

Office of Strategic Information, Research, and Planning

Host Country Impact Study Paraguay



Final Report prepared by the Office of Strategic Information, Research, and Planning

About the Office of Strategic Information, Research, and Planning

It is the mission of the Office of Strategic Information, Research, and Planning (OSIRP) to advance evidence-based management at Peace Corps by guiding agency planning, enhancing the stewardship and governance of agency data, strengthening measurement and evaluation of agency performance and programs, and helping shape agency engagement on certain highlevel, government-wide initiatives.

Table of Contents

Table of Contents	3
List of Tables and Figures	. 4
Acknowledgements	. 6
Acronyms and Definitions	7
Executive Summary	8
Introduction	. 8
Purpose	. 8
Evaluation Methodology	. 9
Project Design and Purpose	. 9
Evaluation Findings	10
Chapter 1: Introduction	
Background	
Purpose	
The Paraguay Rural Health and Sanitation Project	17
Theory of Change	19
Evaluation Methodology	19
Chapter 2: Goal One Findings	
Frequency of Interaction with Volunteers	25
Factors Affecting Outcomes	
Satisfaction with Outcomes	73
Summary of Satisfaction	
Goal One Conclusion and Recommendations	
Chapter 3: Goal Two Findings	
Sources of Information about Americans	
Changes in Understanding and Opinions about Americans	
Causes for Changes in Opinion	
Impact of the Changes on Participants' Behavior and Outlook on Life	
Goal Two Conclusion and Recommendations	
Appendix 1: Methodology	
Site Selection	
Data Collection	
Appendix 2: Methodology from the Host Country Research Team	95

List of Tables and Figures

-		Theory of Change for the Paraguay Rural Health and Sanitation Project	
Table		Number and Type of Respondents: Paraguay Rural Health and Sanitation Project	
-		Background of Counterparts (n=36)	
		Experience of Counterparts (n=36)	
		Background of Beneficiaries (n=71)	
		Background of Students (n=44)	
		Background of Host Families (n=53)	
		Background of Stakeholders (n=14)	
		Experience of Stakeholders (n=14)	
Figure	9:	Frequency of Interaction with Volunteer during Work	25
Figure	10:	Frequency of Interaction with Volunteer Outside of Work	26
Figure	11:	Training Received by Counterparts and Beneficiaries	29
Figure	12:	Extent Training Enhanced Skills of Counterparts and Beneficiaries	30
Figure	13:	Counterpart Assessment of Changes Related to Project Goal 1 Outcomes	32
Figure	14:	Beneficiary Assessment of Changes Related to Project Goal 1 Outcomes	33
Figure	15:	Counterpart Assessment of Changes Related to Project Goal 2 Outcomes	34
Figure	16:	Beneficiary Assessment of Changes Related to Project Goal 2 Outcomes	34
Figure	17:	Counterpart Assessment of Changes Related to Project Goal 3 Outcomes	35
Figure	18:	Beneficiary Assessment of Changes Related to Project Goal 3 Outcomes	36
Figure	19:	Counterpart Assessment of Changes Related to Project Goal 4 Outcomes	37
Figure	20:	Beneficiary Assessment of Changes Related to Project Goal 4 Outcomes	37
Figure	21:	Effectiveness of Volunteers' Work in Building Community Capacity	38
Figure	22:	Effectiveness of Peace Corps' Work in Comparison to Other Groups	39
Figure	23:	Student Assessment of Changes	40
Figure	24:	Extent to which Counterparts and Beneficiaries Maintained Changes	41
Figure	25:	Counterpart Assessment of Sustainability of Project Goal 1 Outcomes	42
Figure	26:	Beneficiary Assessment of Sustainability of Project Goal 1 Outcomes	43
Figure	27:	Counterpart Assessment of Sustainability of Project Goal 2 Outcomes	44
Figure	28:	Beneficiary Assessment of Sustainability of Project Goal 2 Outcomes	44
Figure	29:	Counterpart Assessment of Sustainability of Project Goal 3 Outcomes	45
Figure	30:	Beneficiary Assessment of Sustainability of Project Goal 3 Outcomes	45
-		Counterpart Assessment of Sustainability of Project Goal 4 Outcomes	
-		Beneficiary Assessment of Sustainability of Project Goal 4 Outcomes	
-		Counterpart Assessment of How Well Project Goal 1 Changes Met Needs	
-		Beneficiary Assessment of How Well Project Goal 1 Changes Met Needs	
-		Counterpart Assessment of How Well Project Goal 2 Changes Met Needs	
-		Beneficiary Assessment of How Well Project Goal 2 Changes Met Needs	
		Counterpart Assessment of How Well Project Goal 3 Changes Met Needs	
-		Beneficiary Assessment of How Well Project Goal 3 Changes Met Needs	
-		Counterpart Assessment of How Well Project Goal 4 Changes Met Needs	
0	•		

Figure 40: Beneficiary Assessment of How Well Project Goal 4 Changes Met Needs	52
Figure 41: Counterpart Assessment of Individual Changes Related to Project Outcomes	55
Figure 42: Beneficiary Assessment of Individual Changes Related to Project Outcomes	56
Figure 43: Personal Change that Can Be Attributed to Student-Volunteer Interaction	57
Figure 44: Counterpart Assessment of Sustainability at the Individual Level	58
Figure 45: Beneficiary Assessment of Sustainability at the Individual Level	59
Figure 46: Counterpart Assessment of How Outcomes Met their Individual Needs	60
Figure 47: Beneficiary Assessment of How Outcomes Met their Individual Needs	61
Figure 48: Frequency of Skills Used in Personal Life	62
Figure 49: Frequency of Skills Used in Professional Life	63
Figure 50: Factors Limiting the Sustainability of Project Outcomes	69
Figure 51: Importance of Daily Interaction in Causing Change	71
Figure 52: Importance of the Volunteer Living Locally in Causing Change	72
Figure 53: Counterpart, Beneficiary, and Stakeholder Satisfaction	.74
Figure 54: Counterpart and Beneficiary: Want another Volunteer	75
Figure 55: Respondent Sources of Information about Americans	80
Figure 56: Understanding of Americans before Interacting with a Volunteer	81
Figure 57: Understanding of Americans after Interacting with a Volunteer	82
Figure 58: Opinions of Americans before Interacting with a Volunteer	83
Figure 59: Opinions of Americans after Interacting with a Volunteer	83
Table 2: Summary of Interview Questions by Respondent Type	93

Acknowledgements[⊥]

Several people at Peace Corps/headquarters were instrumental in shepherding this from initial concept to reality. Valuable support and input came from the following headquarters staff: Meghan Curley and Amy Johnson.

The interest and support from the Peace Corps staff in Paraguay was critical to this endeavor. Our sincere appreciation is extended to Country Director Donald Clark, Director of Programming and Training Dee Hertzberg, and Associate Peace Corps Director of the Health Program Pedro Souza.

The success of this study is ultimately due to the work of Senior Researchers Nestor Peralta and Rodolfo Elias and their research team, who skillfully encouraged the partners of Peace Corps Volunteers to share their experiences and perspectives.

¹ Although these studies were a team effort by all members of the OSIRP staff, we would like to recognize Matthew Gallagher for his role as the study lead. Janet Kerley provided advice as OSIRP's Chief of Research, Evaluation, and Measurement. Laurel Howard formatted and copy-edited the report, and OSIRP Director Dr. Cathryn L. Thorup reviewed and made the final substantive edits to the report.

Acronyms and Definitions

Acronyms

HCN	Host Country Na	ational		
OSIRP	Office of Strateg	gic Information, Research, and Planning		
PCV	Peace Corps Vol	unteer		
PST	Pre-Service Train	ning		
IST	In-Service Traini	ng		
SENASA Servicio Nacion Service)		al de Saneamiento Ambiental (National Environmental Sanitation		
Definitions				
Beneficiaries		Individuals who receive assistance and help from the project; the people that the project is primarily designed to benefit		
Counterparts/				
Project partners		Individuals who work with Peace Corps Volunteers; Volunteers may work with multiple partners and counterparts during their service. Project partners also benefit from the projects, but when they are paired with Volunteers in a professional relationship or when they occupy a particular position in an organization or community (e.g., community leader), they are considered counterparts or project partners		
Host family members		Families with whom a Volunteer lived during all or part of his/her training and/or service		
		Host country agency sponsors and partners; including host- country ministries and local non-governmental agencies that are sponsoring and collaborating on a Peace Corps project. ² There may be a single agency or several agencies involved in a project in some role		

² This definition, while narrower than the one commonly used in the development field, is the definition provided in the *Peace Corps Programming and Training Booklet I*.

Executive Summary

Introduction

In 2008, the Peace Corps launched a series of studies to determine the impact of its Volunteers on two of the agency's three historic goals: building local capacity and promoting a better understanding of Americans among host country nationals (HCNs). The Peace Corps conducts an annual survey that captures the perspective of currently serving Volunteers. While providing critical insight into the Volunteer experience, the survey can only address one side of Peace Corps' story. The agency's Host Country Impact Studies are unique for their focus on learning about the Peace Corps' impact directly from host country nationals who lived and worked with Volunteers.

This report presents the findings from a study conducted in Paraguay in July 2011. The focus of the research was the Rural Health and Sanitation Project. The results of the findings from the local research team were shared with the post immediately upon completion of the fieldwork. This OSIRP report is based upon the data collected by the local team and contains a thorough review of the quantitative and qualitative data, supported by respondents' quotes and analysis of the data, presented in a format that is standard for all the country reports.

Purpose

Paraguay's Host Country Impact Study was initiated to assess the degree to which the Peace Corps is able to meet the needs of the host country in improving health outcomes and in promoting a better understanding of Americans among host country nationals. The study provides Peace Corps Paraguay with a better understanding of the Rural Health and Sanitation Project and the impact it has had on local participants. In addition, the evaluation provides insight into what host country nationals (HCNs) learned about Americans and how their opinions about Americans changed after working with a Volunteer and identifies areas for improvement.

The major research questions addressed in the study are:

- Did skills transfer and capacity building occur?
- What skills were transferred to organizations/communities and individuals as a result of Volunteers' work?
- Were the skills and capacities sustained past the end of the project?
- How satisfied were HCNs with the project work?
- What did HCNs learn about Americans?
- Did HCNs report that their opinions of Americans had changed after interacting with the Peace Corps and Peace Corps Volunteers (PCVs)?

³Peace Corps surveyed Volunteers periodically from 1975 to 2002, when a biennial survey was instituted. The survey became an annual survey in 2009 to meet agency reporting requirements.

The evaluation results will be aggregated and analyzed with the results from other Host Country Impact Studies to assess the agency's impact on local partners and participants across a variety of posts.

