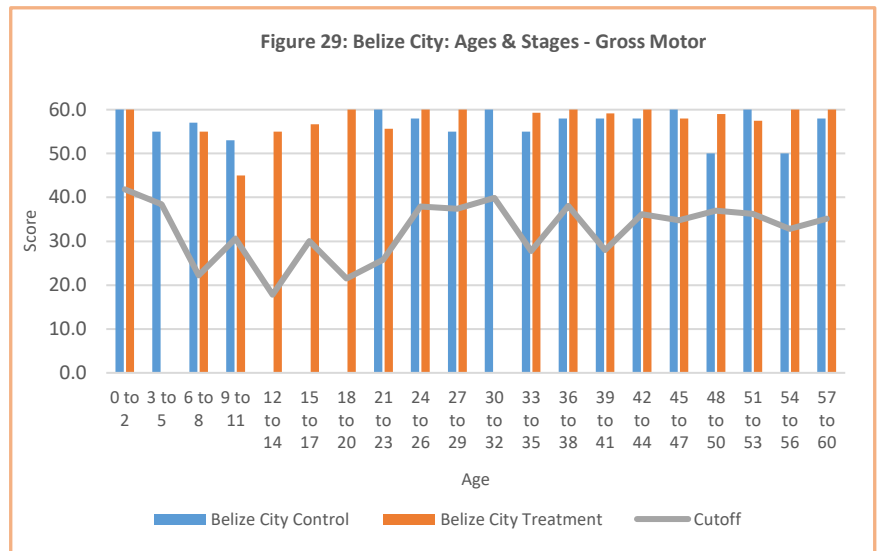
In Belize City, children in both the RCP and Non-RCP groups scored well above their respective cut-off points and there were no observable gaps in the scores between the two groups that suggested that the RCP had more impact on children in the program than those children who were not in the program.

In Toledo there were some observable gaps in the scores between the RCP and Non-RCP children.

In the 3 to 5 months age groups, children in both treatment and control groups performed below the cut-off point which indicated a need for more work with children in this age group.

Children in the age group 6 to 8 months performed marginally above the cut-off point; this was the case for children in the treatment group and for the age groups 24 to 26 and 27 to 29 months.

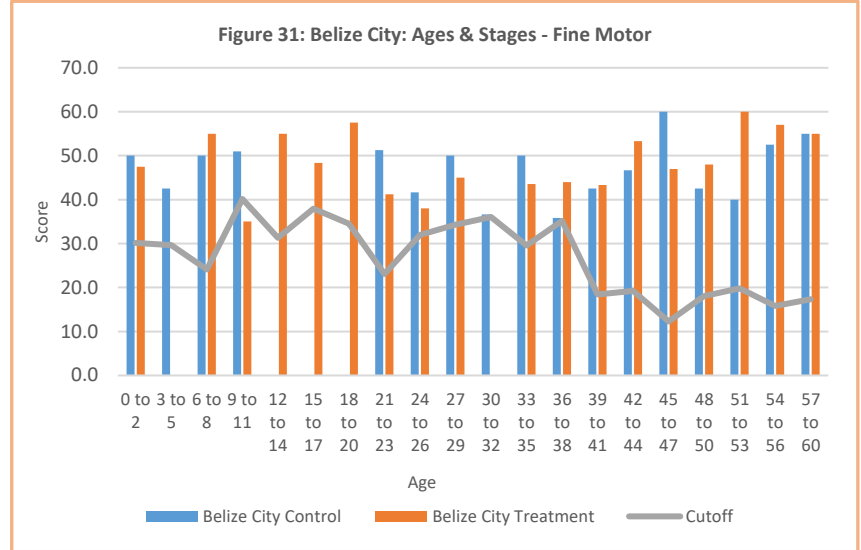
The overall scores did not point to RCP children being more developed in this area than Non-RCP children. In some cases, Non-RCP children scored higher than children in the treatment group (12 to 14, 15 to 17, and 21 through 32 months). As the sample was relatively small, certain outliers contribute to this. It does highlight, though, that certain children have significant delays that are not addressed through referrals or more intensive home visits.



Fine Motor

The 'fine motor' ages and stages evaluation for children in Belize City produced mixed results, that is, children in both groups recorded scores that were higher and lower than their counterparts.

For example, children in the RCP in age groups 6 to 8, 42 to 44, 51 to 53, and 54 to 56 months scored slightly higher than children who were not in the RCP.

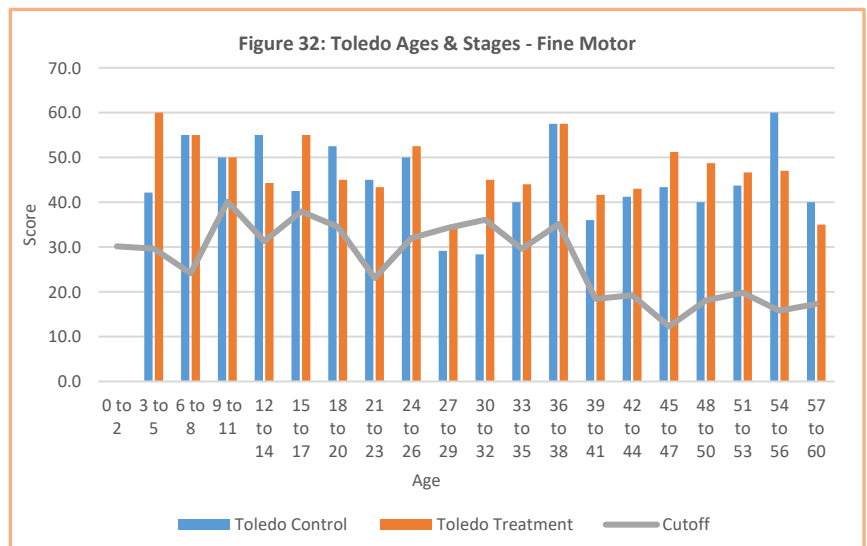


Conversely, Non-RCP children in the age groups 21 to 23, 24 to 26, 27 to 29, 33 to 35, and 45 to 47 months scored higher than children in the RCP.

In the overall though, children in both groups (exception being RCP child in 9 to 11 months age group), performed at or above the cut-off points for this indicator.

In Toledo, there were no marked differences in the overall scores of children in both groups; the exceptions were for the age group 3 to 5 months where RCP children scored much higher than Non-RCP children and conversely for the age group 54 to 56 months where Non-RCP children scored higher than RCP children.

While in the overall children in both groups scored above their respective cut-off points, in the 27 to 29 age range, both groups scored at or below the cut-off point.



In the age range 30 to 32 months, Non-RCP children scored below the ages and stages cut-off point for the fine motor indicator.

