

Family Advising Strategies for Social Workers Using
Budget and Saving Indicators
Interactive Qualifying Project



An Interactive Qualifying Project submitted to the Faculty of
WORCESTER POLYTECHNIC INSTITUTE
in partial fulfillment of the requirements for the degree of Bachelor of Science

Submitted to:

Professor Angel Rivera
Dorothy Wolf
Worcester Polytechnic Institute
Fundación Paraguaya

Submitted by:

Enzo Borges
Eduardo Italiani
Lindberg Simpson

Date:

May 13th, 2021

This report represents the work of three WPI undergraduate students submitted to the faculty as evidence of a degree requirement. WPI routinely publishes these reports on its website without editorial or peer review. For more information about the project program at WPI, please

see <http://www.wpi.edu/Academics/Projects>

Abstract

Fundación Paraguaya (FP) has implemented the Poverty Stoplight (PS) Program to empower impoverished families to combat their multidimensional poverty. The PS measures the poverty of various aspects of a family's living situation and categorizes them under 50 different indicators. Data from FP has shown that families struggle the most with the savings and budgeting indicators. Thus, our goal was to develop training materials for social workers in these two areas so they could further assist the families. We conducted focus groups with the social workers and their mentors to gather data for the materials. The training materials were in the form of five short videos about how to teach and motivate families to budget and save. Our recommendation is to prioritize the development of audiovisual material over written alternatives.

Executive Summary

Fundación Paraguaya (FP) is a non-profit organization whose goal is to empower families to eliminate their multidimensional poverty, through innovative and sustainable solutions. Thus, FP has implemented the Poverty Stoplight (PS) Program. The PS is a multidimensional self-assessment tool used by the families to measure the different aspects (called “indicators”) of their current living conditions as either green, yellow or red which symbolize “no poverty”, “poverty” and “extreme poverty” respectively.

The social workers from FP (called “asesoras”) have found that families displayed the most reds and yellows on the savings and budgeting indicators. Therefore, it was established that the goal of this project was to help the families, through the asesoras, to get them out of poverty. To accomplish this, we continued the work developed by the 2020 IQP team (Stundtner, 2020) by creating training videos for asesoras, working in the savings and budgeting indicators, in the form of a mini-series consisting of five videos. The two-part methodology we employed focused on information gathering through focus groups and training material development.

The goal of the focus group approach was to gather information about the current training materials and ideas about possible improvements. The focus group conducted with the asesoras’ mentors or “capacitadores” gave us great insight into the training process for the asesoras. On the other hand, the focus groups conducted with the asesoras allowed us to gather their perspective of how to improve their current training materials. The key results from these focus groups showed that training materials in video format were highly preferred to those in text or audio format. The asesoras also felt that a video format would be especially fitting during the current COVID-19 pandemic where there are very few in-person meetings.

The first step of developing the video series was designing the script. The script for each video was developed using the information we gathered from the focus groups. Each script was revised once with each party within the team (FP supervisors and project advisors). The script was sent to the FP team for recording in their film studio. The finished video was edited using Sony Vegas Pro 18, where supporting text, images and transitions were added to the videos. The videos were then revised by the team and sent as the final product.

The three videos on the “Family Savings” indicator are intended to guide the asesora re-define, motivate, and explain the concept of saving with families. The first video intends to guide the asesora to investigate the family’s opinion of saving. The video takes off from that point to re-define and state the importance of saving. The second video guides the asesoras to help the families realize their motivations to save. The video’s main concept is that saving takes discipline and motivation. The final video simply explains different strategies of saving, such as support groups, collective saving, and using financial entities.

The concept explored throughout the budgeting video series is the relationship between habits and spending. The first video helps the asesora to explain the concept of good, bad, and neutral habits vis-à-vis spending. The second supports this concept by giving the asesora multiple techniques to help the family practise good habits for their spending. This video series follows the same format as the savings video series. The text and images are supporting material to the presenter’s voice and hand gestures.

The videos mostly show the video presenter, Carolina Mussi, an asesora from FP. When Carolina defines a new concept, or presents examples, the videos show images or text as a supplement. This format keeps the videos entertaining and engaging. The video file size was an

order of magnitude larger than the maximum allowable limit in WhatsApp. To tackle this issue, the videos are going to be uploaded to the FP YouTube channel. Once they are uploaded, the links can be easily communicated through WhatsApp.

Overall, based on the opinions gathered from the asesoras and capacitadores, we conclude that there was a high preference for interactive materials like videos over materials in the form of text and audio. Thus, we recommend that Fundacion Paraguaya continue to develop educational videos, distributed via WhatsApp, that further explain key concepts taught in the asesoras' training. We also recommend that Fundacion Paraguaya develops motivational videos containing success stories or testimonials that can be used to motivate the asesoras to help families achieve their goals. A good starting place would be to transform the FP manuals into videos for asesoras.

	6
Table of Contents	
Executive Summary	3
0.0 Authorship	7
1.0 Introduction	9
2.0 Background	10
2.1 General Information	10
2.1.1 Paraguayan Geography	10
2.1.2 Human Demographics	11
2.2 Rural Poverty in Paraguay	12
2.2.1 Diglossia and Lack of Education	13
2.2.2 Inequitable Land Distribution	14
2.2.3 Paraguayan Government	17
2.3 Fundación Paraguaya	20
2.3.1 Fundación Paraguaya’s Approach	20
2.3.2 Poverty Stoplight Program	22
2.3.3 Saving and Budgeting Indicators	23
3.0 Methodology	26
3.1 Introduction	26
3.2 Focus Group Methodology	27
3.2.1 Focus Group with Capacitadores	27
3.2.2 Focus Groups with Asesoras	28
3.3 Video Making Methodology	30
3.3.1 Developing the Script	30
3.3.2 Revising the Script	30
3.3.3 Recording the Video	31
3.3.4 Video Editing Software	31
3.4 Ethical Considerations	32
3.5 Timeline	33
4.0 Results	34
4.1 Introduction	34
4.2 Focus Groups	34
4.2.1 Focus Groups with Capacitadores	34
4.2.1.1 Training and Motivating Asesoras	34
4.2.1.2 Capacitadores’ Training Material Recommendations	35
4.2.2 Focus Groups with Asesoras	36

	7
4.2.2.1 Triad Questions	36
4.2.2.1.1 Statistical Effects	36
4.2.2.1.2 Triad Results Interpretation	38
4.2.2.2 Open-ended Questions	39
4.4 Training Materials	41
4.4.1 Video Series on Family Savings	42
4.4.2 Video Series on Family Budgeting	43
5.0 Conclusion & Recommendations	44
5.1 Conclusions	44
5.2 Recommendations	45
6.0 Bibliography	47
7.0 Appendices	54
7.1 Implementation Challenges	54
7.1.1 Focus Group Challenges	54
7.1.2 Objective and Methodological Challenges	54
7.1.3 Video Challenges	55
7.2 Notes of Focus Groups with Asesoras	56
7.2.1 Results of Triad Questions	56
7.2.2 Notes of Open Questions for Asesoras	57
7.3 Notes of Focus Group with Capacitadores	61
7.4 Still Shots of Video Training Materials	63
7.5 Remarks on Team Workflow with Fundación Paraguaya	66
7.5.1 Task Management	66
7.5.2 Human Centered Design	67

0.0 Authorship

Section	Primary Author(s)	Primary Editor(s)
<u>1.0 Introduction</u>	Eduardo, Enzo, Lindberg	Eduardo
<u>2.0 Background</u>	Lindberg, Enzo, Eduardo	Enzo, Lindberg, Eduardo
<u>3.0 Methodology</u>	Eduardo, Enzo, Lindberg	Enzo
<u>4.0 Results & Discussion</u>	Eduardo, Enzo, Lindberg	Everyone
<u>5.0 Conclusions and Recommendations</u>	Eduardo, Enzo, Lindberg	Everyone
<u>6.0 Bibliography</u>	Eduardo, Enzo, Lindberg	Eduardo, Enzo, Lindberg
<u>7.0 Appendices</u>	Eduardo, Lindberg	Enzo

1.0 Introduction

Paraguay is a developing country with a small, mostly agrarian, economy. According to the United Nations (UN), about 26% of people in Paraguay are considered poor, and 8.97% extremely poor (*Paraguay Poverty Rate 1990-2021*, 2021). Most of the impoverished live in rural communities. Rural poverty in Paraguay has a history involving dictator Alfredo Stroessner, large agro-industrial companies, lack of education, and unequal land reform (Nickson, 1988; Nickson, 2009; *FAPI*, 2015).

The poverty in Paraguay has attracted the efforts of non-profit organizations (NPOs), like Fundacion Paraguaya (FP). FP dedicates itself to eliminating poverty in the country. Since 1985, FP has employed several programs to eliminate poverty. Since 2013 it has utilized a methodology called the Poverty Stoplight (PS). The PS program is a self-assessment tool that families utilize to measure their poverty. The self-assessment is used by FP social workers to help families work their way out of poverty.