Evaluation Methodology

This report is based on data provided by counterparts, beneficiaries, stakeholders, students, and host family members associated with the Rural Health and Sanitation Project during interviews with the research team. The study included interviews with:

- 36 Counterparts
- 71 Beneficiaries
- 44 Students
- 53 Host Family members
- 14 Stakeholders

The study reached 218 respondents in 24 communities.

All interviews were conducted in July 2011. (See Appendix 1 for a full description of the methodology. Please contact OSIRP for a copy of the interview questionnaires.)

Project Design and Purpose

The purpose of the Rural Health and Sanitation Project is to improve the health, nutrition, and sanitation knowledge and practices of community members and service providers in rural Paraguayan communities, thereby leading to healthier lives. The project had been redesigned and launched in 2004 by combining the goals of two previously existing health sector projects: Environmental Sanitation and Rural Health Extension. The decision to merge these projects was made to better support the Ministry of Public Health's move to decentralize its health services from regional hospitals to local health centers and health posts in order to improve the reach of their health care services.

The impact study covers two project plans developed for Paraguay's Rural Health and Sanitation Project. The first project plan launched in June 2004 and was expected to end in June 2010. Upon review in September 2007, the project plan was modified, and the new project plan commenced in March 2008 and ended in June 2010. The modifications made to the 2004 project plan were slight, with minor changes made to the wording of some activities and updating of targets, but the project goals remained the same.

⁴ Information on the Rural Health and Sanitation Project in Paraguay comes from the two project plans that span the timeframe of this impact study: *Peace Corps Paraguay Rural Health and Sanitation Project Plan*, Peace Corps, June 2004, and *Peace Corps Paraguay Rural Health and Sanitation Project Plan*, Peace Corps, March 2008.

Evaluation Findings

The evaluation findings indicate that the intended outcomes of the Rural Health and Sanitation Project were initially met, although the outcomes were not sustained at the same high level when the Volunteers left their communities.

The project had the greatest impact in terms of change, sustainability, and meeting community and individual needs in three main outcome areas: 1) improved cooking practices (including improved stoves), 2) practicing parasite prevention habits, such as washing hands and wearing shoes on a daily basis 3) constructing and using sanitary latrines, 4) children practicing good dental hygiene, and 5) access to potable water.

Respondents were primarily satisfied with the outcomes of the project because project participants acquired new knowledge that has produced positive change and improved their communities and personal lives. Counterparts frequently described their increased professional capacity to share knowledge on health issues as a positive project outcome. Respondents specifically mentioned their satisfaction with improved stoves, hygiene, improved latrines, and better dental health practices which, in turn, had led to healthier and cleaner communities and homes.

As a result of working and living with Peace Corps Volunteers, the respondents changed the way they perceived people from the United States, developing a more positive opinion of Americans. Respondents based their perception of people from the United States on the good nature and values exhibited by Volunteers.

While the report provides a detailed analysis of the study findings, the key findings are listed below:

Agency Goal One Findings

Volunteer Activities

- Volunteers implemented all eight activities outlined in the Rural Health and Sanitation Project Plan, while also implementing sixteen additional activities
- Volunteers implemented seven of the intended activities consistently (dental health, parasite prevention, improved stoves, sanitation, nutrition, and reproductive health). Volunteers implemented one of the intended activities inconsistently (potable water)

Project Participant Training

- Counterparts and beneficiaries most frequently stated they received training in nutrition (including improved cooking practices) (55%), dental health (51%), and parasite prevention (48%)
- 100 percent of counterparts and 98 percent of beneficiaries indicated that the training enhanced their skills

Intended Outcomes: Community Capacity Building

- Most outcomes showed high rates of community change
 - 94 percent of beneficiaries and 85 percent of counterparts stated that cooking practices were much better in their communities due to the use of improved stoves
 - 92 percent of beneficiaries and 81 percent of counterparts reported that families' use of sanitary latrines was much better in their communities
 - 87 percent of beneficiaries and 91 percent of counterparts stated that children's dental hygiene was much better in their communities
- Teachers' capacity to conduct health lessons was improved
 - 80 percent of beneficiaries and 79 percent of counterparts responded that teachers' capacity to conduct lessons on maintaining and improving dental health was much better
 - 76 percent of beneficiaries and 71 percent of counterparts responded that teachers' capacity to conduct lessons on preventing parasites was much better
- Peace Corps' health work was more effective than comparison groups
 - 53 percent of counterparts and 52 percent of beneficiaries stated that Peace Corps' work was much more effective than other health groups operating in their communities. 40 percent of counterparts and 44 percent of beneficiaries responded that Peace Corps' work was somewhat more effective
- Community changes were somewhat sustained
 - 85 percent of counterparts and 92 percent of beneficiaries stated that children practicing parasite prevention habits were fully sustained. However, only 54 percent of counterparts and 58 percent of beneficiaries stated that adults' dental hygiene practices were fully sustained
 - Counterparts and beneficiaries stated that the most positive and lasting outcomes of the Rural Health and Sanitation Project were improved stoves (39%), better hygiene practices (21%), improved latrines (18%), and better dental health practices (17%)
- The outcomes substantially met community needs
 - 98 percent of beneficiaries and 95 percent of counterparts expressed that the Volunteers' work on improving family cooking practices met their needs
 - 98 percent of beneficiaries and 89 percent of counterparts indicated that the Volunteers' work on improving the parasite prevention habits of children met their needs
 - Conversely, five project outcomes focused on the adult population and respondents ranked and rated them in the bottom half of the sixteen project outcomes, as compared to those focused on the youth population

Intended Outcomes: Individual Capacity Building

- Most outcomes showed high rates of individual change
 - 95 percent of counterparts and beneficiaries reported that their use of sanitary latrines was much better
 - 89 percent of counterparts and beneficiaries stated that their parasite prevention habits were much better
 - 69 percent of counterparts and 65 percent of beneficiaries stated that their diet was much better due to the work of the Volunteers
 - 86 percent of counterparts and 87 percent of beneficiaries use their new skills daily in their personal life
 - 75 percent of counterparts and 79 percent of beneficiaries use their new skills daily in their professional life
- Individual changes were largely sustained
 - 94 percent of counterparts and 91 percent of beneficiaries sustained their parasite prevention habits
 - 90 percent of counterparts and beneficiaries sustained their use of sanitary latrines
- The outcomes largely met individual needs
 - 97 percent of counterparts and 95 percent of beneficiaries stated that the Volunteers' work on parasite prevention habits met their needs
 - 96 percent of counterparts and 90 percent of beneficiaries reported that the Volunteers' work on accessing potable water met their needs

Unintended Outcomes: Community and Individual Capacity Building

• Due to the work of the Volunteers, communities learned how to organize themselves to collaboratively affect change in areas of concern. This included how to organize community groups, unite the community (including authorities) around a particular topic, organize participatory meetings, and work collaboratively with neighbors.

Factors Contributing to Project Success

• According to respondents, the project's success was derived from a combination of three factors: community interest and participation in project activities, the personality and relationship-building skills of the Volunteer, and cross-sectoral support for the project goal. Additionally, placing Volunteers at sites with established community groups, such as women's groups (referred to as 'commissions' by respondents), lent credibility to the project and the Volunteer, and allowed community members to participate in project activities through an organization with which they were already familiar

Factors Hindering Project Success

- According to respondents, several factors limited project success: community disinterest, lack of participation, lack of support from community leaders, initial distrust of the Volunteer, the Volunteers' poor grasp of the Guarani language, and deficient infrastructure such as poor roads and limited transportation options
- Due to the field work at multiple sites involved in the Rural Health and Sanitation Project, daily interaction between the Volunteer and beneficiaries (24%) and students (16%) was limited. However, 57 percent of counterparts interacted with the Volunteer on a daily basis

Satisfaction with Peace Corps Work

- 75 percent of counterparts, 89 percent of beneficiaries, and 86 percent of stakeholders were very satisfied with the changes resulting from the project
- 94 percent of counterparts, 100 percent of beneficiaries, and 98 percent of students expressed a desire to work with another Volunteer

Agency Goal Two Findings

Changes in Understanding and Opinions of Americans

- Prior to meeting a Volunteer, 17 percent of counterparts, 49 percent of beneficiaries, 66 percent of students, and 55 percent of host families reported they had no prior knowledge about Americans
- After interacting with a Volunteer,
 - 63 percent of counterparts indicated that they had a moderate understanding of Americans. 16 percent stated that they had a thorough knowledge of Americans
 - 48 percent of beneficiaries indicated that they had a moderate understanding of Americans
 - 49 percent of students stated that they had a moderate understanding of Americans
 - 45 percent of host family members indicated that they had a moderate understanding of Americans
- Prior to meeting a Volunteer, 64 percent of counterparts, 78 percent of beneficiaries, 89 percent of students, and 73 percent of host family members had neither a positive nor negative opinion of Americans
- After interacting with a Volunteer,
 - 33 percent of counterparts indicated that they had a more positive opinion of Americans. 61 percent stated that they had a somewhat more positive opinion of Americans
 - 24 percent of beneficiaries indicated that they had a more positive opinion of Americans. 67 percent stated that they had a somewhat more positive opinion of Americans

- 8 percent of students indicated that they had a more positive opinion of Americans. 82 percent stated that they had a somewhat more positive opinion of Americans
- 14 percent of host family members indicated that they had a more positive opinion of Americans. 72 percent stated that they had a somewhat more positive opinion of Americans

Causes of Change in Opinions of Americans

- In work situations, respondents stated that they changed their opinions of Americans through their observations of how the Volunteers were willing to share their knowledge, approached their work with humility and commitment, were respectful, and did not discriminate against community members due to perceived differences.
- In social situations, respondents stated that they changed their opinions because they saw that Volunteers were simple, curious, and positive people. The respondents expressed surprise at the Volunteers' ability to adapt to Paraguay and how easy it was to relate to them and to form a relationship. The Volunteers' dedication to philanthropic work also impressed the respondents.
- The Volunteers' positive demeanor and behavior inspired many host family members to describe them in terms of family

Changes in Behaviors and Outlook on Life

- Counterparts, beneficiaries, students, and host families who reported a more positive opinion of Americans stated they:
 - Are more communicative, in terms of sharing their ideas and opinions with family members and neighbors and socializing with family and friends
 - Are more participative, in terms of attending community events and sharing ideas and opinions at community meetings
 - Are more organized, collaborative, unified, and dedicated as a community in their efforts to affect positive change
 - Increased their healthy eating habits
 - Improved their hygiene habits
 - o Improved their dental health habits
 - Have an overall improved confidence and outlook on life, in terms of embracing the philosophy that personal and community change will occur when a sustained effort is made to overcome all challenges and realize the stated goal

Chapter 1: Introduction

Background

The Peace Corps traces its roots and mission to 1960, when then-Senator John F. Kennedy challenged students at the University of Michigan to serve their country in the cause of peace by living and working in developing countries. Peace Corps grew from that inspiration into an agency of the federal government devoted to world peace and friendship.