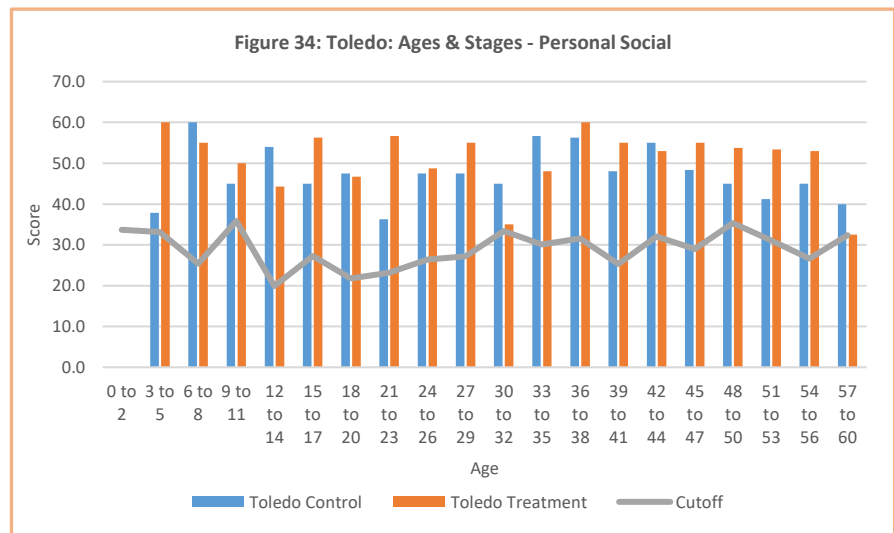
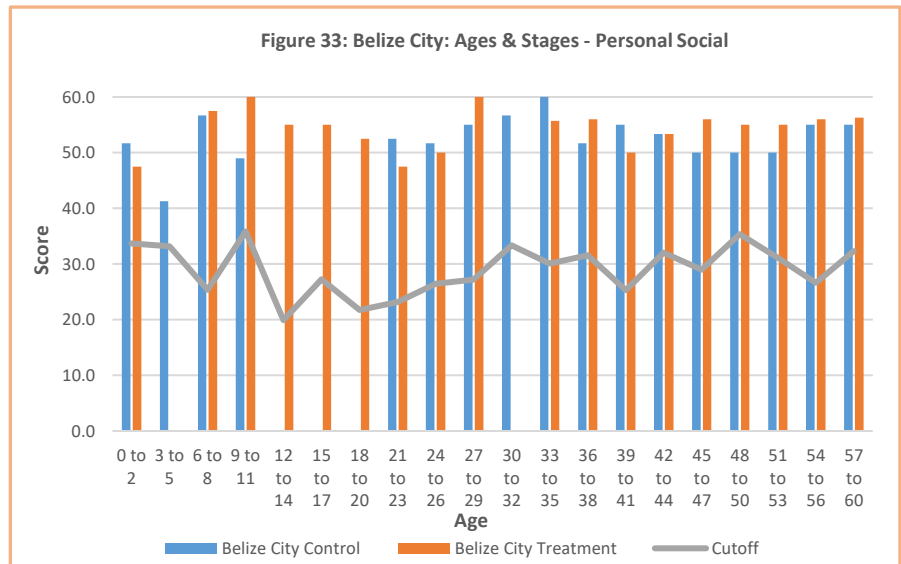
Personal-Social

The overall scores for children in Belize City - both RCP and Non-RCP - did not reveal any notable differences in scores that indicated clear impact on children in the RCP as opposed to those children who were not in the RCP.

Both groups scored well above the cut-off points for this ages and stages indicator.

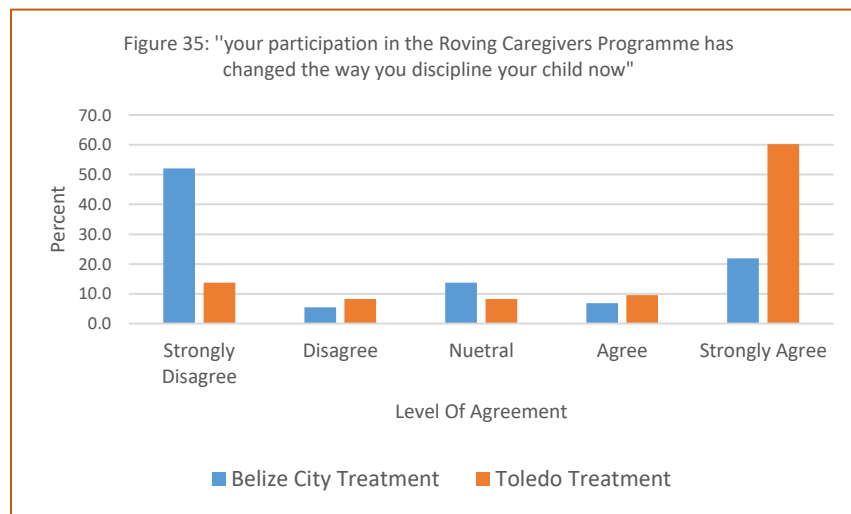
In Toledo, children who were in the RCP consistently scored higher than children who were not in the program.

The exceptions were in the age groups 6 to 8, 33 to 35, and 42 to 44 months where Non-RCP children scored higher than those children in the RCP.



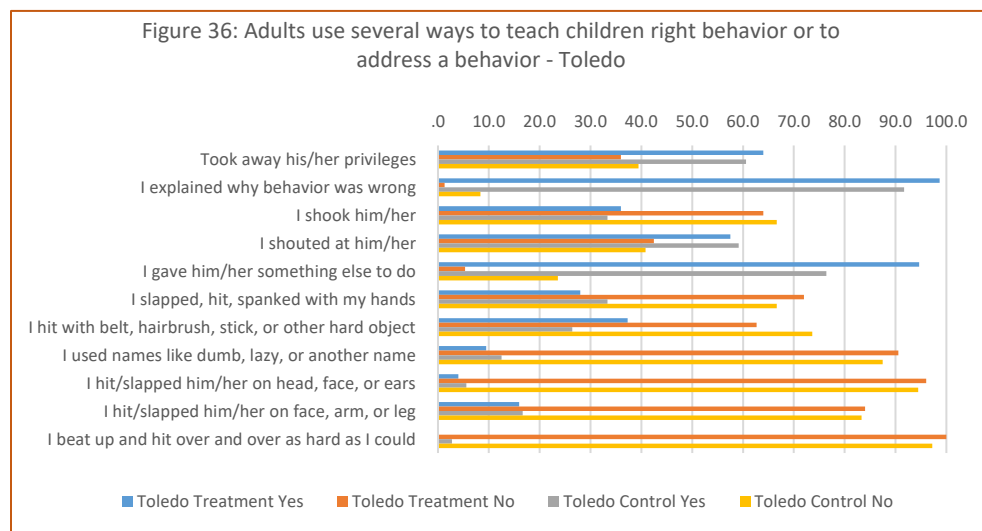
Other Evaluation Questions: “Do caregivers have a better knowledge of ECD, engage equally with their children in development activities, and improved parenting competencies with respect to child discipline?”

Caregivers indicated that the RCP helped them to appreciate key lessons in Early Childhood Development (ECD) in three main areas – child discipline, engagement with child, and types of activities they could do with children.