Each social worker has different advising strategies to help the families. Advising strategies are based on the particular poverty needs of families. These needs can be classified in one of the following six categories: income & employment, health & environment, housing & infrastructure, education & culture, organization & participation, and interiority & motivation (*Poverty Stoplight Application Manual*, 2013). Within income and employment, the budgeting and savings subcategories will be our focus. The goal of this Interactive Qualifying Project (IQP) is not only to identify budgeting and savings advising practices, but also to communicate these practices to the social workers in the form of training materials.

2.0 Background

The background section will provide the necessary context for this project. General information about Paraguay, rural poverty in Paraguay, and FP's role within Paraguay will be discussed in this section.

2.1 General Information

The geography and human demographics of Paraguay will be discussed in this section of the background. This information will be useful when we describe why poverty exists in Paraguay.

2.1.1 Paraguayan Geography

Paraguay is a landlocked country in the center of South America, bordered by Argentina, Bolivia, and Brazil. Paraguay has 17 states, called *departamentos*, and, as seen in **Figure 1**, its capital is Asunción.



Figure 1: Image showing Paraguay's location in relation to Argentina, Bolivia, and Brazil. The map also shows the departamentos, and major cities of Paraguay (Talavera, 2019).

2.1.2 Human Demographics

Paraguay has a small population of approximately 7 million people (*Paraguay - Rural Population - 1960-2019 Data | 2021 Forecast, 2020*), most of whom are of European and mestizo ancestry, while only 2% of the population are indigenous to Paraguay (Nickson & Lambert, 2013). Even though the indigenous people are a minority, their language, Guaraní, has been recognized as an official language alongside Spanish since 1992 (Cruz, 2014; Nickson,

2009). A higher percentage of Paraguay's population speaks only Guaraní (34%), compared to those who only speak Spanish (15.2%), while about 46.3% of the population are considered bilingual (*Paraguay*, 2021a).

In 2018, Paraguay's GINI index, a statistical measurement of inequality, was 0.462. This places the country at about the same level of economic inequality as the United States (*GINI Index (World Bank Estimate)*, 2021).

Paraguay is seeing an urban rate of 1.12%, meaning people are moving into the cities from rural places. About 62.2% of the population lives in urban areas because they offer more economic benefits (*Paraguay*, 2021a). Within the rural regions, the poverty rate was 33.4% in 2018, while the urban poverty rate was only 17.1% (*Paraguay Overview*, 2021).

2.2 Rural Poverty in Paraguay

General information about Paraguay is not enough to understand *why* rural poverty exists. Rural poverty in Paraguay is a result of two factors: diglossia and lack of education, and inequitable land distribution. (Murillo & Román, 2011; Nickson, 2009; *Situacion territorial de los pueblos indigenas de Paraguay*, 2015). These two factors and the actions of the Paraguayan government on poverty will be discussed in this section.

2.2.1 Diglossia and Lack of Education

This section will focus on explaining how diglossia and lack of education contribute to Paraguay's rural poverty. *Diglossia* is the use of two languages within a language collective (i.e. community, group, organization, nation...)(*Diglossia Oxford Dictionary*, 2021).

The diglossia negatively affects monolingual, Guarani-speaking children in schools. These children perform considerably worse, in terms of years of degree attainment, when compared with kids who are bilingual or monolingual in Spanish (Patrinos & Psacharopoulos, 1995). Since almost all the schools in Paraguay teach in Spanish, the Guarani-monolingual children have trouble adapting to the system (Nickson, 2009). Patrinos and Psacharopoulos (1995) found that even though education was mandatory until the age of 13, 28% of 12-year-old monolingual children were already out of school.

Rural households rely on their children to help support the family (Gayoso de Ervin, 2019; Patrinos & Psacharopoulos, 1995). This child labor caused by poverty has originated because the native language has been discriminated against throughout governmental institutions (Nickson, 2009) — especially during the Stroessner dictatorship (1954-1989) (Cruz, 2014; Painter et al., 2021). In 1967, the National Constitutional Convention unanimously rejected Guarani as an official language. Guarani was recognized as a national language; however, Spanish was designated as the language for official business (Nickson, 2009). The lingering effects of this policy still affect Guarani-speaking students.

Aside from the language-based gap in students, other policy issues contribute to the lack of education in rural areas. For schools to be recognized by the Ministry of Education, the schools must “be equipped with (among others) direction and secretarial rooms, as well as one

classroom per grade, a room for recreation and physical education, a library, and a laboratory” (Murillo & Román, 2011). These costly requirements for the schools of Paraguay affect the penetration of education through the rural regions (Murillo & Román, 2011). A study by Duarte et al. (2010), found similar results. The test scores on mathematics and language in primary education were dependent on three factors: teaching spaces (i.e computer labs, library, etc...), access to electricity and water, and bathrooms. All these factors were underdeveloped, or non-existent, in rural areas, where poverty prohibits investment (Duarte et al., 2011; Murillo & Román, 2011).

2.2.2 Inequitable Land Distribution

There are several reasons for inequitable land distribution in Paraguay. Alfredo Stroessner’s land reform, Mercosur, and the “soy regime” account for a large part of why Paraguay’s land is distributed the way it is (Elgert, 2012; Hetherington, 2011; Manzetti, 2018; Nickson, 2009; Painter et al., 2021). This section will cover the features of inequitable land distribution, why inequity exists, and how inequity affects the income of the rural poor.

Inequitable land distribution is the disproportional ownership of land area per person in a given amount of land. The GINI index for the land describes the ratio of land ownership among the population. Paraguay has a high land-based GINI index, standing at 0.94 — the highest in Latin America. This means that 1.6% of the people own 80% of the land (*Paraguay*, 2021c). A meta-analysis by Cipollina et al. found that land inequality is negatively correlated to economic growth in the long run, especially in developing countries. Land inequality had a larger negative correlation when compared to income inequality (Cipollina et al., 2018).

The origin of land inequality in Paraguay starts with Alfredo Stroessner's regime. From 1954 until 1989, Stroessner's far-right governance placed the interests of the lower classes last. The *latifundistas* – the economic elite in Paraguay – and high-ranking military officials were given expropriated land from farmers in the Chaco, a large landmass comprising almost all northern Paraguay (Painter et al., 2021). This land reform still affected the distribution of land after he was ousted in 1989 (Nickson, 2009). Cippollina et al. (2018) argue that increasing commercial pressure on land increases the chance for land inequality to ensue. With the land being legally tied to the elites, and the formation of Mercosur in 1994, agricultural commercial pressure was high after Stroessner's era (Manzetti, 2018; Painter et al., 2021). Soy cropping proprietors from Brazil between 2003 and 2004 owned 27% of soy exportation in the world, while Paraguay only owned 2% (Dros, 2004). Brazil's soy industry has expanded into Paraguay, causing land inequality to increase even more (Elgert, 2012; Hetherington, 2011). Soybean exports in Paraguay were 14% of its GDP (\$2.36B total) in the year 2000 and it was 25% (\$9.72B) in the year 2013 (*Paraguay Economic Complexity*, 2021). A graphic of soy production by volume is shown in **Figure 2**.



Figure 2: Geographical illustration of South American soy cultivation and production by volume in 2013 (Oliveira & Hecht, 2016).

NGOs, such as *La Federacion por la Autodeterminacion de los Pueblos Indigenas* (FAPI), defend the people's pre-Stroessner claims to the land. They have also compiled data on the process of the transfer of ownership of land (*Situacion territorial de los pueblos indigenas de Paraguay*, 2015). This can be seen in table 1. The dilemma the Paraguayan government is facing is whether it should give back the land that was taken from the people. So far, these large land reform reparations have not happened (Elgert, 2012; Nickson & Lambert, 2002).

Table 1: Communities classified according to tenancy, judicial claims, and possession of land in 2002. Retrieved from *Situación Territorial de los Pueblos Indígenas de Paraguay*(*Situacion territorial de los pueblos indigenas de Paraguay*, 2015)

State	Communities	With Ownership	With Judiciary Personnel		Without Judiciary Personnel	
			Processing	Not Processing	Processing	Not Processing
Asuncion	1	-	1	-	-	-
Concepcion	21	11	3	-	5	1
San Pedro	26	17	5	1	3	-
Guairá	8	2	4	-	2	-
Caaguazú	47	7	31	-	5	4
Caazapá	20	14	2	1	3	1
Itapúa	31	14	3	-	8	5
Alto Parana	27	17	-	-	-	-
Central	1	1	5	-	3	2
Amambay	41	34	4	1	-	2
Canindeyú	97	52	10	1	27	5
P Hayes	39	26	7	-	4	1
Boquerón	38	21	21	1	5	4
Alto Parana	17	9	9	-	5	-
Total	414	225	85	5	70	25

Fletschner and Zepeda found that local farmers are not able to get sustainable profits (Fletschner & Zepeda, 2002). This is because local farmers are not able to buy or sell in bulk since their average land ownership is around only 10 hectares (Fletschner & Zepeda, 2002). With the ground deteriorating over time, and technological improvements by industrial competitors, local farmers feel unmotivated to compete with the agro-industrial giants in Paraguay (Camagni & Miro Quesada, 2021; *Paraguay Overview*, 2021). Because of this, agrarian industries are constantly buying more land from the local farmers, leaving them with less appreciable farmland to make a living (Elgert, 2012; Hetherington, 2011).