By the end of 1961, Peace Corps Volunteers were serving in seven countries. Since then, more than 210,000 men and women have served in 139 countries. Peace Corps activities cover issues including education, HIV/AIDS, and business development. Peace Corps Volunteers continue to help countless individuals who want to build a better life for themselves, their children, and their communities.

In carrying out the agency's three core goals, Peace Corps Volunteers make a difference by

building local capacity and promoting a better understanding of Americans among local community members. A major contribution of Peace Corps Volunteers, who live in the communities where they work, stems from their ability to deliver technical interventions directly to beneficiaries living in rural and urban areas that lack sufficient local capacity. Volunteers operate from a community development principle that promotes sustainable projects and strategies.

The interdependence of Goal One and Goal Two is central to the Peace Corps

Peace Corps' Core Goals

Goal One - To help the people of interested countries in meeting their need for trained men and women.

Goal Two - To help promote a better understanding of Americans on the part of the peoples served.

Goal Three - To help promote a better understanding of other people on the part of Americans.

experience, as local beneficiaries develop relationships with Volunteers who communicate in the local language, share everyday experiences, and work collaboratively on a daily basis.

The Peace Corps conducts an annual survey of currently serving Volunteers; however, it tells only one side of the Peace Corps' story. In 2008, the Peace Corps launched a series of studies to better assess the impact of its Volunteers. The studies are unique for their focus on learning about the Peace Corps' impact directly from the HCNs who lived and worked with Volunteers.

⁵Peace Corps surveyed Volunteers periodically from 1975 to 2002, when a biennial survey was instituted. The survey became an annual survey in 2009 to meet agency reporting requirements.

Purpose

This report presents the findings from the impact evaluation conducted in Paraguay in July 2011. Impact evaluations describe "long-term economic, sociocultural, institutional, environmental, technological or other effects on identifiable populations or groups produced by a project, directly or indirectly, intended or unintended." The project studied was the Rural Health and Sanitation Project. The study documents host country nationals' perspectives on the impact of Peace Corps Volunteers on skills transfer to and capacity building of host country counterparts, beneficiaries, students, and stakeholders, and changes in their understanding of Americans.

The major research questions addressed in the study are:

- Did skills transfer and capacity building occur?
- What skills were transferred to organizations/communities and individuals as a result of Volunteers' work?
- Were the skills and capacities sustained past the end of the project?
- How satisfied were HCNs with the project work?
- What did HCNs learn about Americans?
- Did HCNs report that their opinions of Americans had changed after interacting with the Peace Corps and Peace Corps Volunteers?

The information gathered from these studies will inform Peace Corps staff at post and headquarters about host country nationals' perceptions of the projects, the Volunteers and the resulting impacts. In conjunction with Volunteer feedback from the Annual Volunteer Survey, this information will allow the Peace Corps to better understand its impact and address areas for improvement. For example, the information may be useful for Volunteer training and outreach to host families and project partners.

This information is also needed to provide performance information to the Office of Management and Budget (OMB) and the United States Congress. As part of the Peace Corps Improvement Plan, drafted in response to its 2005 Program Assessment Rating Tool review, the Peace Corps proposed the creation of "baselines to measure results including survey data in countries with Peace Corps presence to measure the promotion of a better understanding of Americans on the part of the peoples served."⁷

Feedback from the three pilots was used to revise the methodology rolled out to six posts in 2009, ten posts in 2010, and five posts in 2011. A total of 24 posts across Peace Corps' three geographic regions (Africa; Inter-America and the Pacific; and Europe, Mediterranean and Asia) have conducted host country impact studies. Taken together, these studies contribute

 ⁶ Bamburger, M, Rugh, J. and Marby, L. (2006). *Real World Evaluation*. Thousand Oaks, CA: Sage Publications, p.39
 ⁷ Office of Management and Budget, *Program Assessment: Peace Corps. International Volunteerism, 2005. Improvement Plan.*

to Peace Corps' ability to document the degree to which the agency is able to both meet the needs of host countries for trained men and women, and to promote a better understanding of Americans among the peoples served.

The Paraguay Rural Health and Sanitation Project

The purpose of the Rural Health and Sanitation Project is to improve the health, nutrition, and sanitation knowledge and practices of community members and service providers in rural Paraguayan communities, thereby leading to healthier lifestyles. The project was redesigned and launched in 2004 by combining the goals of two previously existing health sector projects: Environmental Sanitation and Rural Health Extension. The decision to merge these projects was made to better support the Ministry of Public Health's move to decentralize its health services from regional hospitals to local health centers and health posts in order to improve the reach of the country's health care services.

The impact study covers two project plans developed for Paraguay's Rural Health and Sanitation Project. The first project plan was launched in June 2004 and was expected to end in June 2010. Upon review in September 2007, the project plan was modified, and a new project plan commenced in March 2008 and ended in June 2010. The modifications made to the 2004 project plan were slight, with minor changes made to the wording of some activities and an updating of targets, but the project goals remained the same.

Project Goals

The goals of the Rural Health and Sanitation Project focus on short-term outcomes - building the capacity of community members to make healthy lifestyle choices. These project outcomes correlate with and support long-term outcomes—reducing or eliminating the illnesses associated with a lack of capacity. The impact study only measures the extent to which capacity has been built through the work of the Volunteers, and does not measure the project's effect upon the associated illnesses.

As stated above, the impact study covers two project plans developed for Paraguay's Rural Health and Sanitation Project. The first project plan launched in June 2004 and the second was initiated in March 2008. As the 2008 project plan goals remained identical to those in the 2004 plan, the 2008 goals are presented below. Slight wording and target modifications were made to the 2008 plan, so the activities presented for each goal relate to the 2008 plan without reference to target numbers.

Goal 1: Teachers and parents (women and men), and students (boys and girls) will improve their knowledge, attitudes and practices in basic hygiene through dental health and parasite prevention. The two activities for this goal are:

- 1. Volunteers, in collaboration with their local contacts, will train parents and teachers (women and men), and students (boys and girls) on dental hygiene.
- 2. Volunteers, in collaboration with their local contacts, will train parents and teachers (women and men), and students (boys and girls) on parasite prevention.

Goal 2: Men, women, boys and girls will acquire new knowledge concerning balanced nutrition, adopt promising cooking practices, and improve cooking facilities. The two activities for this goal are:

- 1. Volunteers, in collaboration with their local contacts, will train men and women and boys and girls on nutrition.
- 2. Volunteers, in collaboration with their local contacts, will train men and women on the importance, proper use, and construction of brick ovens.

Goal 3: Men, women, young women, and young men will demonstrate improved knowledge concerning reproductive health, STIs, and HIV/AIDS, and changed attitudes concerning reproductive health. The two activities for this goal are:

- 1. Volunteers, in collaboration with their local contacts, will educate men and women, young women and young men about reproductive health through educational sessions and/or home visits.
- 2. Volunteers, in collaboration with their local contacts, will provide information and prevention education about STIs and HIV/AIDS to men and women, young women and men.

Goal 4: Men, women, boys, and girls will understand the importance of a sanitary environment and will have access to potable water sources, and sanitary latrines, and will better their garbage disposal practices. The two activities for this goal are:

- 1. Volunteers, in collaboration with their local contacts, will train men, women, girls and boys about the importance of sanitary latrines and garbage disposal pits and how to construct them.
- 2. Volunteers, in collaboration with their local contacts, will train men, women, boys and girls about the importance of a potable water source.

Theory of Change

A theory of change is a conceptual model used to understand the relationships between the problems a program is designed to alleviate, and the assumptions made regarding how program activities will address those problems. OSIRP staff reviewed the theory of change for the Rural Health and Sanitation Project with the local research team during the impact evaluation training that took place in Paraguay.

Figure 1: Theory of Change for the Paraguay Rural Health and Sanitation Project⁸

Evaluation Methodology

In 2008, the Peace Corps' Office of Strategic Information, Research, and Planning (OSIRP) initiated a series of evaluation studies in response to a mandate from the Office of Management and Budget (OMB) to evaluate the impact of Volunteers in achieving Goal Two.

⁸ Source: Adapted from the Peace Corps/Paraguay Rural Health and Sanitation Project Plan initiated in 2004 and the Peace Corps/Paraguay Rural Health and Sanitation Project Plan initiated in 2008.

Three countries were selected to pilot a methodology that would examine the impact of the technical work of Volunteers, and their corollary work of promoting a better understanding of Americans among the people with whom the Volunteers lived and worked. In collaboration with Peace Corps Country Director at each post, OSIRP piloted a methodology to collect information *directly from host country nationals* about skills transfer and capacity building, as well as changes in their understanding of Americans.

The research was designed by OSIRP social scientists and is implemented in country by a local senior researcher and a team of local interviewers under the supervision of the Peace Corps country staff. The OSIRP team provided technical direction. A web-based database was used to manage the questionnaire data and subsequent analysis.

In Paraguay, the team conducted 218 semi-structured interviews in 24 communities where Volunteers worked. One hundred seven Volunteer placements between 2006 and 2011 were identified for possible participation in the study. A representative, rather than a random, sample was drawn from this list of Volunteer assignment sites. Interviews were conducted in Spanish and Guarani in July 2011. (The interview schedule is available upon request from OSIRP, and Appendix 1 contains a full description of the research methodology.)

Respondents

Five groups of Paraguayans were interviewed (Table 1):

- **Counterparts**: Community Leaders, Health Professionals, NGO Program Manager, and Teachers (36)
- **Beneficiaries:** Community Leaders, Health Professionals, Teachers, Women's Commission Members, Youth Group Members (71)
- **Host Family Members:** Families the Volunteer lived with and landlords of the Volunteers during all or part of their service (53)
- **Stakeholders:** Local Government Officials, Ministry of Health Officials, Ministry of Education Officials, School Directors, National NGO Staff, and SENASA Staff (14)
- Students: Primary School Students, Secondary School Students (44)

Table 1: Number and Type of Respondents: Paraguay Rural Health and Sanitation Project

	Number of	
Interviewee Type	Respondents	Number of Sites
Counterparts	36	24
Beneficiaries	71	24
Host Family Members	53	24
Stakeholders	14	Unknown
Students	44	24
Total	218	-

The charts below provide a further breakdown on the backgrounds of each respondent group. Please note that percentages may add up to more than 100 percent as each respondent was allowed to choose more than one category based on their background.

Community leaders (61%) and teachers (39%) comprised the majority of the counterpart respondents (Figure 2). Counterparts indicating that they were 'Other' included three school directors, a retired teacher, a member of a school's parents association, and a construction worker. The cohort of counterpart respondents was quite experienced, with the highest percentage of respondents (69%) having spent over 10 years in their field of work (Figure 3).