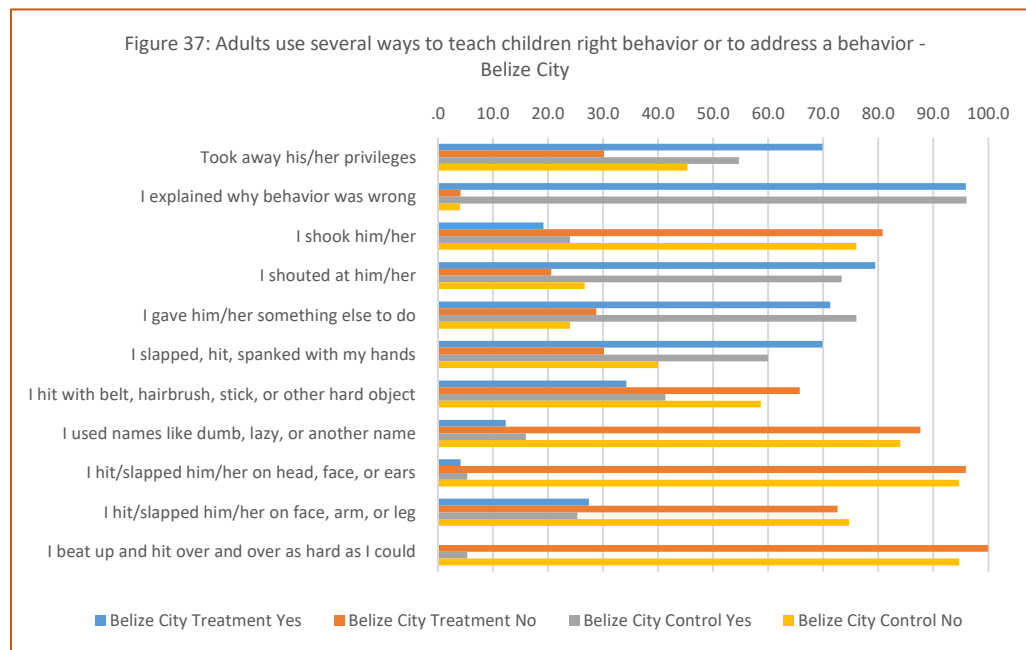
Some words used to describe their understanding of disciplining techniques included – having more ‘patience,’ refraining from using ‘obscene language,’ not using ‘beating’ as a way to teach kids, controlling tone of voice when correcting the child, taking time to listen to

their opinions. When asked whether their participation in the programme affected how they discipline their children, families in Toledo overwhelmingly responded that they strongly agree, as opposed to Belize City whereby persons strongly disagreed. Many families in Belize indicated that they already knew the alternatives to physical punishment, which is why they strongly disagreed that the programme has changed how they discipline their children.



The chart shows similar results, showing that a larger percent of families in the RCP would give their children something else to do as a form of discipline as compared to control families.

Responses between treatment and control families regarding physical forms of discipline showed only small differences, with RCP families responding 'No' slightly more often than control families.



In Belize City RCP adults displayed more positive approach to teach children right behaviour; these adults had higher incidences of using non-physical approach to discipline. These included taking away privileges, explaining wrong behaviour, giving the child something else to do. Areas of weakness though, were shouting at the child, slapping, hitting, or spanking the child with hands.

Adults in the control group were manifestly weaker when it came to teaching children right behaviour. There were very high incidences of shaking the child, hitting with belt, hairbrush, stick, or other hard object, calling them names such as – dumb, lazy, and others – hitting and slapping on head, face, ears, arms, and legs, and even hitting them as hard as they could.

When discussing the idea of engagement with the child, the word 'interact' was most frequently used to describe a key lesson learnt in ECD. Caregivers indicated that they 'learnt how to interact' with the child and how to use different methods to teach him (her).

Activities that caregivers started to do with their children as a result of the RCP included reading, teaching basic 'ABC,' arts and crafts, reading, singing songs, saying nursery rhymes, puppet show, building blocks, and counting with them.

Consistency of Rover Visits

Belize City

Almost seventy-percent (68.5%) of respondents indicated that the frequency of rover visits were 'about right.' However, more than one quarter of respondents (28.8%) said that the frequency of visits were 'too little;' this is significant.

Respondent observations as to why rover visits were not as frequent as they should have been included - rovers did not consistent in keeping their schedules, rovers eventually stopped visiting the home after two or three visits without giving any reasons for doing so. They expressed the view that rovers should visit at least twice per week.

Toledo

The findings in the Toledo district were comparable to those in Belize City. Just under seventy-percent (69.3%) of respondents said that the frequency of rover visits was 'about right.'

A significant percentage of respondents (30.7%) said the frequency of visits was too little. Their observations included – no follow-up to an RCP sensitization visit, sometimes the rover only visits one time for the month, the rover does not visit at all during rainy weather, or they just stop visiting. There were some instances where respondents indicated that they limited rover visits due to conflicts with their home-making responsibilities.

Parenting Sessions

The survey findings showed that there was higher participation in parenting sessions in the Toledo District than there was in Belize City. In Toledo, 76% of respondents had participated in parenting sessions compared to 40% in Belize City.

Also, a higher percentage of respondents in Toledo (92.3%) expressed interest in participating in future parenting sessions compared to only 40% in Belize City. Interesting to note is that one of the topics respondents indicated they benefited most from 'discipline;' this is one of the few areas that showed positive impact in both Belize City and Toledo.

Referrals to Other Programs – Special Needs

In Belize City, there were no children who were identified as having special needs. In Toledo, there were about three cases classified as ‘special needs,’ – physical, developmental, and hearing impaired. Of these three cases, only one was referred to an external organization or agency for support.

Other Support from MHDSTPA

In Belize City, a negligible percentage of respondents (5.5%) indicated that they received support from MHDSTPA (BOOST and Pantry). In Toledo, a similar number (5.3%) also received support from the BOOST and Pantry programmes.

Awareness of Other Programmes

In Belize City, 82.2% and Toledo, 82.2% and 92% of respondents respectively were not aware of other programmes offered by the MHDSTPA. For both locations, programme awareness were limited to BOOST and Pantry.

6.0 DISCUSSION ON FINDINGS

The evaluation set out to establish whether the Roving Caregivers Programme under the Ministry of Human Development, Social Transformation and Poverty Alleviation has been successful in impacting several areas of early childhood development of participating children. Responses for Belize City and Toledo will be provided jointly. Differences between the two regions will be identified and contextualised.

Evaluation Question 1: “Are the beneficiaries nutritionally healthy?”

Children are nutritionally healthy according to the UNICEF Anthropometric measurements. In general, then, children have the capacity to achieve their early childhood development targets without nutrition and health being a significant limiting factor. Although there is an element of nutrition education included in the RCP programme, there is no direct intervention in the form of providing nutritional supplements, as is done in other evaluated Early Childhood Development Interventions in the region¹⁶, to suggest that the programme has an impact on the nutritional status of the children. Also considering that control group children were also nutritionally healthy, there is no evidence to suggest impact of the programme on nutrition of the participating families.

Evaluation Question 2: “Do children in the program participate in more activities that support learning at home – including reading books, looking at picture books, telling stories, and singing songs?”

The results do not show a significant difference between the treatment and control groups regarding these areas of parental involvement in activities with the children.