2.2.3 Paraguayan Government

Due to the economic hardships of people living in rural areas, the government of Paraguay has directed funds to improve their situation (*Paraguay*, 2021b). This government

funding comes in the form of financial assistance, such as grants and loans, given to non-government organizations or citizens. This section will discuss the past measures implemented by the government, and the plans to provide further financial aid to this portion of the population.

According to the International Fund for Agricultural Development (IFAD), Paraguay has seen great economic growth over the last decade (Paraguay, 2021b). IFAD states that overall poverty has decreased from 50% to 34.6% from 2010 to 2019. (INE::*Instituto Nacional de Estadística*, 2021). The figure below illustrates the overall decrease in rural and urban poverty in Paraguay from 2000 to 2017. The bars in orange represent rural poverty, while the blue bars represent urban poverty. The yellow line shows the economic GINI index which remains above 0.5. In general, the figure indicates that: overall poverty is decreasing, rural poverty is higher than urban poverty, and that economic inequality has remained constant between 2013 and 2017.

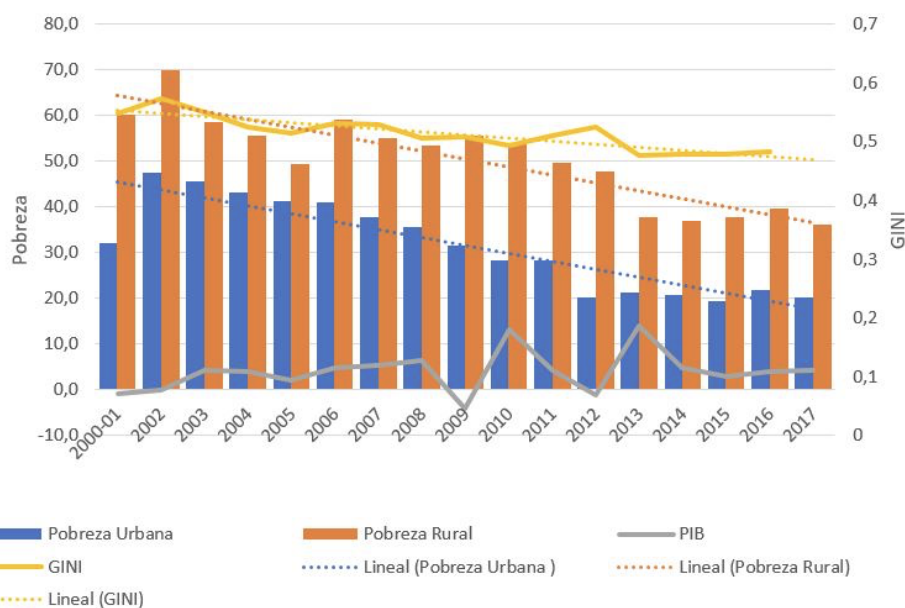


Figure 3: This graph shows the reduction in urban and rural poverty in Paraguay (Mercosur, 2021)

The government is also working on a “Country Partnership Strategy” with the World Bank to combat poverty in Paraguay. This partnership strategy contains a report assessing the current situation of the people and economy of Paraguay, then provides suggestions on how to improve Paraguayan infrastructure and raise the standard of living of the people (World Bank, 2021).

The report states that the government has implemented “prudent macroeconomic policies” that have sustained economic growth from 2004 to 2017. Among these is the “Fiscal Responsibility Law” which limits government deficit to only 1.5% of the Gross Domestic Product (GDP) and restricts the growth of current expenditure to just 4% of the GDP (World

Bank, 2021). These measures ensure that even if the Paraguayan government increases its spending, the debt is controlled. The Central Bank of Paraguay also had to execute shrewd policies to safeguard the country's economic growth. To curb inflation, the Bank enforced Paraguay's flexible exchange rate, so foreign factors had minimal impact on inflation within the country. This led to a decline in inflation compared to other countries in South America. An increase in inflation leads to a reduction in the value of assets; therefore, a decrease in inflation due to these policies means the poor can save more money.

As for future development, the government has two major plans in place called the National Development Plan 2030 (NDP) and Paraguay de la Gente 2023 (PG) (Mercosur, 2021). These are both multifaceted plans which aspire to improve the country by addressing areas such as public access to education, medicine, and poverty (Mercosur, 2021). According to the PG plan, the government intends to promote economic growth in the hope that the families escape poverty on their own (Mercosur, 2021).

2.3 Fundación Paraguaya

FP encourages families to become self-sustaining through their own efforts. This section highlights the role FP has in Paraguay. FP's approach, the PS program, and savings and budgeting are discussed.

2.3.1 Fundación Paraguaya's Approach

FP has established its own concepts to apply in the process of eliminating poverty. The quote below comes from *Who Owns Poverty?*, a book by FP's CEO and founder, Martin Burt:

“Poverty reduction [in Paraguay] programs are not something *done with* a community, or even *done by* a community; they are something *done to* a community—imposed from the outside when an external organization uses its own definition (however coherent), its own measures (however accurate) and its own solutions (however well-intended).” - Martin Burt (Burt, 2019)

FP is an external organization with a mission to eliminate poverty at an international level (Maak & Stoetter, 2012). Instead of directly funding the poor, FP offers educational materials, microfinance services, and sustainable agricultural schools to help families rise out of poverty by themselves. As shown in **Figure 4**, all these programs use the PS program.



Figure 4: Illustration of how the PS program is related to the services FP provides.

2.3.2 Poverty Stoplight Program

The PS program is, essentially, the methodology FP uses to describe and define a family's level of poverty. This section will cover how the families and social workers interact, how the PS tool works, and its effectiveness with poor families.

Families in the program make use of the Poverty Stoplight as a self-assessment tool to measure their poverty. Social workers assist the families in formulating plans to improve their conditions. The social workers make use of the programs and materials from the three pillars, from **Figure 4**, to advise families in their transition out of poverty.

The Poverty Stoplight tool splits poverty into 50 different dimensions, each one called an indicator. To access a list of all indicators, refer to the PS manual (*Poverty Stoplight Application Manual*, 2013). Indicators seek to cover everything that the family has within its sphere of influence such as hygiene, budgeting, income, credit, home comfort, etc. Dividing poverty into 50 different indicators helps simplify the process for families as they can directly act upon each one. The simplicity of this method empowers the families to commit to real change by focusing on improving each indicator. This incremental progress in individual dimensions results in an overall improvement in the family's standard of living.

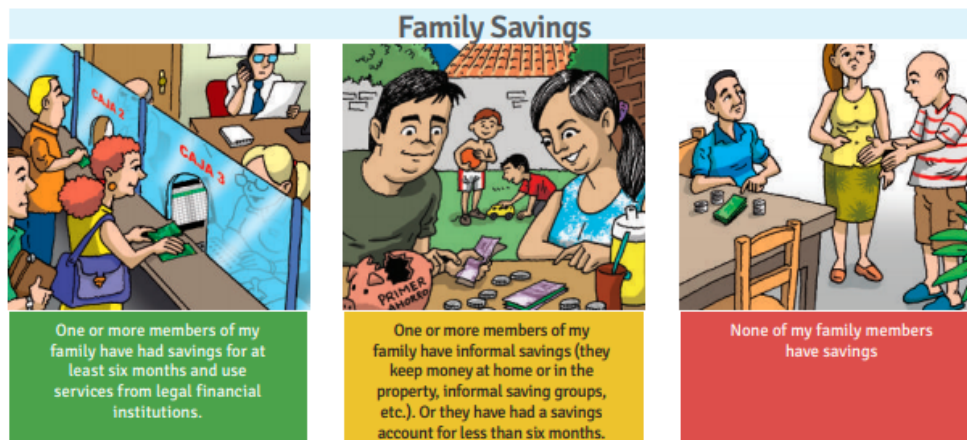


Figure 5: A visual example of the family savings indicator (Fundación Paraguaya, 2018).

The PS tool is effective because literacy is optional for the self-assessment since the tool consists mainly of visual materials as seen in **Figure 5**. This makes it very simple for every member of the family to come together and recognize their weak indicators. The overall program also focuses on bringing communities of families together to help each other by sharing their knowledge on their strong indicators. Social workers visit families periodically to evaluate their progress and to further develop more ideas to improve their weak indicators.

2.3.3 Saving and Budgeting Indicators

FP found that families are most interested in education in saving and budgeting (pers comm Nancy Ramos 3/10/21). Saving refers to reducing one's spending, while budgeting refers to creating an estimation of one's income and expenditure over a given period. This section will discuss the saving and budgeting indicators, and the advising methods the asesores use.