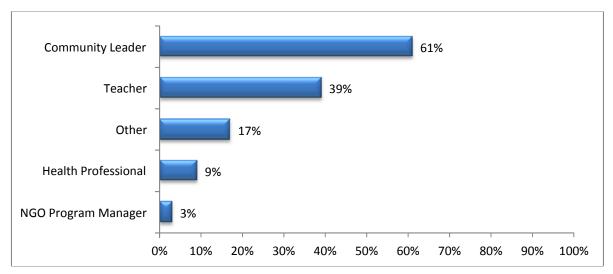


Figure 2: Background of Counterparts (n=36)

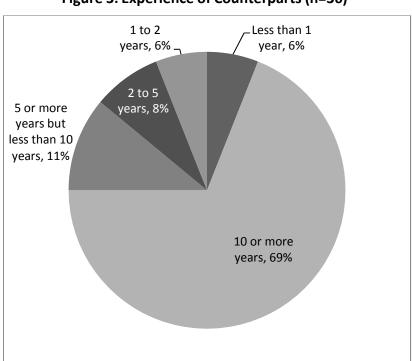
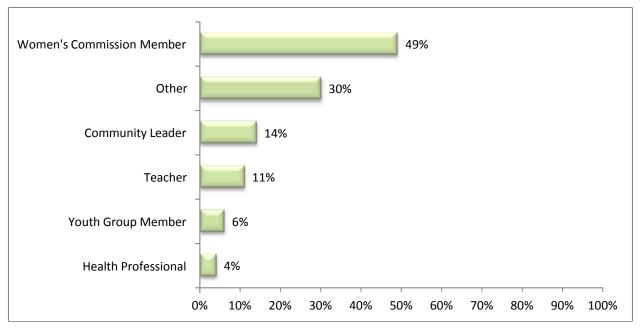
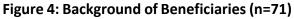


Figure 3: Experience of Counterparts (n=36)

For beneficiaries, members of women's groups (referred to as "commissions" by respondents) represented the bulk of respondents (49%) (Figure 4). Thirty percent of beneficiares indicated that they were 'Other'. These respondents included four housewives, four members of a religious organization, two members of a health board, and members of various neighborhood commissions.





For students, 57 percent were in primary school and 43 percent were in secondary school at the time the Volunteer was in their classroom (Figure 5). Students were also asked their current age, with an even distribution of students indicating they were between 10 and 21 years of age.

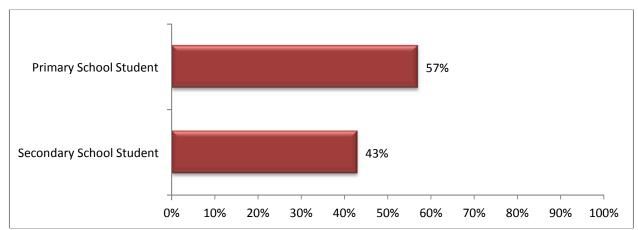


Figure 5: Background of Students (n=44)

Host mothers comprised the majority of host family respondents (74%) followed by neighbors/family-like friends (9%), and host fathers (8%). Respondents indicating that they were 'Other' were a Host Grandmother, Host Grandfather, and a 'Woman of the House' (Figure 6).

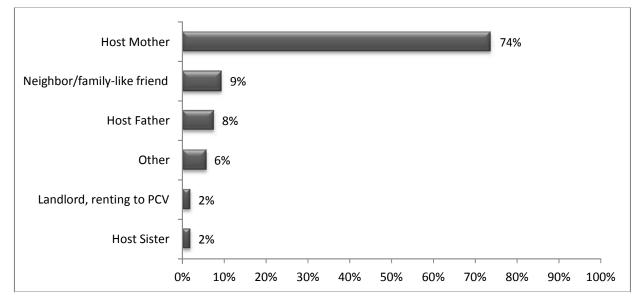


Figure 6: Background of Host Families (n=53)

School Directors (29%) and SENASA staff (29%) comprised the majority of the respondents among stakeholders (Figure 7). The two stakeholders categorized as 'other' indicated that they were mayors. The field experience of stakeholders was varied, with the highest percentage of respondents (57%) having spent over ten years in their career field (Figure 8).

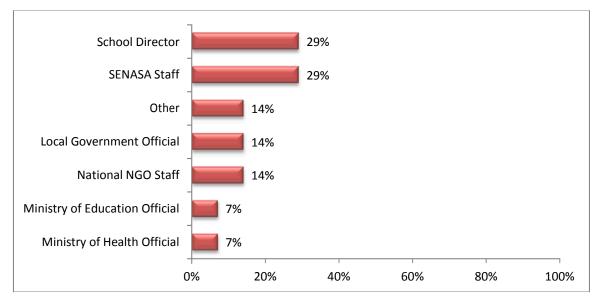
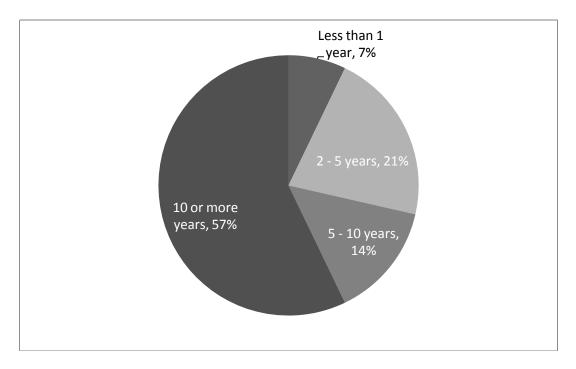


Figure 7: Background of Stakeholders (n=14)

Figure 8: Experience of Stakeholders (n=14)



⁹ Due to the low number of stakeholder respondents (14), their responses are not included in the charts. However, their input is included in the narrative to present a more complete picture of the findings.

Chapter 2: Goal One Findings

All Peace Corps projects support the agency's primary goal of building the technical capacity of local men and women to make it possible for communities to improve their own lives. The primary goal of the Rural Health and Sanitation Project is to improve the health, nutrition, and sanitation knowledge and practices of community members and service providers in rural Paraguayan communities, thereby leading to healthier lives. In addition, the project seeks to strengthen linkages between the communities and their health service providers, and improve the capacity of health educators to provide preventative health care to their constituents. Volunteers working on this project are expected to achieve these goals through specific activities outlined in the project plan, as well as through community-generated activities at the grassroots level.

Frequency of Interaction with Volunteers

During work hours, the greatest number of counterparts (57%) worked with the Volunteer on a daily basis. The remaining counterparts worked with the Volunteer several times a week (29%) or once a week (14%). These percentages indicate a high level of interaction between the Volunteer and their counterpart. For beneficiaries, time spent with the Volunteer varied between daily (24%), several times a week (32%), once a week (28%), and one to two times per month (15%). Students most often interacted with the Volunteer several times a week (52%). The remaining students worked with the Volunteer once a week (30%), daily (16%), and one or two times per month (2%) (Figure 9). No respondent group indicated that they interacted with the Volunteer less frequently than one to two times per month.

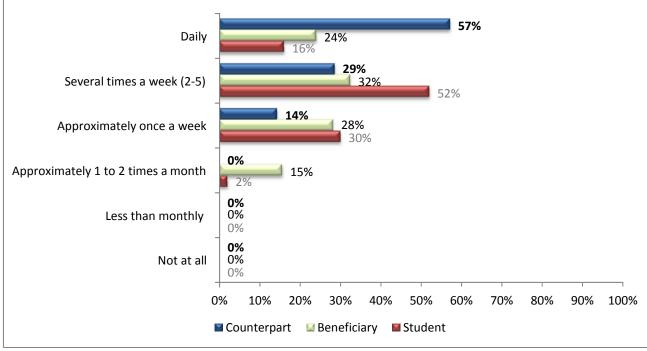


Figure 9: Frequency of Interaction with Volunteer During Work

For counterparts, N=35; for beneficiaries N=71; for students, N=44

All respondent groups reported higher rates of daily interaction with the Volunteers outside of work, with 64 percent of counterparts, 41 percent of beneficiaries, and 30 percent of students indicating this level of interaction (Figure 10). However, 11 percent of students and 3 percent of beneficiaries never interacted with the Volunteer outside of work, and 3 percent of counterparts and 2 percent of students interacted outside of work less than monthly.

For stakeholders, 93 percent responded they had known about Peace Corps projects and activities for more than one year, indicating some level of familiarity with the agency's mission and methods. Indeed, 57 percent of stakeholders reported that they had known about Peace Corps projects for 10 or more years.

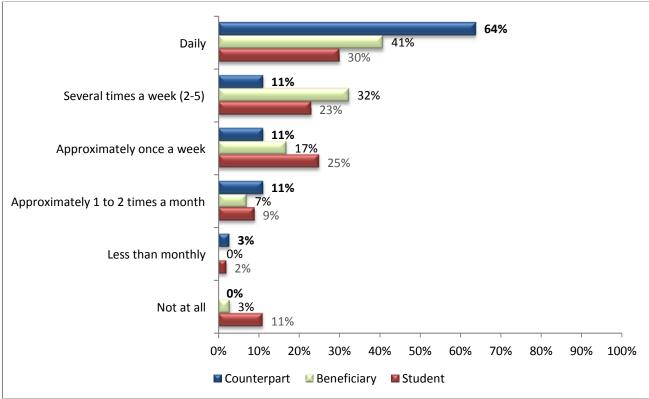


Figure 10: Frequency of Interaction with Volunteer Outside of Work

For counterparts, N=36; for beneficiaries N=71; for students, N=44

Project Activities

As part of the impact study survey, 151 counterparts, beneficiaries, and students were asked to describe the activities that the Volunteers had implemented in their communities. Based on analysis of the 145 project participants that provided responses, Volunteers implemented all eight intended project activities while initiating sixteen additional activities.

The following list provides the eight intended project activities, as described by the counterparts and beneficiaries, in rank order:

- 54% Dental Hygiene
- 51% Parasite Prevention, including hand washing and personal hygiene maintenance
- 37% Improved Stove, including construction, use, and maintenance
- 23% Nutrition
- 23% Sanitation, including garbage disposal and the construction and use of latrines¹⁰
- 21% HIV/AIDS and Sexually Transmitted Infections (STIs)
- 15% Reproductive Health
- 3% Potable Water

Counterparts, beneficiaries, and students also described sixteen activities that do not appear in the project plan of the Rural Health and Sanitation Project. These activities were:

- 17% Making soap, detergent, shampoo¹¹
- 17% Teaching English
- 11% Planting gardens
- 11% Forming various neighborhood action committees
- 7% Reading skills
- 6% Athletic activities
- 4% Planting trees
- 3% Creating soy products
- 2% Summer camps
- 2% Self-esteem classes
- 1% Recycling
- 1% Library development
- 1% Beekeeping
- 1% Bringing electricity to communities
- 1% Making drinking cups from glass bottles

When asked to describe the activities that the Volunteers implemented in their communities, stakeholders chose to describe the higher level goals of the Rural Health and Sanitation Project, and most often mentioned that the Volunteers worked with the local communities to improve their preventative health knowledge and practices through educational lectures and trainings. Five stakeholders specifically mentioned the Volunteers' work in the area of dental health, and five more mentioned their work in preventing parasites.