The accessibility of books especially in the villages of Toledo should be considered during the budgeting for programme materials. Rovers have expressed during focus groups that there are limited resources available to purchase books for use in the programme, as well as limited to no access to libraries and book stores in the villages. In Belize City, alternatively, Rovers can more readily connect families to local public libraries as part of the RCP

¹⁶ “The Promise of Early Childhood Development in Latin America & Caribbean”, Emiliana Vegas & Lucrecia Santibanez; World Bank, 2010.

programme, which would not be possible to do in majority of the villages in Toledo.

There is a significant consideration regarding the language of books, as well. UNICEF¹⁷ has documented the importance and benefits of learning in local indigenous languages to increase the likelihood of family and community engagement in the child's learning. Although the formal education system is conducted in English, there are still significant benefits for Early Childhood Development interventions to be conducted in the local language. First and foremost, it is difficult to expect parents who do not speak or read English very well to read English story books with their children. The programme must then consider the language of resources provided to parents, and therefore also the language that Rovers speak within those villages whose primary language is not English. If indeed parents are able to read in the local language and prefer to conduct the activities in that language, the relevant resources must be developed if they do not already exist.

Evaluation Question 3: “Are the children developmentally on track with respect to literacy and numeracy?”

As the findings indicated, children between the ages of 0-5 are developmentally on track regarding motor, socio-emotional, and cognitive skills but can improve in areas of Fine Motor Development and Problem Solving for both control and treatment groups. Children in the control group show similar results to the treatment group, indicating that impact is not significant.

- Certain cases that stand out give light to the fact that many differently abled children have yet to be diagnosed. It also highlights that children may be suffering developmentally due to other factors, including violence in the home, that was not assessed in this survey but that should be considered in the targeting and therefore evaluation in the future. These cases also indicate that a formal system of reporting is very important for case management and to provide specialised attention to children in a timely and effective manner. If reports from Rovers take quite long to get to supervisors, a rapid action plan cannot be effectively implemented.
- The impact regarding cognitive development, learning, and reading is more evident in Toledo, most likely because of the earlier introduction of English using creative means into the household. As mentioned previously, future research should investigate the impact on literacy and other measures of development if home-sessions are done in the local language as opposed to English.

¹⁷ “The impact of language policy and practice on children’s learning: Evidence from Eastern and Southern Africa”, UNICEF, 2016.

Secondary research indicates there would be a positive impact, but that is yet to be determined definitively in Belize.

- The lack of impact in these core areas does not indicate that Early Childhood Development interventions are unnecessary, as the absolute scores in many areas are quite low for both control and treatment groups. More so, the lack of impact is likely due to lack of a clear programme design, targeting and therefore its implementation. Recommendations on these important concerns will be made in the following section.

Evaluation Question 4: “Do RCG children perform better at school, in terms of scorecards and the national BJAT examination?”

- The findings do not indicate that RCP students did better than their peers in regard to report card scores and achievement of the curriculum. The discussion is similar to the previous discussion question in that the implementation and structure of the programme must be strategically improved to achieve the level of impact intended by the programme.
- On a positive note, RCP students in Toledo are able to learn new things with no difficulty at a much higher rate than their control group counterparts. This is a positive achievement for the RCP. Based on feedback from Caregivers, Rovers in Toledo were quite consistent in their home visits. This has been identified as a key factor to the success of the programme and may contribute to why Toledo does show impact on some of the assessed areas.
- To ensure that there is a long-lasting impact of the programme once it is designed and implemented as recommended, educators must also be trained in Early Childhood Development techniques for a smooth transition of the child from home-based learning to formal education. Techniques from the Roving Caregivers Programme, such as making games and toys from every day materials, can be implemented in classrooms that similarly suffer from lack of resources.
- BJAT scores were not identified as an accurate reference tool because there was not a significant number of beneficiaries within the age range to have taken BJAT already.

Evaluation Question 4: “Are the children developmentally on track with respect to social-emotional behaviours, which can include how children interact with their peers and can focus on the task at hand without getting distracted?”

- The findings referenced an important note that children, especially in Belize City, in both control and treatment groups could not control their behaviour while in the classroom perhaps due to personal problems, including issues at the home among family members. The RCP programme must consider these factors and refer caregivers to other services offered by MHDSTPA,

including Community Counselling services. The programme can also consider discussing healthy conflict resolution and relationship options with parents during parenting sessions.

- Personal-social scores for the Ages and Stages Questionnaire showed no noticeable differences between the treatment and control groups. Both groups scored well above the cut off scores. This section of the Ages and Stages Questionnaire does not directly ask if children appear anxious, nervous or worried so this was asked in the General Caregiver Questionnaire.
- The findings do suggest that more children in the RCP for both Belize City and Toledo never appeared to be anxious, nervous or worried compared to the control groups. We anticipate that there should be a greater impact in this area as parents would display less physical modes of discipline and children would build a sense of security in their family setting based on the family bonding aspects of the programme.
- The domestic and economic issues in the family, though, are still affecting some children in the programme. This raises once again the importance of connecting these families to other services, including cash transfers and counselling, to ensure that children develop not only cognitively but also have strong emotional skills and a sense of security at home.

Other Evaluation Questions: “Do caregivers have a better knowledge of ECD, engage equally with their children in development activities, and improved parenting competencies with respect to child discipline?”

- In Toledo, parents were more likely to use other forms of discipline in addition to their more traditional physical forms of discipline. Parents did indicate that this was due to the RCP, but in the long-term a major goal is also to ensure that parents are not only using these alternative forms of child discipline to compliment to more physical forms of punishment but move away from physical forms of punishment entirely.
- In Belize City where families indicated that they were already aware of these alternative methods, they were still resorting to physical punishment. This is likely because more physical methods of discipline have been strongly ingrained into the culture and may be the default method of choice when Rovers are not around. In short, the beneficiary parents did not perform significantly better than their counterparts in Child Discipline, but there has been some improvement in the case of Toledo.

- While the results show minimal impact in most areas assessed, the findings did suggest that Caregivers appreciated the lessons around child engagement and indicated that when possible, they used those techniques with their children. The disconnect between caregivers' responses and the results of the child assessments does indicate that other factors may be contributing to the low impact on average. Factors that were identified through the Educator survey include violence at home and financial issues.
- It may also be the case that homes were targeted that already had access to the information and may not have been the families in most need. The RCP Evaluation in St. Lucia indicates as well that most impact is garnered when children are enrolled at a younger age and participate for the duration of the programme¹⁸.
- Majority of respondents indicated that they would recommend the programme to friends and family, indicating their appreciation for Early Childhood Development. When asked a hypothetical question on whether they would pay for such a programme, 79.5% and 83.8% in Belize City and Toledo respectively responded that they would indeed pay because the programme is seen as valuable. For those that responded no, it was mostly due to their financial capacity to pay. Majority of respondents that were willing to pay indicated that they would pay \$5 per session, based on their current income and capacity to pay. This gives us insight into how much families value the programme and that the benefits are also evident by those caregivers. In the control group, over 90% and 94.7% respectively responded that they would be willing to pay for a programme such as the Roving Caregivers, indicating that the interest goes beyond the families that we currently work with. With this sort of buy-in, expansion into these household would likely yield good results.
- This is not to say that expansion is dependent on payment from caregivers, but to indicate that there is growing appreciation for early childhood development activities. If targeting becomes more effective in ensuring that only families that are in most need receive the services, we envision that the programme can have greater impact and can expand into more communities.