The Poverty Stoplight tool from FP has specific indicators for family savings and budgeting. The images below, taken from the Poverty Stoplight Manual, illustrate the three levels

of poverty for the corresponding indicators and their descriptions (*Poverty Stoplight Application Manual*, 2013).




Indicator: 4. Family savings		Dimension: Income & Employment
Justification: Savings allow the family to cope with contingencies of life and/or to plan the purchase of goods or services.		
Definition: Part of the income that is not spent, but is saved in cash for future needs.		
LEVEL 3. The family has savings and a "savings culture" expressed in this practice maintained at least in the last six months.	LEVEL 2. The family has been saving for less than six months and/or has saved occasionally.	LEVEL 1. The family has never or almost never saved.
		

Figure 6: Family Savings Indicator (*Poverty Stoplight Application Manual*, 2013)



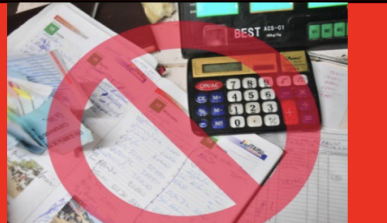
Indicator: 31. Capacity to plan and budget		Dimension: Education & Culture
Justification: Planning and budgeting are basic skills required for good management of cash inflows and outflows of the business and the family.		
Definition: The family is able to plan and budget their economic future in the short, medium and long term in writing, follows its plans.		
LEVEL 3: The family has a Business Plan and a monthly budget in writing. Both permanently govern the family economy.	LEVEL 2: The family has a Business Plan and a budget in writing, but does not use them regularly.	LEVEL 1: The family does not Business Plan or budget or does not use them.
		

Figure 7: Capacity to plan and budget Indicator (*Poverty Stoplight Application Manual*, 2013)

The social worker's job is to move families from the red section to the yellow section, or from the yellow section to the green section. The red section indicates extreme poverty, the yellow moderate poverty, and the green no poverty (*Poverty Stoplight Application Manual*, 2013). To figure out why the families are at a certain PS color, the asesores also implement a Wilber diagram. The Wilber diagram is a tool to find the root causes of certain circumstances. **Figure 8** shows a Wilber diagram that could be used for saving and budgeting. This diagram splits reality into four quadrants that encompass individual and collective, and exterior and interior motives for behavior. (pers comm Nancy Ramos 3/10/21)

<p style="text-align: center;">Individual Interior</p> <p style="text-align: center;">Is it worth it to save or budget? Can I save or budget?</p>	<p style="text-align: center;">Individual Exterior</p> <p style="text-align: center;">Have I met my personal goals? Do I know how to budget and save?</p>
<p style="text-align: center;">Collective Interior</p> <p style="text-align: center;">Does my community save or budget? Does my community support me?</p>	<p style="text-align: center;">Collective Exterior</p> <p style="text-align: center;">Are there institutions that offer saving or budgeting services to my community?</p>

Figure 8: Wilber Diagram asking questions that try to explain the cause of a family's circumstances (Ranitz, 2016).

Social workers use this model to come up with advising methods to motivate or educate families. Each social worker has different advising strategies to help the families improve in these two areas. They also have online resources to help them like TVET academy and the Bank of Solutions (pers comm Nancy Ramos 3/10/21).

3.0 Methodology

3.1 Introduction

Our objective was to develop new material and add to the repertoire of training materials asesoras have in savings and budgeting. We built upon the work developed by the 2020 IQP team's "Family Budgeting and Savings" (Stundtner, 2020) to create training and motivational materials for asesoras in savings and budgeting. Since the training materials would contain information analogous to field practices, the asesoras and capacitadores were consulted as they have the most experience in these areas. Also, the asesoras' suggestions are key since they are the future users of the training materials we developed.

We utilized a focus group approach to gather all of the information for the training materials. Therefore, we divided the following methods section into four components. First, the definition of a focus group. Second, the focus group questioning format with capacitadores. Third, the focus groups two-part questioning format with asesoras. Finally, the fourth, the implementation challenges of the three focus groups.

After conducting the focus groups, we chose to make a series of five videos that guide asesoras through assessing, motivating, and encouraging the families to save and budget. There will also be a section explaining the methodology behind making the videos.

3.2 Focus Group Methodology

We used focus groups to elicit the content from the asesoras and capacitadores. The formal definition of a focus group is a moderated group discussion to gather information. Within a given focus group, the researcher pre-structures the questions for the group, while a facilitator asks the questions to the group (Young, 2019). The focus group methodology is a good way to have a guided discussion with multiple individuals at the same time—making it less time-consuming than conducting multiple individual interviews. Focus groups were an excellent way to gather information for the materials we made.

We kept the duration of the focus groups at a maximum of one hour so as to maintain the attention of the interviewees and to respect their work schedules. Restricting the window to one hour was effective as we derived the desired information while keeping the participants' attention.

3.2.1 Focus Group with Capacitadores

The capacitadores are the members of FP staff that train and instruct the asesoras with strategies that help the families transition out of poverty through the PS program. We participated in a focus group with the capacitadores to understand the main goals and ideal outcomes of training sessions held with the asesoras. We also aimed to find out the content and format of the training materials the capacitadores use in their interactions with the asesoras. Further, we attempted to understand what the asesoras find particularly beneficial and disadvantageous about the training sessions implemented by the capacitadores.

The focus group itself took the form of a guided discussion or conversation, with a facilitator. Nancy Ramos, a supervisor from FP, was the facilitator for all the focus groups. The facilitator performed the general greetings and introduced us to the capacitadores, but we asked the questions. The focus group lasted for about an hour and contained six open-ended questions. This allowed the capacitadores to fully explain their responses to the questions and give as much detail as possible. We also asked follow-up questions that allowed us to discover additional information that we had not anticipated.

As for the structure of the focus group, it was divided into two sections: the outcome of a good training session with the asesoras and the content of good training material for the asesoras. These questions are outlined in **Appendix 7.3** at the end of this document. After the focus group was completed, we analyzed the audio recording to discover the key components of the format and content of the training materials that we developed for the asesoras.

3.2.2 Focus Groups with Asesoras

Our advisor suggested that the best way to conduct focus groups with asesoras is by having a supervisor from FP directing the meeting. Considering that the supervisor, Nancy Ramos, is well-versed in the context, the asesoras would feel more comfortable sharing information about their role. The supervisor directed the focus group with questions using the triad protocol such as the one shown in **Figure 9**. Based on the protocol, the supervisor asked a question and offered three different options. Then, the asesoras drew a circle in some spot on the borders or edges of the triangle to indicate their answer. If a circle was drawn between two alternatives, that meant that the two alternatives were both possible answers. **Appendix 7.2.1**

shows the triad protocol questions. The questions and the possible answers were co-generated with FP supervisors to ensure that they were competent to the context of asesoras.

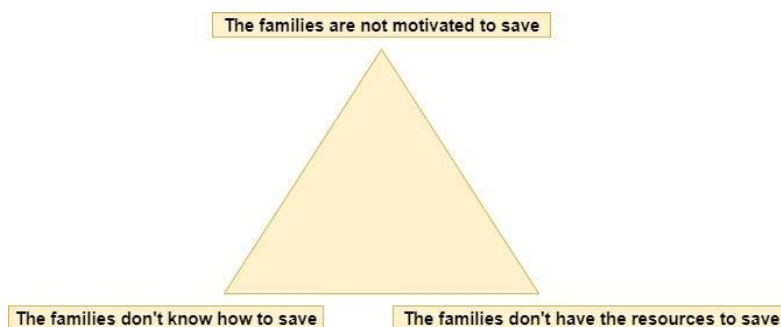


Figure 9: Sample triad protocol format for the question. The question for this triad is: “Why do families struggle to save?”

Since the focus groups were conducted online, we used a website called Miro as a tool. It enabled us to create a collaborative online whiteboard to draw the triads—with the questions and possible answers—while letting all participants involved to draw their circles to include their responses.

After the triad questions, we also made open-ended questions to ask asesoras about previous materials they have used, and new material they would like to use. The open-ended questions allowed the asesoras to give more details about their work and give us further information. They are included in **Appendix 7.2.2**. Their answers to those questions were influential factors in the design of the new training materials.

3.3 Video Making Methodology

Based on the information gathered from the focus groups, we concluded that a video format would be best for the training materials we created. Over the course of three weeks, we developed the videos through a series of steps. First, we developed each script, then we revised the scripts with the rest of the team (our counterpart, and project advisors). Lastly, the team in Paraguay filmed the video in their film studio. This section will aim to dissect each of these three steps.

3.3.1 Developing the Script

To develop the script we first needed to compile all of the information related to the topic of the video. This included findings and materials from the previous IQP (Stundtner, 2020), the Poverty Stoplight website, Fundacion Paraguaya's website, TVET Academy materials, and suggestions gathered from the asesoras and capacitadores.

Next, we set an objective for each video to make sure the video feels complete, and easy to understand. The overarching objective was then split into a list of questions that were key to understand that objective. With the questions set, we used the information we gathered to answer the questions to the best of our ability.

