Honors Thesis Proposal

Working Title

Liahona Children’s Foundation Program Evaluation: Is there a relationship between number of health classes offered and changes in nutritional status among children enrolled in the program?

Project Purpose

This project will serve as a program evaluation for Liahona Children’s Foundation (LCF). The primary aims of this evaluation are as follows:
1. Determine how frequently the health classes are being taught in each LCF district.
2. Identify the relationship between number of health classes taught and change in nutritional status of the children enrolled in each district.
3. Gather general opinions and about the health classes from LCF’s local program coordinators.

Project Importance

Liahona Children’s Foundation’s mission is to eliminate malnutrition in infants and toddlers. Like any other nonprofit organization, LCF operates with limited resources, and seeks to use those resources as efficiently and responsibly as possible. Currently, some of LCF’s resources are being used to provide classes that educate families about hygienic, healthy food preparation and meal planning. To date, no program-wide evaluation regarding these classes has been conducted. The proposed project is an initial attempt at determining how consistently the classes are being implemented, observing whether a relationship exists between the classes and nutritional outcomes in the children, and gathering general feedback about the lessons from the local program coordinators. Results from this project will provide LCF with information that will be useful in understanding how the classes fit in with the program’s overall mission, and in identifying ways to ensure that the lessons are as effective as possible.

Project Overview

Liahona Children’s Foundation (LCF) is a humanitarian organization that is based in Utah and has a presence in 19 countries throughout the world.¹ LCF screens children for malnourishment, stunting, and wasting, and provides families with the supplements necessary to improve their children’s nutritional status. In an effort to promote self-reliance among participants, last year

¹ Read, 2018.
Shannon Barham

LCF introduced a series of health and hygiene classes that parents are required to attend before receiving their children's nutritional supplements from LCF. These classes are currently offered in the Spanish- and Tagalog-speaking countries that LCF serves, namely the Philippines, Bolivia, Colombia, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Paraguay, and Peru. Classes are taught by local program coordinators, and the objective of these classes is to increase parental knowledge of nutrition and hygiene, and ultimately encourage parents to make more nutritious and hygienic choices in their home, thereby reducing primary malnutrition and malnutrition secondary to food borne illness. While the theories behind these classes are important to LCF’s mission, it is unclear whether teaching these classes has contributed to LCF’s overall mission, which is to improve the nutrition status of children enrolled in the program. The primary purpose of this evaluation is to determine how many health classes have been taught in each district, and to determine if a relationship exists between the number of health classes taught and the changes in nutritional status of children in each district. The secondary purpose of this evaluation is to gather opinions about the health classes from LCF’s local program coordinators.

For this study, a brief on-line questionnaire will be distributed to the regional coordinators in each of LCF’s 10 Spanish- and Tagalog-speaking countries. The coordinators will then distribute the questionnaire to each local program coordinator in his or her region. In total, surveys will be sent to 144 locations. The survey will also be available as a hard-copy in the case of technical issues, and for cases in which the local program coordinators do not have reliable Internet access. Questions will primarily focus on whether the classes are being taught, how frequently they are taught, and how many participants generally attend. A few open-ended questions will also ask for the local program coordinators’ thoughts and opinions about the health classes (see attached surveys). The open-ended questions will be coded and summarized into themes. This data will be used to suggest recommendations for lesson improvement.

The quantitative responses, along with pre-existing data about nutritional outcomes among the children enrolled in each district, will be analyzed. Nutritional outcomes data include age, gender, weight, height, and weight-for-height and weight-for-age Z-scores. We will establish correlation coefficients and perform a regression analysis to determine the validity of our hypothesis that a positive relationship exists between lesson frequency and/or attendance and favorable changes in the children’s nutrition status.

This hypothesis is consistent with evidence from the scientific literature. Coordinators at LCF have found that those attending the health lessons are primarily mothers of children enrolled in the program. A growing body of literature suggests that maternal nutrition knowledge is a predictor of child nutrition status, independent of the mother’s level of formal education.²⁻⁴ A

² Block, 2002
³ Block, 2007
⁴ O’Brien, 2012
few studies suggest that, in food insecure areas, providing mothers with targeted nutrition education and nutrition supplementation can be an efficient, cost-effective way to improve child height-for-age Z scores, weight-for-age Z-scores, and stunting. Various country-specific nutrition interventions aimed at increasing maternal nutrition knowledge have demonstrated that maternal nutrition education can improve child micronutrient status. Further, dietetics and nutrition professionals recognize that parental involvement in nutrition and weight management programs is more effective than only including young children. If this principle holds true within the communities LCF serves, we can expect that an increased number of health lessons provided to parents will have a positive relationship with nutritional outcomes among children, although no causation can be implied. If we do not find any relationship, further analysis will be conducted outside of this thesis.