Consistency

- Consistency in any form of child development intervention is incredibly key¹⁹, especially for children with additional needs and developmental delays. It is noteworthy that around almost one third of respondents indicated that Roving

¹⁸ "Roving Caregivers Programme St. Lucia Impact Results 2008-2009", Susan Branker, 2011.

¹⁹ "Care for Child Development Training Workshop in Belize", Pan American Health Organisation and United National Children's Fund, 2016.

visits are too little, sighting various points as to why. It is essential that Rovers have an enabling environment whereby they are motivated, supported, and monitored to ensure quality and consistent services are being provided.

Parenting Sessions

- A larger number of caregivers in Toledo than in Belize City indicated that they participate in parenting sessions and would like to participate in more sessions. As caregivers tend to be focused on household activities, parenting sessions can allow for the opportunity to meet with other caregivers in the community and reinforce what is being taught in the home sessions. The results also indicate that they learn from the topics being covered in the parenting sessions. Based on the responses in Belize, topics of parenting sessions may not be as relevant and engaging. It is important that caregivers' input are fed into the planning of the topics of the parenting sessions to increase their willingness to attend and participate.
- Some results also indicate that parents attended parenting sessions but could not recall topics covered. This reinforces the finding that current sessions may not be as relevant to those in Belize City.

Referrals

- Children at risk and with additional needs for care are especially affected by the efficiency of the referral systems among service providers. Children that are not meeting the required level of care in any of the various elements of nurturing care are at increased risk of facing developmental delays²⁰. If a Rover fails to refer a child to specialised health care, their regular home visits will not have the intended impact.
- Internal referrals are also currently lacking, with majority of respondents not participating or aware of other programmes offered through MHDSTPA. Based on desk results on the programme in other Caribbean countries and positive results of similar programmes across the region, early childhood development interventions should be expanded to reach the poorest, based not only on income poverty but other aspects of multidimensional poverty, including maternal education, mental health and nutrition and should provide holistic services²¹. In the next section, we will discuss important points that must be

²⁰ "Care for Child Development Training Workshop in Belize", Pan American Health Organisation and United National Children's Fund, 2016.

²¹ "The Promise of Early Childhood Development in Latin America & Caribbean", Emiliana Vegas & Lucrecia Santibanez; World Bank, 2010.

addressed in order for expansion to achieve the intended outcomes of the RCP programme in Belize.

7.0 RECOMMENDATIONS

Programme Design

A major recommendation for an effective and efficient continued roll out of the programme will be to develop a Theory of Change Framework and an updated programme design manual. Apart from the standard elements of the Theory of Change Framework, the manual should include the following steps of the programme cycle:

- Identification and Prioritisation
- Registration and enrolment
- Participation models that outline specific goals for home-based and group-parenting based sessions: number of home visits per family per week, number of parenting sessions (pre-school not within the programme design)
- Monitoring: Structure of Home plans and Journals, Ages and Stages
- Transitioning
- Evaluation including both process and impact indicators

Identification and Prioritisation

The RCP is intended for children starting from the age of zero, based on neuroscience research indicating that ages 0-3 are critical for brain development and as outlined in our Early Childhood Development National Strategic Plan 2017-2021. More specifically, the RCP aim to target children ages 0-3 in most need, categorised by various risks that would cause stress and deprivation, thereby reducing the ability of family and child to cope. This then requires a mechanism to be able to identify children at risk and in need of specialised services as early as possible to then be able to enrol into the RCP.

It is then recommended that the social registry be bolstered to include an individual child tracking mechanism whereby all key institutions providing services to children can upload data to one central database, including births. The registry should also collect data on the households, including poverty data such as household income, vulnerability to environmental emergencies and crisis, persons living with disabilities, and any other multidimensional poverty indicator defined by the MHDSTPA. Other types of information that will allow for effective targeting would be HIV status of the child and caregivers, mental and overall health of caregivers, if the child has disabilities, was born with a low birth weight, and other factors that would create stress and deprivation and reduce the capacity of the

child the cope²². With this information, we can generate a list of households with children ages 0-3 at risk or that require additional services.

Referrals from other institutions including from health institutions and organisations providing specialty care, are therefore a strong component to be able to effectively identify and prioritise families with children at risk as well as families with children with additional needs. Service providers within the Ministry of Education, Ministry of Health, and the MHDSTPA are continually being trained in Care for Child Development (CCD)²³, which comprises of checklists to assess the child's care and interaction with parents and other caregivers, typically when they visit health clinics. It will be imperative in communities where the RCP is operational that service providers trained in CCD refer families to the RCP that need further assistance based on the CCD checklists.

It should be noted here as well that it is a benefit if households targeted in the RCP are also targeted by other social protection services, including BOOST. Evidence from the region indicates that holistic programmes, providing nutritional and financial support as well as caregiving services are more impactful than programme providing only one or the other²⁴.

In the Standard Operating Procedure section, we will also highlight the importance of creating clear systems and procedures for Rovers to make referrals to other specialised institutions as well should the need arise.

Registration and Enrolment

Once a household has been identified and prioritised, the caregivers, including fathers and other key family members, in that household would be informed about the Roving Caregivers Programme by the Rover assigned to that area. It is recommended that Rovers be provided with brochures on the programme, including the structure and benefits, to distribute to the caregivers at this point to ensure that all caregivers, not only the primary caregiver, has accurate information on the RCP.

The household would provide written consent on whether they would like to enrol in the programme, and the Rover would then arrange times and days of the week to visit. There should be an option on FAMCare to upload scanned copies of these consent letters. If Rovers are provided with basic tablets, those

²² "Nurturing care for early childhood development: a framework for helping children survive and thrive to transform health and human potential", World Health Organisation, 2018.

²³ "Care for Child Development Training Workshop in Belize", Pan American Health Organisation and United National Children's Fund, 2016.

²⁴ "The Promise of Early Childhood Development in Latin America & Caribbean", Emiliana Vegas & Lucrecia Santibanez; World Bank, 2010.

could also be used for programme monitoring described later in this document as well as allow caregivers to provide digital consent.

As part of the family's own orientation process, Rovers should outline very clearly that the RCP seeks to integrate into the child and family's routine, and so the outlined times within the day that Rovers would visit can remain flexible.

Participation Models

Home-Based sessions

Based on the current structure of the Units, each home visit should comprise of broader discussions between Rovers and caregivers on identified priority topics, learning activities for children specifically based on their age and developmental level and activities for families to do together to build relationships.

The current Guide, though, does not provide clear indications of how the Units should be spread across the three years and also does not provide enough topics and lessons to extend for the entire three years, with the Rover visiting the child once per week. It instead suggests that Rovers should take a maximum of 7 months to complete the units with each family, if a unit is to be completed per home visit once a week. In that case after the 7 months, it would be the sole responsibility of the parent to ensure that the developmental milestones, as discussed throughout several units, are achieved. Therefore, it may be the case that the Rover only works with the children from age 0-7 months, but the parent will be provided with the information on how the child should develop up to the age of 3 and should be tracking that even after the Rover no longer visits the home.