¹⁰ While garbage disposal and sanitary latrines are two distinct activities, they are combined in the project plan. Therefore, they are combined here for consistency.

¹¹ Making soap could be included under the parasite prevention activities, but the respondents did not clearly specify that they used the soap for parasite prevention activities.

Intended Outcomes

Project activities seek to produce specific outcomes that meet project goals, and in so doing highlight the extent to which Peace Corps meets its primary goal of transferring technical skills and building local capacity. Performance under Peace Corps' first goal was examined in three ways:

- 1. The extent to which HCNs observed community and personal changes, and reported gaining new technical skills.
- 2. The extent to which the capacity for maintaining the changes was built once the project ended.
- 3. The extent to which the project met the community and personal needs of local participants.

Training provided by Volunteers is one method for increasing the technical capacity of local teachers and one of the immediate outputs of any Peace Corps project. The training received by counterparts and beneficiaries and the extent to which training enhanced their skills is presented first. Intended outcomes observed by the project participants at the community-level are presented second, followed by the individual-level changes that respondents reported.

Training Received

Basic training areas for counterparts and beneficiaries in the Rural Health and Sanitation Project are: dental health, parasite prevention (including potable water), sanitation, nutrition (including improved cooking practices), and reproductive health. Eighty-nine percent of counterparts and 93 percent of beneficiaries stated that they received training in these areas (Figure 11). When broken down into the component parts, respondents indicated that their training occurred in the following areas:

- 55% Nutrition (including improved cooking practices)
- 51% Dental health
- 48% Parasite prevention (including potable water)
- 29% Reproductive health
- 10% Sanitation (includes both sanitary latrines and waste disposal)

In Peace Corps/Paraguay, Volunteers are also trained to offer additional areas of training to their counterparts and beneficiaries. Counterparts indicated that they most often received training in the areas of Project Design and Management (PDM, 47%) and methods for preventing HIV/AIDS (44%). To a lesser extent, beneficiaries also received training in these two areas (27% and 38%, respectively). Training was provided inconsistently in the areas of assessing/monitoring community needs, organizational operations and management, providing services to vulnerable groups, and forming coalitions/linkages with other organizations.

Respondents also expressed that they received training in other areas. These areas included: sports, information technology, reforestation, recycling, English, and improved cooking by using soya.

One counterpart and one beneficiary stated they did not receive any training at all.

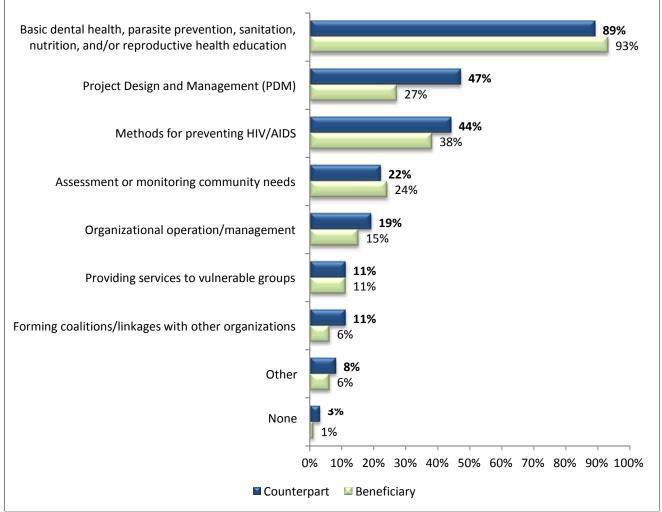
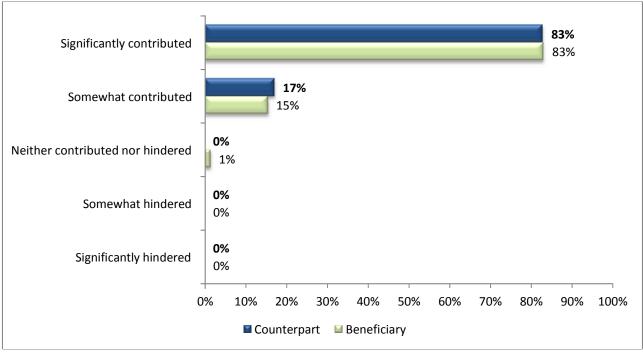


Figure 11: Training Received by Counterparts and Beneficiaries

For counterparts, N=36; for beneficiaries, N=71

Both groups felt the training they received had enhanced their overall skills (Figure 12). Eightythree percent of counterparts and beneficiaries believed the training significantly contributed to enhancing their skills. An additional 17 percent of counterparts and 15 percent of beneficiaries stated the training somewhat contributed to enhancing their skills. The skills most often cited as improving for both respondent groups were maintaining dental health, using improved cooking stoves, organizing and mobilizing community members, and sanitation.





For counterparts N=35, for Beneficiaries N=71

Community Level Change

The project theory of change (Figure 1) generated a list of planned project outcomes. Counterparts and beneficiaries were asked about the following community-level outcomes:

- 1. Adults (men and women) practicing good dental hygiene
- 2. Children (boys and girls) practicing good dental hygiene
- 3. Teachers' capacity to conduct lessons on maintaining and improving dental health
- 4. Adults (men and women) practicing parasite prevention habits, such as washing hands and wearing shoes, on a daily basis
- 5. Children (boys and girls) practicing parasite prevention habits, such as washing hands and wearing shoes, on a daily basis
- 6. Teachers' capacity to conduct lessons on preventing parasites

- 7. Adults (men and women) adopting balanced nutrition practices, such as planting a home garden, and eating fruits and vegetables
- 8. Children (boys and girls) adopting balanced nutrition practices, such as planting a school garden, and eating fruits and vegetables
- 9. Families using improved cooking practices, such as using a brick oven
- 10. Community members' attitudes towards people living with HIV/AIDS
- 11. Community members protecting themselves and their partners against HIV/AIDS and STIs (using condoms, getting HIV/AIDS tests, etc.)
- 12. Community members protecting themselves against unwanted pregnancies, spacing their children, talking about sexual health, and using the local health clinic to maintain sexual health
- 13. Families constructing sanitary latrines
- 14. Families using sanitary latrines
- 15. Community members protecting water sources in order to access clean water
- 16. Community members using water disinfectant methods in order to access clean water

Counterparts and beneficiaries were asked about these project outcomes through a matrix question. For each project outcome derived from the project plan, respondents were asked if changes had occurred and about the direction of those changes, whether the change had been maintained after the Volunteer departed, and whether the community's needs had been met. Students were asked a separate set of questions to assess changes within their classroom environment. Stakeholders, due to their limited interaction with Volunteers, were asked a more general set of questions. The results from the student and stakeholder questions will be shared below.

Due to the high number of outcomes outlined in the project framework, as well as the broad range of people participating in project activities (youth, adults, teachers, and families), project outcomes are grouped and presented below according to the four goals of the Rural Health and Sanitation Project Plan: Hygiene, Nutrition, Reproductive Health, and Sanitary Environment.

Changes Resulting from the Project ¹²

For hygiene outcomes, counterparts and beneficiaries agreed that dental hygiene among youth had experienced the most positive direction of change, with 91 percent of counterparts and 87 percent of beneficiaries rating the outcome as much better experienced a significant positive direction of change (Figures 13 and 14). The respondents also agreed that youths' parasite

¹² Respondents were asked about the extent to which they saw changes related to each outcome in their communities and schools on the following scale: Much Better; Somewhat Better; Same; Somewhat Worse; and Much Worse. As the vast majority of interviewees responded very positively, OSIRP retained the "Much Better" and "Somewhat Better" categories in order to clarify the differences between these two outcomes. OSIRP grouped the categories of "Somewhat Worse" and "Much Worse" into a single category called "Worse." This resulted in the following scale: Much Better, The Same, and Worse.

prevention habits (wearing shoes and washing hands) was the second most positive change, with 83 percent of counterparts and 86 percent of beneficiaries rating the outcome as much better. Finally, both respondent groups agreed that dental hygiene among adults experienced the least amount of positive change, with 67 percent of counterparts and 62 percent of beneficiaries rating the outcome as much better. Overall, both respondent groups saw a more positive direction of change in outcomes targeted towards youth than for those targeted towards adults. Examples described by beneficiaries included:

"We learned a lot with them, because one thing we never did before they came is dental health. Because of them, we worked and saw the results in children, and significantly decreased the problem of decay." – Counterpart, Apyragua

"The children have fewer cavities because they are using the fluoride." – Counterpart, Caundy

"Personal hygiene was a very positive change here in the community. We successfully reduced the problems of parasites [through] the use of shoes in adults and children." – Counterpart, Mandiyutygue

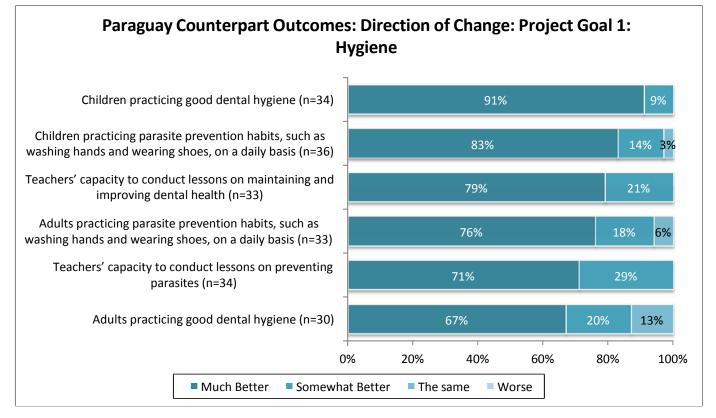


Figure 13: Counterpart Assessment of Changes Related to Project Goal 1 Outcomes

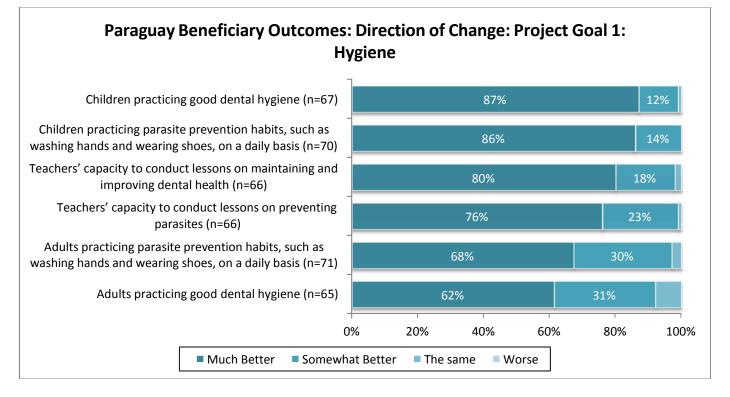


Figure 14: Beneficiary Assessment of Changes Related to Project Goal 1 Outcomes

For nutrition outcomes, counterparts and beneficiaries agreed that families using improved cooking practices, such as an improved stove, had experienced the most positive direction of change, with 85 percent of counterparts and 94 percent of beneficiaries rating the outcome as much better (Figures 15 and 16). All respondents rated the nutrition practices of youth and adults as better, with the nutrition practices of youth being rated much better at a slightly higher rate than those of adults. Comments on these outcomes included:

"The construction of modern bathrooms and stoves that went to all the homes – they improved the living conditions of the people." – Counterpart, Ybaroty

"The best part was the construction of the stove. That helps us a lot to cook and we no longer suffer from all of the cooking smoke on the ground." – Beneficiary, Zaro Caro

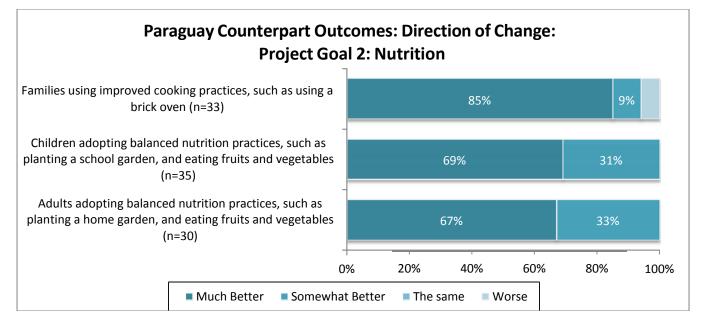
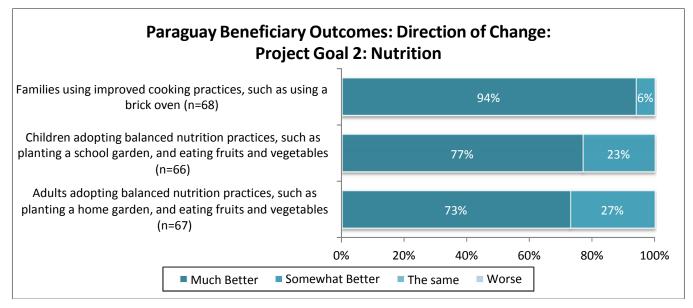


Figure 15: Counterpart Assessment of Changes Related to Project Goal 2 Outcomes

Figure 16: Beneficiary Assessment of Changes Related to Project Goal 2 Outcomes

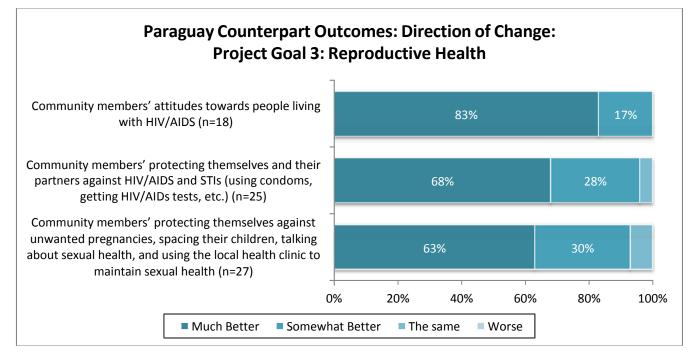


For the reproductive health outcomes, counterparts and beneficiaries agreed that community members' attitudes towards people living with HIV/AIDS had experienced the most positive direction of change, with 83 percent of counterparts and 75 percent of beneficiaries rating the outcome as much better (Figures 17 and 18). Both respondents groups rated community change in the area of community members' protecting themselves against HIV/AIDS as slightly higher than community members' reproductive health practices. Examples described by beneficiaries included:

"We maintain everything that was taught to us. We wash our hands and clean our bathroom, and the young are careful about HIV and getting pregnant." – Beneficiary, Solano Escobar

"Through the youth groups, there were talks about HIV, and awareness was raised in young people about condom use to prevent disease." – Beneficiary, Barrero Pyta

Figure 17: Counterpart Assessment of Changes Related to Project Goal 3 Outcomes



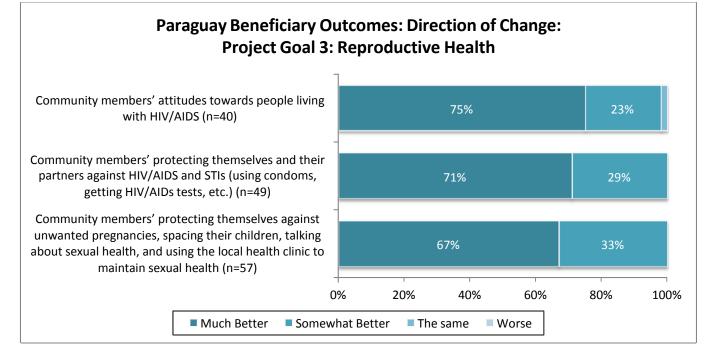


Figure 18: Beneficiary Assessment of Changes Related to Project Goal 3 Outcomes

For sanitary environment outcomes, counterparts and beneficiaries agreed that families' use of sanitary latrines had experienced the most positive direction of change, with 81 percent of counterparts and 92 percent of beneficiaries rating the outcome as much better (Figures 19 and 20). Similarly, both counterparts (80%) and beneficiaries (92%) observed significant change in families constructing sanitary latrines. Both respondent groups also rated community members' use of water disinfectant methods slightly higher (counterparts 77%, beneficiaries 71%) than their protection of water sources (counterparts 71%, beneficiaries 69%) in their efforts to access clean water.

"The construction of latrines has been very helpful to our health." – Counterpart, Ybaroty

"He taught us that the water well shouldn't be near the toilet and we have to use bleach to clean it."

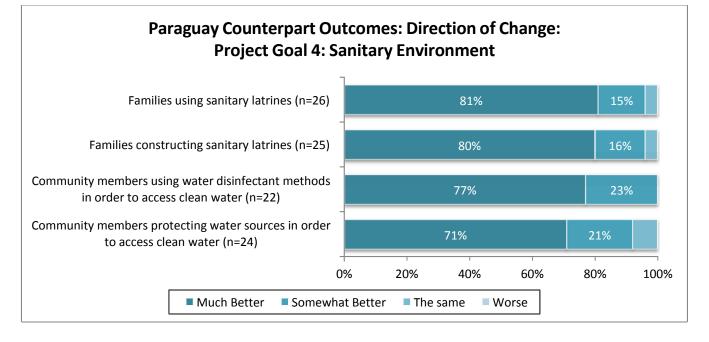
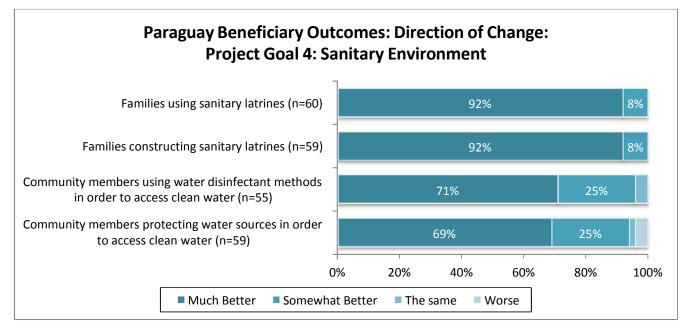


Figure 19: Counterpart Assessment of Changes Related to Project Goal 4 Outcomes

Figure 20: Beneficiary Assessment of Changes Related to Project Goal 4 Outcomes



In a separate question, counterparts and beneficiaries were asked to indicate the best contribution that the Volunteer had made through their work in the Rural Health and Sanitation Project. Forty-two percent of project participants indicated that the best contribution were the improved stoves that were built with the Volunteers. Many of these respondents recognize the impact these improved stoves are having on their lives, and specifically noted their link with

reduced respiratory illnesses. Other contributions that project participants noted was the knowledge they had gained on health issues (16%), the construction of sanitary latrines (13%), and the overall support provided by the Volunteer to help create a healthier community (10%).

Counterparts and beneficiaries were also asked two questions about the effectiveness of the Volunteers' work in addressing health concerns in their community. For the first question, counterparts and beneficiaries were asked how effective the Volunteers' work had been in helping community members improve their ability to address their health concerns (Figure 21). Eighty-six percent of counterparts and 84 percent of beneficiaries stated the activities were very effective in building their capacity. A further 14 percent of counterparts and beneficiaries stated that the activities had been somewhat effective. One beneficiary responded that the project activities were somewhat ineffective in building community capacity, stating that not all of the health talks given by the Volunteer were applicable to community needs. No respondents found the activities to be very ineffective in building capacity.

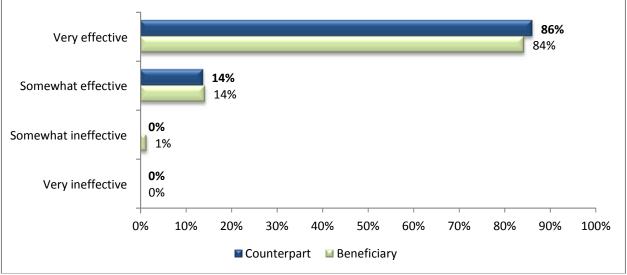


Figure 21: Effectiveness of Volunteers' Work in Building Community Capacity

For counterparts, n=36, for benerficiaries, n=70

In the second question on effectiveness, counterparts and beneficiaries were asked how effective the Peace Corps' work was in comparison to the work done by other groups in addressing health issues in their community (Figure 22). Only 42 respondents provided answers to this question, as most had not observed the work of any group other than Peace Corps. Respondents identified six groups that had worked on health issues in their communities: Plan Paraguay (26 respondents), Alter Vida (1), Advent (1), Itaipu Corporation (1), Japan International Cooperation Agency (2), and Pastoral Social (1). Ten respondents also mentioned the community health work of the local health posts, the municipality, and the Ministry of Health.

While these groups are Peace Corps' partners in many cases, this data is included in the chart below in order to provide the full spectrum of responses. Fifty-three percent of counterparts and 52 percent of beneficiaries stated that Peace Corps' work is much more effective than that of comparison groups. An additional 40 percent of counterparts and 44 percent of beneficiaries responded that Peace Corps' work is somewhat more effective in their community. Respondents noted that this greater effectiveness is a result of the Volunteer living in their community long-term, which provides the Volunteer an opportunity to listen and respond to expressed community needs and to reiterate a consistent message on healthy lifestyle practices. This helps to ensure that the message penetrates further and deeper into the community.

Seven percent of counterparts and 4 percent of beneficiaries observed Peace Corps' work to be less than effective than comparison groups. These respondents stated that while Peace Corps Volunteers provide knowledge, the comparison groups provide financial resources, which—according to these respondents—is preferable in some cases. In the case of Plan Paraguay, respondents noted that staff consists of Paraguayans, with whom it is easier to relate than Americans.