3.3.2 Revising the Script

After the first draft, we revised the script with the two parties within the team (FP supervisors and IQP advisors) to make the flow of ideas smooth and direct.

The FP supervisors' assistance was instrumental as they have a deep understanding of the techniques used to guide and motivate families. Also, they were able to make the script sound local and relatable. Their revisions were necessary to make the material's content and delivery appropriate for the asesoras in the given context.

The IQP advisors were also very helpful because they could help improve the coherence of ideas, and ensure the videos were clear enough for any audience to understand them. With the assistance of these parties, we were able to revise and improve the organization of ideas set by us and the FP supervisors.

3.3.3 Recording the Video

The video recording was done in the FP film room. They had sophisticated equipment to enhance the video quality of the materials. This part of the material making process was done by the FP supervisors and their colleagues using the script we wrote.

The presenter in the videos was not only reading words from the teleprompter, but also performed certain actions to place emphasis on what they were saying. The actress also changed positions occasionally to make the video more dynamic and eye-catching.

3.3.4 Video Editing Software

The software used to edit the videos, Sony Vegas Pro 18, gave us options to unite professional tools, quality output, and ease of operation. Even though it has the capacity to work with videos in different resolutions and several advanced tools, the application allowed us to make edits with ease.

When FP sent us the recordings of the staff reading the scripts, we first had to add the media to the videos projects. Then, we slowly polished them, added additional media, and even designed our own images. The five videos underwent several iterations. They had to be reviewed many times, but eventually, we had reached the final products.

For this project, one of the biggest advantages of Vegas over other video editors is the way it handled the original video files. In addition to allowing for real-time, non-linear editing, all changes that we made within the program were only saved within Vegas. This capability guaranteed the integrity of the original video files even after a final multiple-trail edited version was created.

In addition to the internal manipulations within each frame of the movie, Vegas also has a vast array of transition effects, so the cuts between a video's scene and the next were able to occur naturally and fluidly. Compositions that are theoretically difficult to achieve, such as overlapping images, were made from simple controls within the timeline created for each media clip. Vegas also allows for the incorporation of audio, so it was easy to add an uplifting soundtrack to make the videos more engaging.

3.4 Ethical Considerations

Ethical principles during program interventions were respected to ensure all parties involved were duly respected. The project was followed with good ethical principles by recognizing all participants with dignity. We made sure to have the attentiveness to maximize the benefits and reduce any potential harms. Ethics in this professional environment contributed to

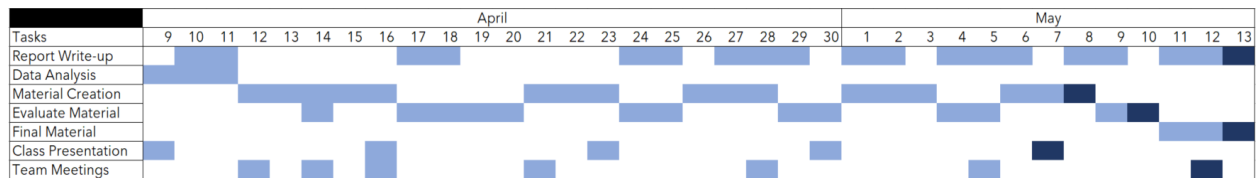
ensure the smooth running of activities and foster a healthy and harmonious climate. In this way, trust was developed.

During interviews, participation was voluntary, subjects were allowed to end their participation at any time, and they did not need to answer all questions. Lastly, subjects were informed that their names or any identifying information from them were not collected.

The presence of an FP supervisor was essential for the discussions to be conducted properly. This made social workers feel comfortable to speak their minds, and at the same time, gave them the security that they were not being evaluated. The social workers themselves were not the target of the interviews, but the methods and experience they use to counsel the families as well as their training material preferences. This enabled everyone involved to benefit from the results of the project.

3.5 Timeline

Table 2: Gantt Chart depicting how the project was organized around the final deadlines.



4.0 Results

4.1 Introduction

As a result of the COVID-19 pandemic, we conducted this project online which limited the type of materials we could produce. Thus, materials that could be distributed virtually was the optimal option. The form of these materials could have been videos, animations, presentations, or courses.

The ideal training material would have the following qualities: accessible, relevant, and easy to use. These qualities were best fulfilled by breaking down the advice the capacitadores and asesoras gave during the focus group sessions. In this section, we will discuss these suggestions, and in relation, the resulting set of training materials.

4.2 Focus Groups

4.2.1 Focus Groups with Capacitadores

4.2.1.1 Training and Motivating Asesoras

The capacitadores are the staff members responsible for the preparation of asesoras to ensure they are ready to advise families. Thus, the objective of this focus group was to learn more about the capacitation, or training, process and determine the asesora's needs. The results from the focus group are discussed below.

Firstly, the capacitadores noted that the training sessions should teach the asesoras about the essential tools to use in the field, and how to implement the strategies learned. The asesoras

should also feel empowered, motivated, and inspired to carry on with their tasks. When asesoras feel motivated from the training sessions, they become more effective at empowering families. A capacitador noted that the most effective way to motivate asesoras is to explain the reason why FP needs them to do their job. The capacitadores emphasized that motivating the asesoras was the longest, most important facet of the training sessions.

The capacitadores also mentioned training sessions lead to asesoras being able to use accurate terms, correct communication, and use interactive exercises to help families understand various concepts. Good training sessions teach the asesoras to adapt their strategies to their audience. For instance, if the audience is younger, interactive activities should be used; conversely, if the audience is older, then a conversation is more appropriate.

During the focus group, the capacitadores mentioned attitudes and aptitudes that asesoras should have or develop. The aptitudes mentioned were: tolerance to frustration, proactivity, listening skills, taking responsibility, and teamwork skills. The attitudes mentioned were: Empathy, kindness, politeness, solidarity, integrity, and honesty.

The capacitadores all agreed that the most important quality asesoras should have is empathy. Without empathy, it will be difficult for the asesora to understand the situation families might be in. They said it is a key trait for working with people.

4.2.1.2 Capacitadores' Training Material Recommendations

The capacitadores believe there is a lack of materials covering the attitudes and aptitudes asesoras should have. To serve asesora's needs, capacitadores suggest that training materials should contain real-life examples or case-studies to help them grasp new concepts. The capacitadores also believe that the best format of the training materials should be videos or

podcasts. They said that videos, specifically, can enrich the work in the field, especially if testimonials and case studies are included.

4.2.2 Focus Groups with Asesoras

The objective of the focus groups we conducted with the asesoras was to get their perspective on how to improve their current training materials and the ideal content and format of new training materials. Each of these focus groups contained two parts. The first part consisted of triad questions and the second consisted of open-ended questions. The rationale for using these focus groups and their results are shown below:

4.2.2.1 Triad Questions

4.2.2.1.1 Statistical Effects

The variability of answers to the triads was somewhat constant within each focus group. However, when comparing answers between focus groups there was a significant difference in the answers each group provided. **Figure 10** shows question 3 of both focus groups. All of the triad questions can be found in **Appendix 7.2.1**.

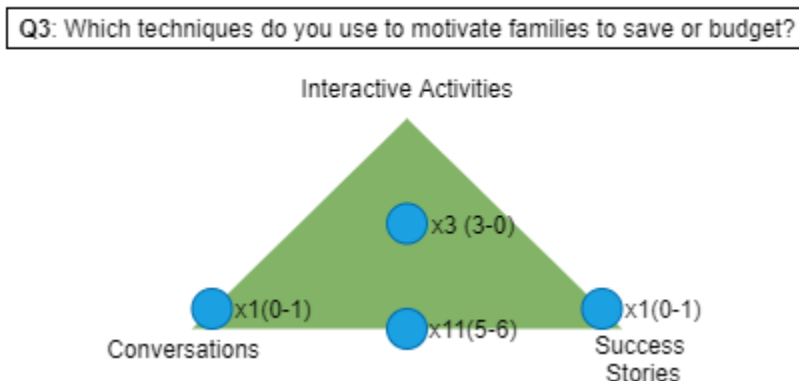


Figure 10: Triad question from both groups showing the discussed variance. The midpoint between conversations and success stories was the most popular answer in both groups. The first number (xN) represents the total number of answers, and the two numbers ($N_1 - N_2$) represent the answers from group 1 and group 2 respectively.

Some interesting effects are observed between the answers of each group. These differences are likely to come from the change we implemented in the second focus group with the asesoras. The first group actively used Miro and marked the answers independently after they were read by the facilitator. The second group, however, had most participants connected through their phones, hence Miro couldn't be used. We gathered the answers from the phone participants by directly asking for their response to the triad questions. This methodological difference may explain why the second group had more concentrated answers. A lack of inter-subjective representation is an effect where individuals within a group tend to agree with arguments already laid out in the group (Acocella, 2011). This bias in group answers was possibly attributed to the fact that the asesoras in the second group were asked directly for their opinions in front of their peers. In the first group, the asesoras were effectively answering the

question without knowing what their peers were thinking because they did not have to speak to answer.