It should be noted that the programme in St. Lucia²⁵ is conducted twice per week as opposed to once per week for the full three years. Caregivers in Belize responded that they believe the current structure of once per week, as long as Rovers are consistent, is adequate and appropriate. The lack of impact in most developmental areas, though, suggest that for children at risk and in need of additional support, this may not be enough, especially if the Rovers are not consistent.

Please see below for recommendations on an alternative structure and implementation of the home-based sessions:

A. Duration of the programme: The assumption is that after the Rovers leave, parents alone would continue to track the developmental milestones of the children and ensure that they implement activities that achieve those

²⁵ "ROVING CAREGIVERS PROGRAMME (RCP)", Laura Helen Consultancy, 2012

milestones. However, implementation in other countries, including St. Lucia²⁶, suggest that Rovers work with children from the age of 0 until that child turns three, and that there has been impact on children's development using this duration. If the programme is to start from zero up to three years of age, the manual should provide a much clearer timeline.

It is therefore recommended that the current manual, more specifically Section 7, be revised. Suggestions are as follows:

1. Separate Family Messages/Topics that are relevant for all families. These topics can be applied in the order based on the judgement of the Rover as to what information is most urgent based on the needs and priorities for the family. There should also be flexibility in the programme to include other Family Messages/Topics identified by caregivers that are not currently outlined in the guide. Rovers should then be able to access resources from Supervisors and other relevant partners to design these additional modules and present to the family.
2. Design specific activity guides based on the Ages and Development Outcomes²⁷, which will include the family messages for specific ages and development levels currently provided in the RCP guide, family relationship building activities, as well as activities that achieve each level of outcome outlined in the guide as well (Communication and Language, Motor Development, Sense of Self, Social Relations, Creative Representation, Movement, Exploration, and Early Logic). It is suggested that this guide follow the frequency of the Ages and Stages Questionnaire, meaning that it would have detailed activities for each age that is outlined in that Questionnaire. It is important that these guides follow a more integrated approach, providing specific guidance on how to ensure activities and interaction are built into the child and family's existing routine throughout the day.

Family relationship building activities should incorporate concepts from the Care for Child Development Framework, which promotes positive interactions and relationships between the caregiver and the child specifically²⁸. The framework is especially useful as it uses basic household items readily available to engage children and their caregivers throughout the family's usually household routine.

²⁶ "ROVING CAREGIVERS PROGRAMME (RCP)", Laura Helen Consultancy, 2012

²⁷ "Guide for Training Rovers". Caribbean Centre for Development Administration, 2009.

²⁸ "Care for Child Development Training Workshop in Belize", Pan American Health Organisation and United National Children's Fund, 2016.

3. If there are children with significant delays and/or development disabilities, the Standard Operating Procedure, to be discussed in depth below this section, would then provide guidance on additional steps and support to be provided to these children and families.
4. If there are children of different ages between 0-3 in the household, the Rover would conduct the different age appropriate activities within that one household visit, which may mean the session would extend beyond one hour. As mentioned previously, these sessions should be designed as best as possible to integrate into the routine of the family.

This recommendation would save time from developing in depth home plans per family per visit, as the home plans would reflect the in-depth activities already provided in the guide. A more simplified session report would indicate what general family message was chosen, as well as what activities were successfully completed based on that guide for the child's age and developmental level. This would then provide insight into what activities still need to be completed at the next session if they were unable to complete all activities associated with the various outcomes.

5. Timeline: It is recommended that the broader family messages are prioritised based on the expressed needs of the family and those needs observed by the Rovers. Those family messages can be covered in one or multiple sessions depending on the responses from parents and the relevance of the topics to that specific household. Once all family messages are covered thoroughly, with parents expressing competence and dedication in those areas, Rovers can begin a phase-out process whereby Rovers do not need to visit the household so intensely depending on the needs of the child. There should be an established protocol within the Standard Operating Procedures (SOP) that assists Rovers in identifying when they can begin the phase out process. For children with significant developmental delays, it is advised that Rovers maintain consistent and more intensive visits, as would be outlined in the SOP.
- B. Budget: With a more in-depth guide, a budget can be developed according to the activities associated with the age and developmental outcome. Rovers should develop a simple monthly register indicating the number of children they plan to work with and their ages and levels. If a budget is developed alongside the specific age and development-specific sessions, the Supervisor can request the appropriate amount of funds according to that information and purchase the correct type and amount of material for the Rovers, leading to greater efficiency. Budgets should also be developed alongside Key Family Messages, topics for Parenting Sessions, and additional activities outlined in the

SOP for children facing significant delays and/or disabilities so that in the event a Rover is working with a child that needs extra support, they have the appropriate resources.

Budgets must also be developed to support orientation and quarterly trainings as well as fortnightly meetings.

- C. Pre-school component in Toledo: The home-based sessions are designed for children from ages 0-3, and therefore the pre-school component of the programme for children ages 4-5 must be reconsidered as this does not fall within the intended programme design. Pre-school services in villages that do not currently have a pre-school should be provided through the Ministry of Education in collaboration with the ECD Technical Working Group. By having Rovers work with children ages 4-5 in the group sessions, it creates a time constraint on other aspects of the programme, including parenting sessions and meeting with new children ages 0-3.

Parenting Sessions

The current procedure is that Supervisors lead the parenting sessions in the various communities. The feedback from supervisors is that they often face various constraints, primarily as it relates to time and transportation in the case of Toledo, to conduct these sessions monthly as required. As Rovers are based within the communities they work, especially in Toledo, they are capable of organising and leading these parenting sessions, but Supervisors are still expected to attend to provide a supporting role as well as get an opportunity to see how Rovers are interacting with parents.

They will also be able to facilitate these sessions if the guide provided clearer details as to how parenting sessions should be structured as well as topics that should be covered. Currently, the guide does not provide this information.

It is recommended that parenting sessions allow and promote parents to,

1. Discuss as a group the topics that have been covered in the home-based session
2. Provide feedback on how useful the topics are and provide examples of how they have implemented the information as well as positive experiences integrating lessons learned into the child's and family's routine
3. Share progress on their children's development
4. Flag challenges and discuss methods used by other caregivers to address those challenges

5. Develop a support network and promote community building and cohesion
6. Conduct family bonding activities together as a group. Rhymes that Bind can then form part of the parenting sessions and can be implemented in Toledo
7. Identify common priority topics that families would like to discuss in home-based and parenting sessions that were not previously covered

In Toledo, parenting sessions can also be done in smaller groups of 3-4 caregivers as opposed to larger groups, which have been found to be more difficult to organise due to cultural concerns.