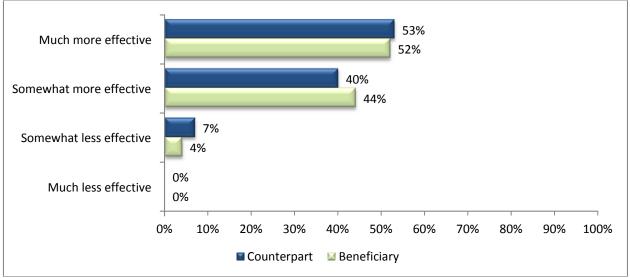


Figure 22: Effectiveness of Peace Corps' Work in Comparison to Other Groups

For counterparts, n=15, for benerficiaries, n=27

Students were asked to describe the changes they saw in their school environment due to the work of the Volunteer (Figure 23). Ninety-five percent of respondents observed improved health habits within their school, including students brushing their teeth, wearing shoes daily, and washing their hands. Sixty-four percent of respondents stated that students improved their knowledge of health issues. This discrepancy of data between habits and knowledge indicates that while students are practicing improved health habits, not all have made the connection between these habits and improved overall health.

"We all still brush our teeth after recess." - Primary school student, Yacu Barrero

"It is much better for me and my friends. Every day we brush our teeth, wash our hands, wear shoes, and eat more fruits and vegetables to be strong and have good health." – Secondary school student, Mandiyutygue

"The teachers don't allow us to throw garbage on the floor anymore." – Primary school student, 3ra Calle Pte. Franco

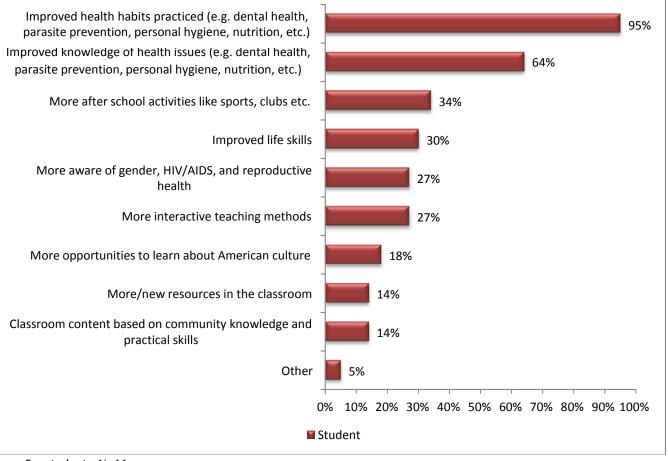


Figure 23: Student Assessment of Changes

For students, N=44

Sustainability of Community Change

In general terms, the majority of counterparts and beneficiaries felt they had maintained the changes introduced by the project to a large extent (Figure 24). Seventeen percent of counterparts reported they had completely maintained the changes and another 50 percent reported maintaining the changes to a large extent. Ten percent of beneficiaries stated they had completely maintained the changes and another 69 percent stated they had maintained the changes to a large extent. Twenty-three percent of students reported they had completely maintained the changes and another 52 percent reported maintaining the changes to a large extent.

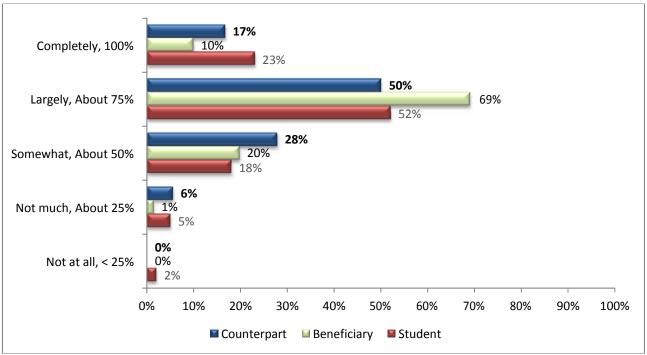


Figure 24: Extent to which Counterparts and Beneficiaries Maintained Changes

For counterparts, N=36; for beneficiaries, N=71; for students, N=44

Respondents were then asked to assess the extent to which each change had been maintained by the community on the following scale: yes, to some extent, and no. While respondents previously indicated a very positive direction of change for all outcomes during the Volunteers' service (see Figures 13 through 20), these trends were not sustained at the same rate once the Volunteer left, but were still relatively high (Figures 25 through 32).

For the hygiene outcomes, both respondent groups agreed that children practicing parasite prevention habits, such as wearing shoes and washing hands on a daily basis, was the most sustained community change (counterparts 85%, beneficiaries 92%) (Figures 25 and 26). This outcome was cited by both respondent groups as the second most positive change resulting from the project, indicating that Volunteers properly educated children in improved parasite

prevention practices, and that they had also properly informed them on the importance of continuing the practice due to its connection with improved overall health. Respondents also saw sustained change in the area of children's dental hygiene, with 77 percent of counterparts and 85 percent of beneficiaries responding that these changes had been maintained.

Respondents indicated that children's dental hygiene experienced the most positive direction of change for this particular outcome, therefore this high rate of sustainability signifies that the Volunteers' health talks on this topic were particularly effective. Finally, adults' dental hygiene was rated as the least sustained outcome. Respondents also rated this outcome as experiencing the least degree of change, indicating that impact was relatively lower in this health area.

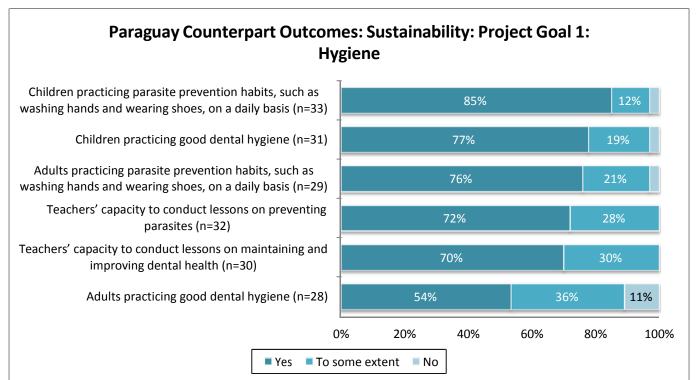


Figure 25: Counterpart Assessment of Sustainability of Project Goal 1 Outcomes

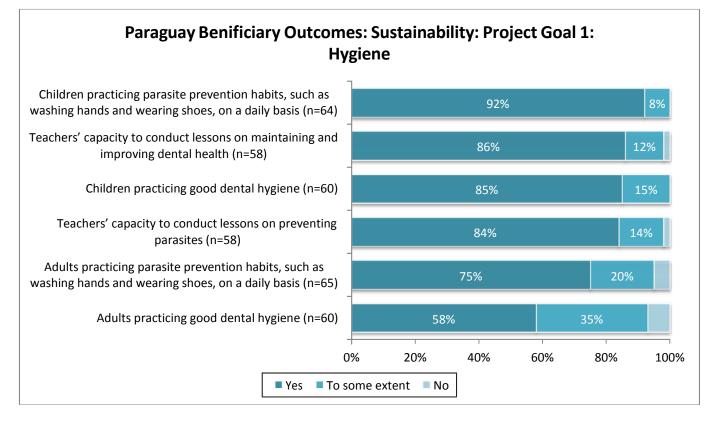


Figure 26: Beneficiary Assessment of Sustainability of Project Goal 1 Outcomes

For the project's nutrition outcomes, both respondent groups agreed that families using improved cooking practices, such as an improved stove, was the most sustained change (counterparts 83%, beneficiaries 92%) (Figures 27 and 28). As noted above, 42 percent of all project participants stated that the construction of improved stoves was the best contribution of the Rural Health and Sanitation Project. Through their comments, project participants also made the connection between the use of the improved stoves and a reduction in respiratory illnesses and eye inflammation. As a result, it is of critical importance for Volunteers to not only construct improved stoves and train community members on their use, but to also train them on how to maintain the improved stoves in order to sustain this positive outcome.

Respondents also indicated that children and adults sustained better nutrition practices at a similar rate. As the direction of change for this outcome had similar results, this may be an indication that children will simply eat what their parents prepare for them. It is unclear from the respondents' comments if this is the case, but Volunteers should ensure that their health talks on nutrition include all family members in order to increase the prospect of sustained adherence to changes in diet.

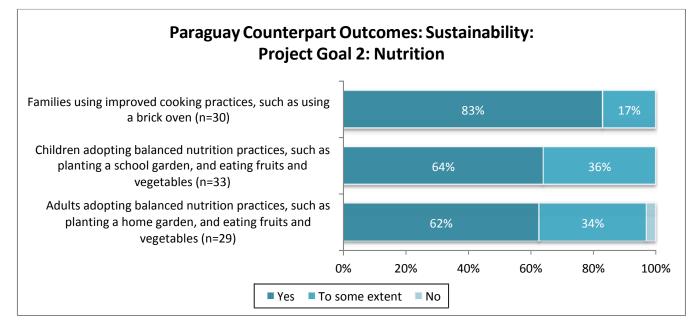
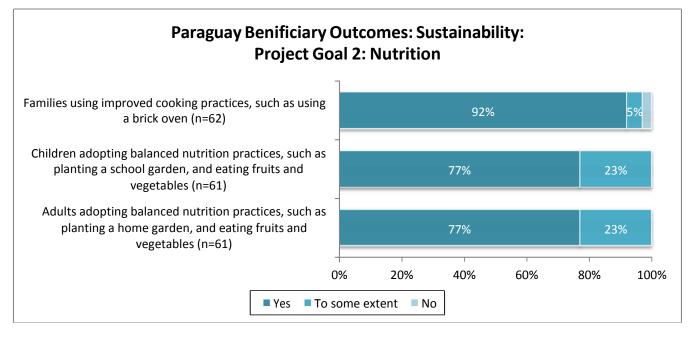


Figure 27: Counterpart Assessment of Sustainability of Project Goal 2 Outcomes

Figure 28: Beneficiary Assessment of Sustainability of Project Goal 2 Outcomes



For the reproductive health outcomes, respondents agreed that community members protecting themselves against HIV/AIDS and STIs was the most sustained change (counterparts 78%, beneficiaries 71%) (Figures 29 and 30). For direction of change, counterparts and beneficiaries had rated community members' attitudes towards people living with HIV/AIDS as the most positive change. Respondents observed that this improved attitude was not fully sustained once the Volunteer left their community.