As a supplement to the data collection, I will travel to Peru to meet with a few local program coordinators and conduct more extensive surveys in person. This will allow for more in-depth, honest conversations regarding the health lessons. While in the country, I will attend at least one health class and talk with participants to get a general feeling for how the classes are received and perceived. Responses will be written down, summarized, and presented to the LCF board along with the data analysis.

Qualifications of Thesis Committee

Faculty advisor: Rickelle Richards, RD, MPH, PhD
Dr. Richards, PhD, MPH, RDN has over ten years of experience in qualitative and quantitative research methods among low-income families and has published 13 peer-reviewed articles in the past 5 years. She also teaches undergraduate courses in community nutrition, nutrition through the life cycle, and a graduate maternal and child nutrition and health course. I took nutrition through the life cycle, in Winter 2018 and I am currently enrolled in her community nutrition class.

Reader: Benjamin Crookston, PhD, MPH
Dr. Crookston is an associate professor in BYU’s department of Public Health. He is also the Master’s of Public Health program director, and has extensive experience in program evaluation and international research. He has worked as a consultant for many

5 Bhutto, Das, Rizvi, Gaffer, & Walker, 2013
6 Sahn & Alderman, 1997
7 Kebede, 2005
8 Miller & Rodgers, 2009
9 Burchi, 2010
10 Golan & Crow, 2004
11 Katz et al., 2011
international humanitarian organizations and currently serves on the Liahona Children’s Foundation Advisory Board. He designed and instructed the courses titled Research and Evaluation Methods and Program Planning and Evaluation. I took Dr. Crookston’s class, International Health, in Winter 2018. He connected me with LCF in January 2018.

Project Timeline

September 28-October 15 2018
Draft, edit, and translate Qualtrics survey and hard-copy survey. Contact regional coordinators to inform them about the program evaluation and the forthcoming survey.

October 16-18 2018
- Print and assemble hard copy surveys, stamp and label return envelopes, compile all needed materials for regional coordinators.
- Mail packets with all hard-copy survey materials to regional coordinators for dissemination to local program coordinators who do not have internet access.
- Send out recruitment email with anonymous survey link to regional coordinators for dissemination to local program coordinators who have internet access.

October 20, 2018
Obtain nutritional status data.

October 23, 2018
Draft questions for in-person interviews.

November 2, 2018
Email regional coordinators to remind them about the survey and request help in attaining responses.

November 9, 2018
Finalize questions for in-person interviews.

November 16, 2018
Deadline to fill out Qualtrics survey; all hard-copy surveys should be sent back by this day.

November 19, 2018
Begin process of coding open-ended responses from Qualtrics survey.

November 25, 2018

Proposed travel date to Peru.

December 15, 2018

Scan all hard copy surveys and add responses to Qualtrics data (csv format).

December 20, 2018

Compile data gathered in the country, prepare in-person section of project report.

January 10, 2019

Begin data cleanup.

January 14-25, 2019

Complete coding, run regression analyses with survey responses and LCF anthropometric data.

February 15, 2019

Complete first draft of report.

February 30, 2019

Complete second draft of report.

March 4, 2019

Present findings to LCF board.

March 5, 2019

Submit completed thesis.

Schedule defense 2/22

Defense deadline 3/6
## Funding

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Rationale</th>
<th>Proposed Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>Envelopes</td>
<td>50</td>
<td>It is expected that about 1/3 of all program coordinators will not have access to the internet and will need to fill out a physical survey. We will provide pre-addressed envelopes.</td>
<td>$10</td>
</tr>
<tr>
<td>Printed Surveys</td>
<td>50</td>
<td>The survey will be consolidated into a 4-page pamphlet that will fit into a 4.5 X 9.5 envelope.</td>
<td>$25</td>
</tr>
<tr>
<td>Postage</td>
<td>50</td>
<td>We will need to send packets of surveys and envelopes to the regional coordinators in each country, and pay for the return postage of about 50 envelopes.</td>
<td>$100</td>
</tr>
<tr>
<td>Travel Costs</td>
<td>1</td>
<td>In order to get a true-to-life understanding of how the health lessons are being taught and received, I plan to travel to Peru to conduct a few in-depth interviews with some local coordinators and participants. Peru is the most logical choice because I served my mission there (2013-2015) so I am familiar with the transportation system and am fluent in Spanish. Peru is home to many LCF sites within close proximity to one another, which would make it easy to travel between them. I recognize that this will provide us with a country-specific snapshot of the LCF program, rather than a universal picture, but the in-person perspective will add greater depth and insight to our presentation to the LCF board than remote data collection alone.</td>
<td>$850</td>
</tr>
</tbody>
</table>

Total: $985

In addition to applying for funding through the Honors Program, we will also apply for funding through BYU’s College of Life Sciences.