The consequence of this effect is that the answers have less variability. We do not know if the biased answers were set by the first asesora who spoke, the facilitator, or the wording or nature of the questions. Regardless of the cause, the topics we covered in the material were influenced by this subtle bias.

4.2.2.1.2 Triad Results Interpretation

Each question in the triad served as a guide to choose the topics of the materials we made. This subsection will discuss the findings of each of the four questions, which can be found in **Appendix 7.2.1**.

The first question asked the asesoras about the challenges that families faced when trying to save and budget. The answers in both groups were completely different. We concluded that sometimes the families may lack the motivation, or the skills, or the amenities, to save and budget. In effect, the question was inconclusive because it did not narrow down the challenges families faced. This meant that we had to cover all three topics in the training materials.

The second question had the premise that a family was successful at saving and budgeting. Afterwards, the asesoras were asked for the reason(s) for the family's success. We concluded that the more successful families were those that were confident in their skills and/or had the right skills to save or budget.

The third question asked the asesoras which techniques they used to motivate the families. The three categories were “interactive activities”, “success stories”, and “conversations”. We concluded that conversations and success stories were far more popular than

interactive activities. Interactive activities are usually directed towards children, hence asesoras use them less often than conversations or success stories, which are more fit for adults.

The fourth question asked the asesoras which method was best when trying to motivate families. The most popular answer was both “detailed instructions” and “motivational stories”. There was significant variability in the answers between the groups. The first group chose answers in every part of the triangle, while the second group focused all of their answers between “detailed instructions” and “motivational stories”.

4.2.2.2 Open-ended Questions

To satisfy the objective of the focus groups mentioned earlier, we asked the asesoras thematic questions related to their training materials. These open-ended questions allowed the asesoras to respond with greater detail and allowed us to ask follow-up questions based on the information we received. The questions we asked and the asesoras’ responses are outlined in the table below.

Table 3: These are the abridged answers from asesoras when they were asked the open-ended questions.

Q1	Are there any current training materials that you like? Why do you like them?
A1	<ul style="list-style-type: none"> • I like the instructive video we received from the executive director via WhatsApp. It is very specific and has a lot of explanation. • I like the material on the TVET platform because I can use it to develop materials for the clients.
Q2	How would you improve the current training materials? What would you add?
A2	<ul style="list-style-type: none"> • They could be in the form of videos that show motivational success stories. • They could be in the form of short videos that are specific to each indicator in the stoplight. The videos could also be sent and downloaded via WhatsApp. • The materials could show what to do in different scenarios.
Q3	Do you have any other suggestions or comments about the materials?
A3	<ul style="list-style-type: none"> • The materials could include pictures showing before and after budgeting and saving. • I would prefer training material in the form of videos instead of just audio in a podcast or a manual. • I really like the current training materials but a video would be nice as well. • An instructive video would be helpful, especially since there aren't many meetings due to COVID-19.

It was discussed in the challenges that explaining that the training materials were for the asesoras and not the families was difficult. As seen in **Table 3**, some answers are directed towards materials designed for families. We were able to identify these answers because they did not seem to apply to a training material for social workers. For example, in answer set 3, the first

bullet recommends a before and after picture of a family — this might be motivating if it's shown to another family, not an asesora.

Regardless of this hurdle, we were still able to collect actionable answers. In general, the answers indicated that short, motivational videos for each indicator would be effective in helping asesoras. This is especially true because COVID-19 has limited in-person meetings, which is another way that asesoras learn more about advising families. Another insight was that WhatsApp would be the best method of distributing these materials across the organization.

4.4 Training Materials

Based on the above responses our group has determined that it would be best for the training material we develop to be in the form of a set of short videos that mimic an online course. We also have to ensure that each video provides enough explanation concisely, so it is small enough to retain the audience's attention and be uploaded to YouTube.

As for the content of the training materials, we drew information from last year's IQP deliverables, the TVET academy online platform, and the manuals provided to us by Nancy Ramos, a supervisor in FP. This information mainly included effective strategies for budgeting and saving and motivational techniques the asesoras can use on the families. Our final deliverable contained a set of videos on saving and budgeting in a course-like format.

4.4.1 Video Series on Family Savings



Figure 11: Three still shots (one from each video) showing the main concepts of each video.

Refer to **Appendix 7.4** for more video still shots.

The three videos on the “Family Savings” indicator are intended to guide the asesora re-define, motivate, and explain the concept of saving with families. The first video intends to teach the asesora to investigate the family’s knowledge of saving. The video takes off from that point to re-define and state the importance of saving. The video then recommends that the asesora asks the families to write down why they think saving is important. The second video guides the asesoras to help the families come up with their motivations to save. This video’s main concept is that saving takes discipline and motivation. Lastly, the final video simply explains different strategies of saving. These strategies include: support groups, collective saving, and using financial entities to save.

The videos mostly show the video presenter, Carolina Mussi, an asesora from FP. When Carolina defines a new concept, or presents examples, the videos show images or text as a supplement. This format keeps the videos entertaining and engaging.

4.4.2 Video Series on Family Budgeting



Figure 12: Screenshot of the first video of the budgeting video series. Refer to **Appendix X** for more video still shots.

The concept explored throughout the entire video series is the relationship between habits and spending. The first video helps the asesora to explain the concept of good, bad, and neutral habits vis-à-vis spending. The second supports this concept by giving the asesora multiple techniques to help the family acquire good habits for their spending. This video series follows the same format as the savings video series. Also, text and images are included as supporting material to the presenter's voice and hand gestures.

5.0 Conclusion & Recommendations

5.1 Conclusions

The primary objective of our team was to provide assistance to Fundacion Paraguaya by developing training materials for the asesoras working with the budgeting and savings indicators. We achieved our goal by completing an analysis of the current training materials in use, and by gathering feedback and recommendations on how to improve them.

Throughout our project, we employed the focus group methodology to better understand Fundacion Paraguaya's training materials and the asesoras' training sessions. Our team conducted two focus groups with the asesoras, who work directly with families, and one focus group with the people who train them (capacitadores).

In general, the focus groups found that there was an overwhelming preference for video training materials. This is because videos are easier to understand and are more interactive than text. Videos also take less time to understand than reading a document.

Once we discovered that the creation of videos was the most favored, we initiated the process of drafting scripts with the collaboration of FP's supervisors. Then, we decided to produce three videos for saving and two videos for budgeting, totalling five videos.

Each video was developed with a clear objective and expounds a specific aspect of budgeting or saving. The objective of the first video on savings was to advise the asesoras on helping families to recognize the importance of savings as a healthy practice that will help them meet their personal or business goals. The second video on saving focused on defining the families' motivations for saving and making sure they know the choices they have on how to

save. Lastly, the third video on saving was centered around effective saving strategies and institutions that provide financial services such as banks.

As for the budgeting video series, the goal of the first video is to guide the asesora on how to make a family aware of how their habits affect their income and spending. The last video is intended to share techniques that asesoras can implement to guide families to create and maintain a budget.

The recordings were done in FP's film studios, then were edited with the software Vegas Pro 18 to produce the final versions. The videos are also saved in FP's digital folders and the links were sent in their WhatsApp groups, making it a resource that is accessible at all times.

These deliverables represent small but very important steps into a revolutionary approach to training the asesoras of Fundación Paraguaya. The videos should make the learning process much more enjoyable and interesting for the asesoras, which would help them feel highly motivated to help the families achieve their goals. With the introduction of this new form of training material, the asesoras, and by extension Fundación Paraguaya, should be well-equipped to continue eliminating poverty across the country.

5.2 Recommendations

Overall, based on the opinions gathered from the asesoras and capacitadores, we conclude that there was a high preference for interactive materials like videos over materials in the form of text and audio. Thus, we recommend that Fundación Paraguaya continue to develop

educational videos that further explain key concepts taught in the asesoras' training. We also recommend that Fundacion Paraguaya develops motivational videos containing success stories or testimonials that can be used to encourage the asesoras to help families achieve their goals. This type of training material also has the potential to be adapted to the other indicators under the Poverty Stoplight.

6.0 Bibliography

Acocella, I. (2011). The focus groups in social research: Advantages and disadvantages. *Springer Science+Business Media B.V. 2011*, 46. <https://doi.org/10.1007/s11135-011-9600-4>

Burt, M. (2019). *Who Owns Poverty?* Red Press.

Camagni, M., & Miro Quesada, L. (2021). *Paraguay*. IFAD.

<https://www.ifad.org/en/web/operations/country/id/paraguay>

Cipollina, M., Cuffaro, N., & D'Agostino, G. (2018). *Land Inequality and Economic Growth: A Meta-Analysis*. *Sustainability*, 10(12), 4655. <https://doi.org/10.3390/su10124655>

Cruz, J. M. (2014). *The Histories of the Latin American Church: A Handbook*. 1517 Media.

<https://doi.org/10.2307/j.ctt9m0t2k>

Diglossia Oxford Dictionary. (2021). Oxford Dictionary.