More broadly, the RCG Manual indicates that Parenting Sessions should serve to do the following:

- To build relationships
- encouragement
- ideas for generating income²⁹

If ideas for generating income is indeed covered during parenting sessions as intended, it is recommended that those sessions be developed in-depth with clear guidance and support systems in place and not haphazardly. It is recommended that the Women's Development Officer lead these specific sessions since they have experience and knowledge in this subject matter and can provide further referrals to other agencies to support any caregivers who wants to start or expand their own business. Evidence indicates that a family that is nutritionally healthy, that has access to finance and skills to become financially independent, and that has knowledge of parenting skills to ensure proper development of the child will likely thrive and potentially combat the long-term effects of poverty more effectively³⁰.

Note that topics suggested by the guide are not exhaustive, meaning that Rovers should respond to expressed needs of the caregivers to provide information on topics not originally outlined. Similarly for these topics and other more challenging topics such as addressing violence in the home, Rovers can outsource supporting staff from the MHDSTPA and/or resources if required.

²⁹ "Guide for Training Rovers". Caribbean Centre for Development Administration, 2009.

³⁰ "The Promise of Early Childhood Development in Latin America & Caribbean", Emilianas Vegas & Lucrecia Santibanez; World Bank, 2010.

Programme Monitoring

Data Entry

It is recommended that FAMCare allows for the tracking of the following:

- List of Beneficiaries including programme start date, programme end date, address, contact information, age at the start of the programme, age at the end of the programme
- Session Reports
- Home Environment Profile

Current Home Visit plans³¹ are intended to ensure Rovers are prepared for their home visits, and journals helps supervisors to ensure that Rovers are achieving their goals and issues regarding children can be flagged up. The current structure of those documents do not facilitate these goals as they are hand-written, often times done hastily and require too much desk time to review the paperwork for each home visit.

Alternatively, these documents should be designed to require minimal qualitative data entry. As opposed to home plans and journals, session reports as mentioned previously would be more effective and efficient. Sessions reports should have the following:

For preparation of the session:

- Checklist of topics to be covered in the home visit, including options to input topics prioritised by the family but not included in the checklist
- Ages and developmental levels of the children in the household
- Option to indicate whether you have the required material not readily available at the households

For after each session:

- Options to indicate whether the topic was covered fully or if you would need to review the topic once more with the family,
- Options to indicate whether all age and developmental specific activities were completed or which activities are left to complete
- Option to indicate whether necessary material were available and what specific materials are still needed, if any, especially for children with specific additional needs
- Option to indicate whether an Ages and Stages Questionnaire was completed. Rovers and supervisors can then better keep track of when Ages

³¹ Appendix 2.0

and Stages Questionnaires need to be completed according to the approved time intervals

- Option to indicate the date of the last doctor visit, including height and weight measurements and immunization records. This will allow for verification with Ministry of Health data on the registry
- Option to flag any serious developmental issues, including health issues, disabilities, signs of abuse. In serious cases, the Standard Operating Procedure would outline how to proceed in addressing these issues. There would then also be the option to track whether those additional actions outlined by the SOP are being achieved

Rovers would then be required to upload these session reports to FAMCare monthly, when they would provide the Monthly Register to the Supervisor and obtain their materials for the month.

To reduce the time taken to input session reports at one time monthly, it is recommended that FAMCare updates its functionality to allow Rovers to upload information offline. All the information would be downloaded to the server when they connect to the internet at the office. To facilitate this, there would need to be an investment in basic tablets to allow Rovers to input information in the field. Session reports would explicitly be designed using checklists and tick boxes to be user friendly and efficient. The provision of tablets could also serve as an additional tool to help work with families, especially those with children that require additional assistance.

Each household should have, in addition to relevant beneficiary information and session reports, a profile on whether the home environment is conducive to positive early learning, with nurturing and inclusive characteristics for those children with significant developmental delays and/or disabilities. It is recommended that the profile on the home environment be in a checklist format and updated once home characteristics are positively addressed.

Monitoring of Child Outcomes

The Ages and Stages Questionnaire should be done by the Rovers alongside the parents at the established intervals outlined by the Ages and Stage Manual, ideally every 6 months. Continuous internal monitoring of the children can ensure that issues are flagged up and addressed in a timely manner. The development outcomes outlined in the RCP Manual i.e Communication and Language, Motor Development etc. are similar to those assessed in the Ages and Stages tool, so the tool should be able to accurately capture what is being taught in the RCP.

To ensure that children are in good health and are on track nutritionally, Rovers should ensure that parents take children for basic health check-ups, including

height, weight, visual and hearing checks, every six months or according to the time interval recommended by the Ministry of Health according the age of the child.

Transitioning

Children officially graduate from the programme upon turning three, even if the phasing-out process started earlier. A proper phase out and transition plan should be outlined, including the following:

- Conducting a final Ages and Stages Questionnaire assessment of the children alongside the parents
- Ensuring parents have access to necessary material to continue providing nurturing care to the child in the home environment
- Preparing the next service to receive the child, primarily pre-schools
- Preparing the child for the next service

If there are any serious issues that arise from the assessments that were not previously addressed, Rovers should assist parents in connecting the relevant supporting institutions, whether it is a health professional or the principal of the pre-school the child is intended to attend, to ensure that a plan of action to address any developmental delays and/or disabilities is established.

Evaluation

To achieve a scientific evaluation of the programme as it continues to expand and grow as a programme under the MHDSTPA, a formal Theory of Change framework, including indicators and means of verification, must be developed alongside a Monitoring and Evaluation Strategy and accompanying budget. This process will allow future monitoring and evaluation activities of the programme to provide more specific insights into the different areas of the programme that are yielding positive results and identify areas of weakness that can be improved.

Future RCP evaluations should also investigate how effective the child tracking mechanisms and referral services are in providing multisectoral and holistic support for children at risk and in need of additional services. The RCP must be mapped among other ECD actions outlined in the National Early Childhood Development Strategy so that gaps, especially for the most vulnerable children, can be identified and addressed by the most appropriate programmes and institutions.

Impact

To understand the long-lasting impacts of the programme, a longitudinal study should be conducted. For this to occur, the suggested tracking mechanism must be implemented effectively to ensure data on future schooling, health, and other areas identified as crucial to the Ministry is collected and updated on to FAMCare or a central child tracking system. This should be designed to track children from enrolment into the program through to age 16 at a minimum.

It is recommended that the listing of past beneficiaries that have already graduated be contacted once a year to confirm a. address, b. change of contact information, c. update on educational institution of the children in the household. It is also recommended that caregivers be given a clear and user-friendly method to contact a Focal Point in the MHDSTPA in order to update their information, including the changes listed above.

Performance Evaluation

Intuitively, the success of the programme requires that Rovers remain dedicated and consistent with their sessions. To remain dedicated, Rovers must receive relevant and timely feedback as well as be provided with opportunities to improve on areas of weakness. It is recommended that when the results of the Ages and Stages are reviewed every six months, that supervisors also take the opportunity to provide feedback on the home sessions, parenting sessions, and sessions reports. The current RCP Guide provides a Programme Quality Assessment (PQA) that should be used. It is the responsibility of the Programme Manager to ensure Supervisors submit a RCPQA every six months for each Rover, and that this be used as a tool to determine staffing incentives, including bonuses, tokens of appreciation, and/or certificates of appreciation.