## Culminating Experience

Because this is a project evaluation, it is not eligible to be treated as research. The purpose of this evaluation is to inform LCF leadership about the functionality of the health classes and how they relate to the children’s outcomes. For these reasons, the culminating experience for this project will be a presentation to the LCF board. The presentation will include the results from our data analysis and the major themes that emerge from the local program coordinators’ feedback about the health lessons, both from the survey and the in-person discussions.
References


Conclusion

This project will be a valuable experience for both the student and LCF. Ultimately, however, the reasons behind conducting this project center on the children LCF serves. Please see the attached surveys for more information.
Shannon Barham


from https://search.proquest.com/docview/220282073.

O’Brien, C. M. (2012). Maternal nutrition knowledge and child health outcomes: An analysis of
nutrition promoters in a Mozambique orange-fleshed sweet potato intervention Available
from ProQuest Dissertations & Theses Full Text: The Humanities and Social Sciences

nutrition-programs.

importance of age-specific effects. World Development, 25(4), 577-588. doi:10.1016/S0305-
750X(96)00118-0.
**Question 1**

In which stake do you volunteer with Liahona Children's Foundation? *(fill in the circle)*

- [ ] Aguilar
- [ ] Alaminos
- [ ] Antique
- [ ] Bacolod North
- [ ] Bacolod
- [ ] Bacolod South
- [ ] Bayambang
- [ ] Binalbagan 1st
- [ ] Binalbagan 2nd
- [ ] Bogo
- [ ] Calape
- [ ] Bulan
- [ ] Cadiz
- [ ] Calasiao
- [ ] Dagupan
- [ ] Iloilo North
- [ ] Iloilo
- [ ] Jordan
- [ ] Guimaras
- [ ] Kalibo
- [ ] La Carlota 1
- [ ] La Carlota 2
- [ ] Legazpi
- [ ] Liloan
- [ ] Makati
- [ ] Mandaue
- [ ] Mangaldan
- [ ] Montalban
- [ ] Novaliches
- [ ] Rosales
- [ ] Roxas Capiz
- [ ] Sagay 1
- [ ] Sagay 2
- [ ] Sipalay
- [ ] Sorsogon
- [ ] Tabaco
- [ ] Tagbilaran
- [ ] Urdaneta
- [ ] Catanduan
Question 2

Over the past year, did you teach any of the health classes to Liahona Children's Foundation participants?

○ Yes

○ No, but someone else did

○ No

Q2a If you answered “No,” please use the lines below to let us know why the lessons have not yet been offered.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

If you answered “No,” please skip to Question 8.

Question 3

How often are classes usually given?

○ Weekly

○ Monthly

○ Every two months

○ Other (please specify) ________________________________
Question 4

Over the last year, how many health classes were taught?

- [ ] 1
- [ ] 2
- [ ] 3
- [ ] 4
- [ ] 5
- [ ] 6
- [ ] 7
- [ ] 8
- [ ] 9
- [ ] 10
- [ ] 11
- [ ] 12
- [ ] 13
- [ ] 14
- [ ] 15
- [ ] 16
- [ ] 17
- [ ] 18
- [ ] 19
- [ ] 20
- [ ] Other (please specify) ___

Question 5

What have you enjoyed about teaching the health classes? What has been challenging?

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

Regional Coordinator Survey - Philippines
Question 6

About how many people generally attend each health class?

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25
- 26
- 27
- 28
- 29
- 30
- Other (Please specify) ____

Question 7

Would you change anything about the lessons?

- No
- Yes

Q7a If you answered “Yes,” what would you change about the lessons?

______________________________

______________________________

______________________________

Regional Coordinator Survey - Philippines
Question 8

Have any participants joined the Church of Jesus Christ of Latter-day Saints since becoming involved with Liahona Children's Foundation?

- [ ] No
- [ ] Yes

If you answered “Yes,” how many? _______

Thank you for all of your hard work with Liahona Children’s Foundation and for filling out this survey! Please place these papers in the pre-stamped, pre-addressed envelope provided for you and send it before December 5, 2018.