<https://www.oxfordlearnersdictionaries.com/us/definition/english/diglossia>

Dros, J. (2004). *Managing the Soy Boom: Two scenarios of soy production expansion in South America*. Coop Naturaplan Fund.

https://wwfeu.awsassets.panda.org/downloads/managingthesoyboomenglish_nbvt.pdf

Duarte, J., Gargiulo, C., & Moreno, M. (2011). *School Infrastructure and Learning in Latin American Elementary Education: An Analysis Based on the SERCE*.

Elgert, L. (2012). *Certified discourse? The politics of developing soy certification standards*. *Geoforum*, 43(2), 295–304. <https://doi.org/10.1016/j.geoforum.2011.08.008>

Fletschner, D. K., & Zepeda, L. (2002). *Efficiency of Small Landholders in Eastern Paraguay*. *Journal of Agricultural and Resource Economics*, 27(2), 554–572.

Fundación Paraguaya. (2018). *Poverty Stoplight*.

<https://a.storyblok.com/f/42340/x/8c9afdfa23/brochure-poverty-stoplight.pdf>

Gayoso de Ervin, L. E. (2019). *Can Compulsory Schooling Reduce Language-Based Educational Gaps? Evidence from a Policy Change in Paraguay*. *Economic Development and Cultural Change*, 69(2), 569–589. <https://doi.org/10.1086/703123>

GINI Index (World Bank Estimate). (2021). <https://data.worldbank.org/indicator/SI.POV.GINI>

Hetherington, K. (2011). *Guerilla Auditors: The Politics of Transparency in Neoliberal Paraguay*. Duke University Press.

INE.: Instituto Nacional de Estadística. (2021). <https://www.ine.gov.py/>

Maak, T., & Stoetter, N. (2012). Social Entrepreneurs as Responsible Leaders: “Fundación Paraguaya” and the Case of Martin Burt. *Journal of Business Ethics*, *111*(3), 413–430.

Manzetti, L. (2018). *The Political Economy of MERCOSUR*. Routledge.

<https://doi.org/10.4324/9780429498893-24>

Murillo, F. J., & Román, M. (2011). *School infrastructure and resources do matter: Analysis of the incidence of school resources on the performance of Latin American students*. *School Effectiveness and School Improvement*, *22*(1), 29–50.

<https://doi.org/10.1080/09243453.2010.543538>

Nickson, A., & Lambert, P. (2002). *State reform and the ‘privatized state’ in Paraguay*. *Public Administration and Development*, *22*(2), 163–174. <https://doi.org/10.1002/pad.218>

Nickson, A. R., & Lambert, P. (2013). *The Paraguay reader: History, culture, politics*. North Carolina: Duke University Press.

Nickson, R. Andrew. (1988). *Tyranny and Longevity: Stroessner’s Paraguay*. *Third World Quarterly*, *10*(1), 237–259.

Nickson, Robert Andrew. (2009). *Governance and the Revitalization of the Guaraní language in Paraguay*. *Latin American Research Review*, 44(3), 3–26.

Oliveira, G., & Hecht, S. (2016). *Sacred groves, sacrifice zones and soy production: Globalization, intensification and neo-nature in South America*. *The Journal of Peasant Studies*, 43(2), 251–285. <https://doi.org/10.1080/03066150.2016.1146705>

Painter, J., Nickson, A. R., & Hoyt, J. (2021). *Paraguay | History, Geography, & Facts*. Encyclopedia Britannica. <https://www.britannica.com/place/Paraguay>

Paraguay. (2021a). CIA World Factbook.

<https://www.cia.gov/the-world-factbook/countries/paraguay/>

Paraguay. (2021b). IFAD. <https://www.ifad.org/en/web/operations/country/id/paraguay>

Paraguay: Access to land, inequality and implications for democracy (Parts 1 & 2). (2021c).

<https://www.iapss.org/2015/02/25/paraguay-access-to-land-inequality-and-implications-for-democracy-parts-12/>

“*Paraguay de la Gente 2018-2023*”: *Una oportunidad para mejorar la aplicación de políticas públicas de superación de la pobreza rural*. (2021).

<http://fidamercosur.org/claeh/noticias/historial-del-programa/1056-%E2%80%9Cparaguay-de-la->

[gente-2018-2023%E2%80%9D-una-oportunidad-para-mejorar-la-aplicaci%C3%B3n-de-pol%25C3%25Adticas-p%C3%BAblicas-de-superaci%C3%B3n-de-la-pobreza-rural](#)

Paraguay Economic Complexity. (2021). The Observatory of Economic Complexity.

<https://oec.world/en/profile/country/pry>

Paraguay Overview. (2021). World Bank.

<https://www.worldbank.org/en/country/paraguay/overview>

Paraguay Poverty Rate 1990-2021. (2021).

<https://www.macrotrends.net/countries/PRY/paraguay/poverty-rate>

Paraguay—Country Partnership Framework for the Period FY19-FY23. (2021). World Bank.

<https://documents.worldbank.org/en/publication/documents-reports/documentdetail/891841547849263157/Paraguay-Country-Partnership-Framework-for-the-Period-FY19-FY23>

Paraguay—Rural Population—1960-2019 Data | 2021 Forecast. (2020).

<https://tradingeconomics.com/paraguay/rural-population-percent-of-total-population-wb-data.html>

Patrinos, H. A., & Psacharopoulos, G. (1995). *Educational performance and child labor in Paraguay*. *International Journal of Educational Development*, 15(1), 47–60.

[https://doi.org/10.1016/0738-0593\(94\)E0001-5](https://doi.org/10.1016/0738-0593(94)E0001-5)

Poverty Stoplight Application Manual. (2013).

http://www.fundacionparaguaya.org.py/upload/semaforo/Poverty_Stoplight_Manual_10mar2014.pdf

Stundtner, A. P., Delareyna, B., Sanchez, J. A., Garcia, R. A. A. P., & Orrico, S. A. (2020).

Family Budgeting and Savings. Worcester Polytechnic Institute.

https://wpi.primo.exlibrisgroup.com/permalink/01WPI_INST/12krsei/alma9937012262004746

Ranitz, A. de. (2016, April 27). *Integral Theory*. Spiral Dynamics Integral.

<https://spiraldynamicsintegral.nl/en/about-sdi/integral-theory/>

Situacion territorial de los pueblos indigenas de Paraguay. (2015). FAPI.

<https://www.fapi.org.py/wp-content/uploads/2015/11/Libro-Tom-Final.pdf>

Talavera, M. (2019, July 31). *Mapa del paraguay*. IPParaguay.

<https://www.ipparaguay.com.py/mapa-del-paraguay-por-departamentos-y-distritos/>

Young, N. (2019). *What are focus groups?*

<https://www.experienceux.co.uk/faqs/what-are-focus-groups/>

7.0 Appendices

7.1 Implementation Challenges

7.1.1 Focus Group Challenges

The major challenge we faced was clearly communicating the goal of the focus group to the asesoras. We tried to explain that the training materials we would develop would be for the asesoras themselves, but they interpreted it as training materials to be used on the families. However, after repeating our objective, the asesoras understood and gave us informative responses.

Another challenge we faced was the learning curve of the asesoras in the first focus group when trying to complete the triad questions on Miro. Miro is an online collaborative canvas that allows users to draw on the same virtual whiteboard. It took the asesoras around forty minutes to learn how to draw on the triad questions, so we had little time left to collect detailed responses to the open-ended questions that asked specifically about the training materials. However, the proceedings in the second focus group with the asesoras went much smoother, so we were able to complete the triad section and the open-ended questions with ample time remaining.

7.1.2 Objective and Methodological Challenges

The method we outlined had some expected challenges when it was implemented. The challenges came from disagreements of strategy between parties in the team, changes in the objective, and the disadvantages of the methods we used.

One team disagreement was the use of the triad protocol. The triad protocol is advantageous because the data it provides is concise, easy to analyze, and potentially powerful. On the other hand, implementing the triad protocol online posed many difficulties because it involved drawing on a screen. Our team suggested eliminating the triad protocol from the methods because it would take a long time to explain, and it might frustrate the asesoras. The FP team wanted to keep it because they believed it would be a fun activity for the asesoras. In the end, we agreed to implement the triad, however, the FP team would be in charge of managing Miro with the asesoras during the interview.

Furthermore, the triad protocol did not prove to be very effective. In the focus group with the asesoras, it was mentioned that the asesoras were free to add an answer if they thought it was not represented in the triad. Surprisingly, no asesoras suggested additional answers. This might be because there was a group pressure to remain within the specified answers.

As for the change in objective, initially, we believed we would be inquiring about the advising strategies used by the asesoras, and presenting the strategies in a training material. However, after careful discussions with the FP supervisors, and the IQP advisors, we all came to an agreement that the advising strategies should still be within savings and budgeting.