Standard Operating Procedures (SOP)

Alongside the programme design manual, there should be an accompanying standard operating procedures (SOP) manual. This manual should give insight into the specific activities that would serve to implement and achieve the goals outlined in the design manual, as well as provide clear guidance and protocols on how to deal with certain issues that may arise. Currently, Rovers report incidences to Supervisors, and Supervisors would then make referrals if needed. It would be more effective if there is a clear procedure with actors clearly identified, including community health workers, clinics that support differently abled children, public clinics, and other departments within the MHDSTPA.

This SOP manual would include the following:

- The current guide for Training Rovers including the specific activities to do with children (recommendations on the design of the guide provided earlier)
- List of material and budget associated with each activity
- Ages and Stages Questionnaire: how to use it and how often
- Orientation and Regular Training Workshops
- How to fill in Session Reports
- Children with disabilities: what to do when you believe a child may have a disability, specific activities to do with a child that has been diagnosed, and outline how number of visits would change in these cases (Rovers may need to visit the home more often)
- Children that show signs of ill health and poor nutrition
- Children scoring below cut off on Ages and Stages Questionnaire: what to do when a child scores low
- How Rovers should proceed if key family messages and lessons are not being retained. There should be an option to re-evaluate current methodology with the Supervisor and develop alternatives
- Parenting Sessions: How to conduct a parenting session, including suggestions on how to combat contextual issues, such as women gathering in the remote villages; ensure that Rovers are trained in providing information for the parenting sessions
- Procedures in the event of an Emergency or Crisis
- How to complete and submit the monthly register
- How to recognise and initiate the phase-out process
- Transitioning process for both the family and the replacement Rover if a Rover is on extended leave/resigns

Orientation and Regular Training

When new Rovers are hired, they must undergo essential orientation training on the following topics:

- RCP Manual
- Ages and Stages Questionnaire
- Session Reports
- Using FAMCare/data capture tools, such as tablets
- Developing Monthly Registers
- Early Childhood Development theory
- Working with children at risk and with additional needs

Quarterly Trainings should be organised for Rovers to review these essential programme material as well as to provide additional relevant information on relevant topics such as health emergencies that may arise, new methodologies in child care, etc.

Fortnightly meetings should also take place between the Supervisors and Rovers to discuss challenges allow for swift resolution of those issues as well as share successes to allow for peer learning.

A training and meeting schedule and budget should be developed by the Programme Manager and the Supervisor on a yearly basis to submit alongside the overall programme budget to ensure appropriate resources are available to provide quality trainings.

Partnerships

Following the Nurturing Care Framework³², there are several components to consider to ensure that children are developmentally on track and are able to develop to their full potential. The RCP delivers strongly on ensuring responsive caregiving and opportunities for early learning. Other important components include good health, nutrition, and security and safety that are relatively minimally covered in the RCP. To address all components effectively, partnerships are crucial.

Partnerships will especially be key among the following agencies:

- Ministry of Health, including local clinics and community health workers
- Other departments within the Ministry of Human Development, Social Services and Poverty Alleviation
- Civil Society providing specialised services including the Belize Council for the Visually Impaired and The Inspiration Centre that would allow for diagnostics and support for children that require specialised care.

These partnerships should be established throughout various period of the programme including the following:

- Developing and executing the Standard Operating Procedures, especially when working with children that are differently-abled, nutritionally deficient and facing poor health
- Designing and delivering parenting sessions, especially in regard to addressing other components of the Nurturing Care Framework such as ensuring the good health, financial, physical and emotional health of caregivers

³² “Nurturing care for early childhood development: a framework for helping children survive and thrive to transform health and human potential”, World Health Organisation, 2018.

An important opportunity exists for strengthened partnership through the recommended child tracking mechanism that will connect various key institutions supporting children and their families. Both internal and external partnerships are evidently then very important.

Policy Recommendations:

Staffing Incentives

- As expressed earlier, the success of the programme will depend on the continued dedication of the Rovers. Through the Focus Group with the Rovers, a suggested form of incentive is formal training system whereby Rovers participate in continuous learning opportunities to obtain formal certifications. This includes becoming certified Community Health Workers, as some Rovers in Belize City have achieved, receiving certifications on Early Childhood Development, and be provided with opportunities to further their own formal education in the field.
- The programme should outline the upper and lower limit of the number of children that each Rover should work with each month according to the pay scale. With the recommended tailoring of the programme, whereby Rovers visit children less frequently during the phase-out process, it may mean that Rovers have time to see more children than currently, which they should be compensated for. In Jamaica, each Rover is assigned to around 30 families³³, which would allow each Rover to visit around six families per day. It is then recommended that if they see more than 30 families at any one time, that they are additionally compensated for this.

Budget

The budget for the programme must more systematically cost the following:

- Materials required for each activity outlined in the recommended RCP Manual. As previously indicated, Rovers can then more effectively produce material requests based on the age and developmental groups they are scheduled to visit for the month.
- Basic transportation, in the form of bicycles or a transportation stipend, for Rovers to access homes while carrying RCP materials.
- Since the inception of the RCP, UNICEF has been its main funder with contributions made from Government of Belize (GOB) through the MHDSTPA and drawing on CAP II and OCF funding. Given the need for, and potential for future expansion of the RCP, the programme should have its own programmatic and cost centre with periodic budgets and budget allocations to ensure the sustainability and impact of the programme in the future.

³³ “Roving Caregivers’ promote early childhood development at home in Jamaica”, UNICEF, 2006

APPENDIX:

- 1.0 Roving Caregiver's Journal
- 2.0 Roving Caregiver's Home Visit Plan
- 3.0 Rover's Monthly Register

Appendix 1.0

Roving Caregiver's Journal

Date of visit: _____

Child/Family Visited: _____

Family Goals: _____

<p>Family Messages:</p> <ol style="list-style-type: none">1.2.3. <p>Resources provided to the family:</p> <p>Learning Activity/Materials needed:</p>	<p>Family-Relationship-Building/Toy-Making Materials:</p> <p>How will the family use the materials?</p> <p>Next steps:</p>
<p>The family shared the following information:</p> 	<p>My Child Observations at Choice Time:</p> <p>During the Learning Activity:</p>

Home Visit Plan

Family/Child's Name: _____

Date and time of next visit: _____

Family Messages to share:	
Family goal focus:	
Storybook/Story to share:	Songs or rhymes to sing:
Materials for Choice Time:	Family-Relationship-Building/Toy-Making Materials:
Materials for Learning Activity:	Learning Outcomes/Key Experiences anticipated during the Learning Activity:

Appendix 3.0

Month	Name of Caregiver	Name of Child	Developmental Level of Child (according to guide)	Budget (predetermined with age-appropriate and developmental level activities)
Example				
January	Lisa Monteroz	Jessica Monteroz	6 Months	\$30
January	Jose Carballo	Juan Carballo	1 year	\$50
January	Ebony Sanchez	Angelia Sanchez	2 months	\$20
January	Javier Mendez	Karen Mendez	2 years	\$40
Total budget for the month for Rover 1				\$140

**All children the Rover is planning to work with for that month should be listed