7.1.3 Video Challenges

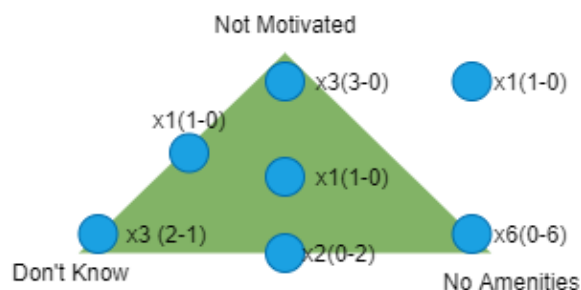
A problem was that the file size of the videos did not allow them to be uploaded to WhatsApp. To circumvent this, FP will upload the videos on their YouTube channel, and they will be sent through WhatsApp. The WhatsApp limit for media is 16MBs. The videos were

around 5 minutes long, with a corresponding file size of around 650MBs at 1080p quality. Even at 360p quality, the file size would be 60MBs.

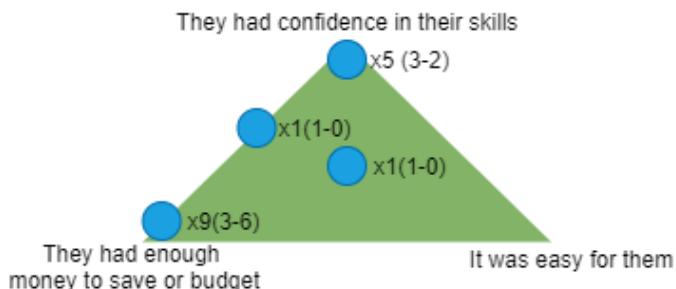
7.2 Notes of Focus Groups with Asesoras

7.2.1 Results of Triad Questions

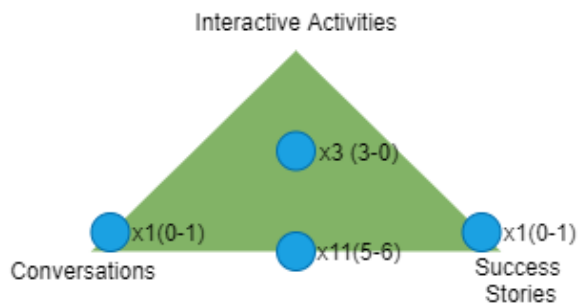
Question 1: In your experience, what are the challenges in getting families to save or budget?



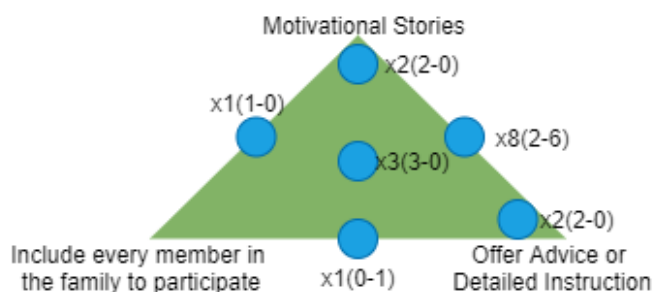
Question 2: When a family manages to save or budget, why were they able to achieve it?



Question 3: What techniques do you use when trying to motivate families to save or budget?



Question 4: In your opinion as a social worker, what is the best way to motivate the families?



7.2.2 Notes of Open Questions for Aseoras

Original Questions for Aseoras:

Question 1: As a social worker, what do you think about training materials for social workers?

Do you frequent them?

Question 2: Are there any existing materials you like?

Question 3: What would you improve about the materials? What would you add? Do you want new material?

Question 4: What kind of content would you want in the materials?

Question 5: Which format do you prefer for the materials?

Question 6: Do you have other suggestions or comments about the materials?

Group 1: We only had 5 minutes for this part of the focus group because the triad questions had taken too long. Hence, not all the questions are shown.

Question 6: Do you have other suggestions or comments on the materials?

A1:

- She likes the success stories of other people
- Well to motivate herself
- She thinks that “I can do it too”
- can be in the form of short videos

A2:

- Interactive activity with boys,
- savings ideas... Save water and electricity
- Child saving
- Success videos

A3:

- A sheet
- A Short Image
- Before and after saving and budgeting

- Well short and concise
- you could do in different cases

Group 2: This part of the focus group had to be abbreviated because we still had only 15 minutes.

Question 1:As a social worker, what do you think about training materials for social workers?
Do you frequent them?

A1:

- Training videos
- Videos you can submit in whatsapp and show customers

A2:

- Video
- Prepare a manual available in the advisor's briefcase
- You can visit families with the manual
- Use the manual to train families who do not have cell phones

Question 2: Are there any existing materials you like?

A2:

- The executive director's instructional video
- Send by whatsapp

- Pretty explicit and there's a lot of explanation

A1:

- Material on the TVET platform
- Sexual Health Indicator
- Presentation
- Develop this material with customers

Question 3: How would you improve existing materials? What additional things would you add?

A1:

- They can be specific videos
- for each indicator
- Send in whatsapp to download
- Short also
- For audio
- Videos are better because they have pictures

Question 6: Do you have other suggestions or comments about the materials?

A2:

- I would love the existing materials
- They are spectacular

- A video would be great

A3:

- I preferred a video to a manual

A4:

- An instructional video
- Good especially during the covid season when there aren't many meetings
- Submit by whatsapp
- Help with questions about how to approach the indicators

7.3 Notes of Focus Group with Capacitadores

Original Questions for Capacitadores:

Question 1: What are the results of a good training session with a social worker?

Question 2: What kind of soft skills do you teach social workers?

Question 3: How should the content of the materials be?

Question 4: What kind of aspects should training materials not contain?

Notes:

Question 1: What are the results of a good training session with a social worker?

C1: Social workers that understand the reason why they do what they do. There are many things that can't be taught in training.

C2: They are more effective if they feel more empowered.

C3: Through being motivated they motivate families

C4: Guide the social workers towards an 'emotional salary', that is, have them enjoy their work by knowing why it is that they are doing that work. The motivational part depends on the capacitador.

C5: There has to be motivation. As for the technical aspect, you need the correct terms, and the appropriate exercises for the right audiences. Interactive activities with young people, and conversations or stories with older individuals.

Question 2: What kind of soft skills do you teach social workers?

C1: Tolerance of frustration, proactivity

C2: Empathy, leadership, good manners, genuine interest, teamwork

C3: Listening and observation skills, learning skills, creativity, good energy.

Question 3: How should the content of the materials be?

C1: Case study

C2: animation , there is a lack of materials for social workers. There is a surplus of materials for families.

C3: step by step guides.

C4: there is no way to teach specific strategies because the field changes so much.

C5: Tutorials, interviews, recommendations.

Question 4: What kind of aspects should training materials not contain?

C1: Cultural assumptions about individuals

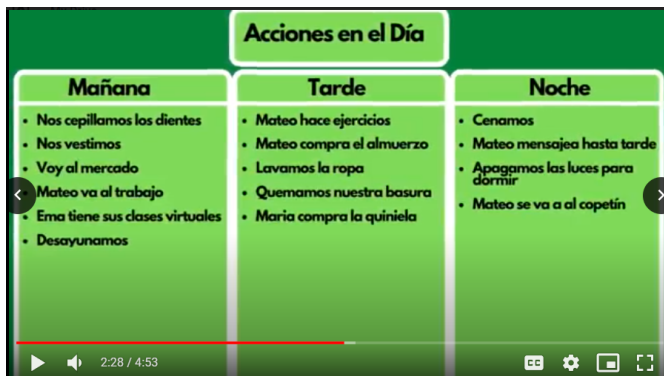
C2: Too specific information or steps to follow as they might not fit the scenario the social workers finds him/herself in.

7.4 Still Shots of Video Training Materials

Savings videos:



Budgeting videos:



7.5 Remarks on Team Workflow with Fundación Paraguaya

7.5.1 Task Management

Working with the FP was surprisingly simple. Nevertheless, we believe some basic teamwork remarks will be useful for the next project team.

Productive meetings have a purpose. It is always important to have the purpose clear. When it isn't clear, the meeting can feel confusing, and the project can feel hard — something nobody wants. To make the meeting productive, make a list of talking points in the following fashion:

- Talking point 1
- Talking point 2
- Talking point 3

This is a very simple activity that might seem obvious, however, it proved very useful in our project work. Sometimes the purpose of meetings isn't always clear.

At the end of a meeting always make sure to coordinate with the counterpart what everyone is doing after the meeting. Set tasks and deadlines associated with them. Assign these tasks to each member of the team, and stay in contact to accomplish them. List the tasks with the team so that everyone knows what needs to get done to achieve the project goal.

7.5.2 Human Centered Design

Given the online nature of this project, collaborating within a document can become a slow process. Somebody might check the document one day and it might take another day for somebody else to look at it just because the project is online. Our experience within this project indicated that doing this kind of collaborative work was most productive when we did the following:

1. After establishing a collaborative task (co-editing a document, a script, brainstorming, etc) in a meeting, initializing the task immediately sped up the process.
2. Telling the other collaborator when edits were made, and notifying them when feedback is desired.
3. Iterating this process multiple times.