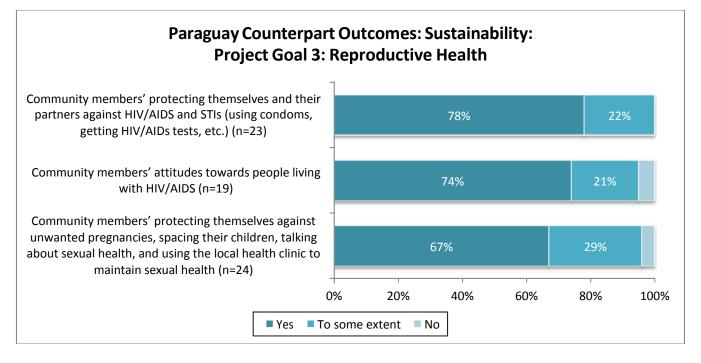
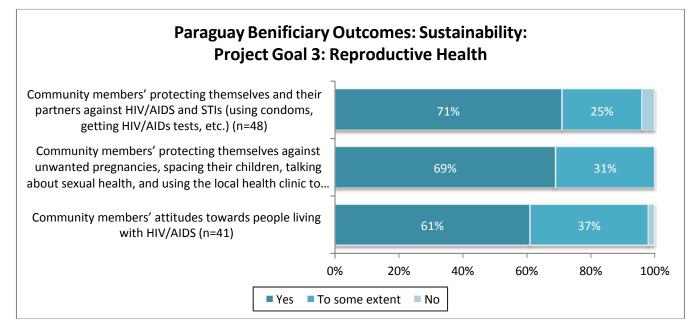


Figure 29: Counterpart Assessment of Sustainability of Project Goal 3 Outcomes

Figure 30: Beneficiary Assessment of Sustainability of Project Goal 3 Outcomes



For sanitary environment outcomes, respondents did not agree on the most sustained change, but the percentages do not vary widely enough to make it possible to draw any significant conclusions from these differences (Figures 31 and 32). Counterparts rated families constructing sanitary latrines as the most sustained change (83%). Beneficiaries rated families' use of sanitary latrines as the most sustained change (88%). These results indicate that community members continue to apply the skills and habits learned in the area of solid waste management.

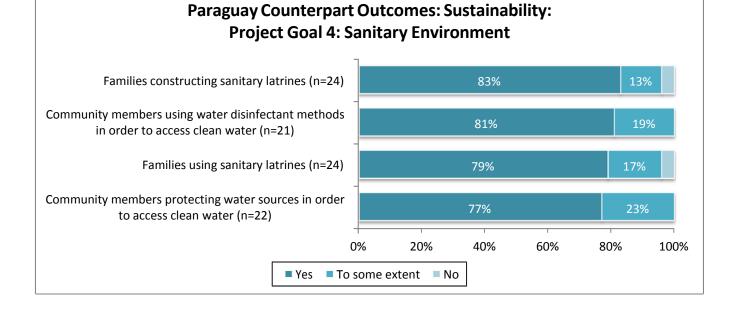
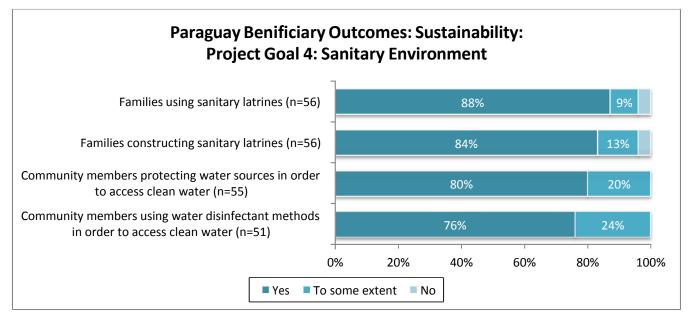


Figure 31: Counterpart Assessment of Sustainability of Project Goal 4 Outcomes

Figure 32: Beneficiary Assessment of Sustainability of Project Goal 4 Outcomes



In a separate question, counterparts and beneficiaries were asked to identify the most positive and lasting change of the Rural Health and Sanitation Project. The top results are as follows (please note that the results will add up to more than 100% as respondents sometimes cited more than one outcome):

- 39% Improved stoves
- 21% Better personal hygiene practices
- 21% Overall general knowledge gained on all health issues
- 18% Improved latrines
- 17% Better dental health practices
- 9% Improved nutrition
- 7% Parasite prevention practices
- 6% Improved community collaboration and organization
- 4% Better waste management practices
- 3% Potable water
- 3% Sexual and reproductive health knowledge
- 3% Family gardens

Extent to which Changes Met Needs

Finally, respondents were asked to assess how well the changes met the community's needs.

For all hygiene outcomes (Project Goal 1), the overwhelming majority of counterparts responded that the Volunteers' work completely or largely met their needs. Counterparts believed that activities based on children practicing good dental hygiene best met their needs, with 94 percent responding positively to this outcome (Figure 33). With children's dental hygiene also the counterparts' top ranked outcome for direction of change and second ranked outcome for sustainability, it is clear that they believe the training received on this outcome had the most positive impact on their communities. According to counterparts, the Volunteers' work to improve adults' dental hygiene and teachers' ability to conduct lessons on preventing parasites met their needs the least (87% and 82%, respectively). These two outcomes' low ranking in direction of change (6th and 5th of 6 outcomes, respectively), and sustainability (6th and 5th of 6 outcomes, respectively) indicates that Volunteers' work in these areas had the least impact.

Beneficiaries most often stated that youth practicing parasite prevention habits, such as washing their hands and wearing shoes daily, met their needs (98%, Figure 34). This outcome was also the beneficiaries' second ranked outcome for direction of change and top ranked outcome for sustainability. This information, combined with the direction of change and sustainability rankings from counterparts, clearly indicate that youth hygiene practices also had a very positive impact on the communities taking part in this study.

As was the case with the counterpart group, beneficiaries' needs in the area of adults' dental hygiene (78%) were not fully met. Beneficiaries indicated low levels of satisfaction for this outcome in the areas of direction of change and sustainability (6th of 6 outcomes in both). Counterpart and beneficiary comments do not provide further information on the source of this dissatisfaction, so it is unclear where the Volunteers' work fell short in this area.

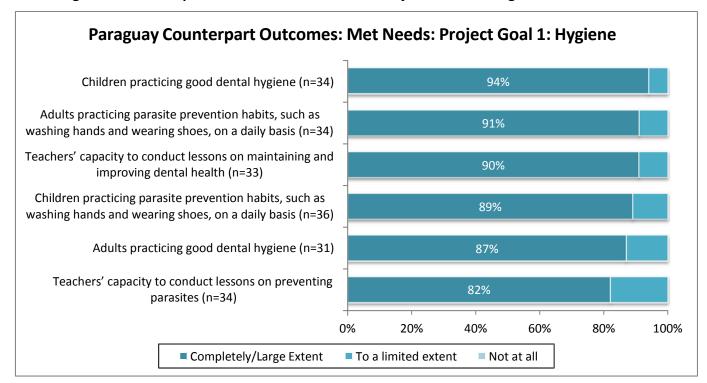


Figure 33: Counterpart Assessment of How Well Project Goal 1 Changes Met Needs

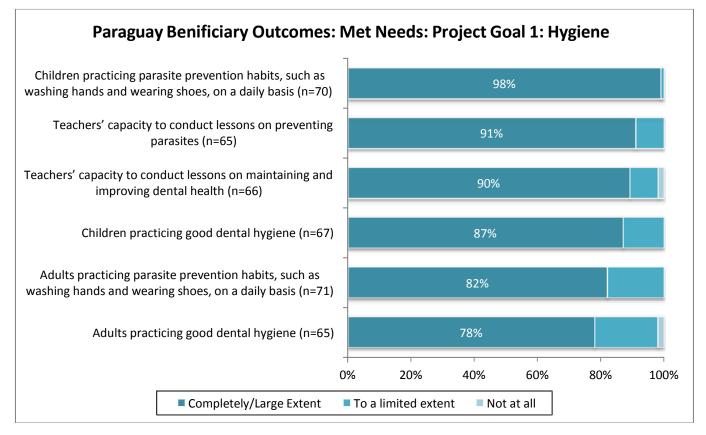


Figure 34: Beneficiary Assessment of How Well Project Goal 1 Changes Met Needs

For the nutrition outcomes (Project Goal 2), counterparts (95%) and beneficiaries (98%) agreed that families using improved cooking practices, such as a brick stove, best met their needs (Figures 35 and 36). This outcome was also the counterparts and beneficiaries' top ranked nutrition outcome for direction of change and sustainability. Respondent ratings for the nutrition practices of adults and children again tracked very closely, emphasizing that health talks on nutrition should include all family members to ensure changes in diet are adopted by family members of all ages.

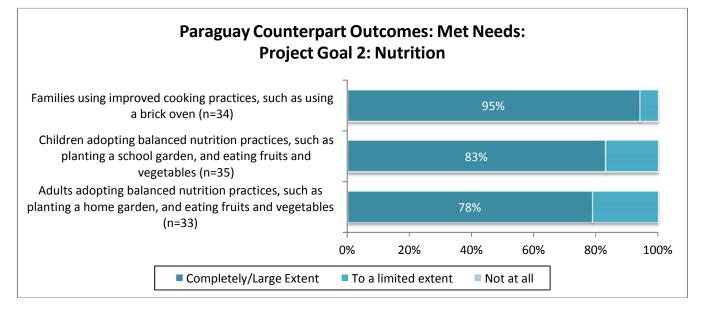
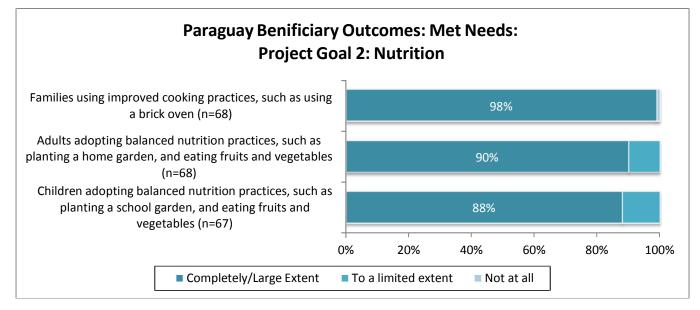


Figure 35: Counterpart Assessment of How Well Project Goal 2 Changes Met Needs

Figure 36: Beneficiary Assessment of How Well Project Goal 2 Changes Met Needs



For reproductive health outcomes (Project Goal 3), counterparts (85%) and beneficiaries (91%) agreed that community members' attitudes towards people living with HIV/AIDS best met their needs (Figures 37 and 38). Counterparts and beneficiaries also ranked this outcome first in terms of direction of change. Respondents noted that this outcome was a bit difficult to sustain, indicating that Volunteers need to understand that changing community members' attitudes on the stigma of HIV/AIDS is a longer-term endeavor. Respondents did characterize Peace Corps Volunteers as inclusive and collaborative (see the later section under Goal Two: What Volunteers Did to Change Opinions), and these personality traits serve Volunteers well in their work to alter community members' attitudes towards people living with HIV/AIDS.

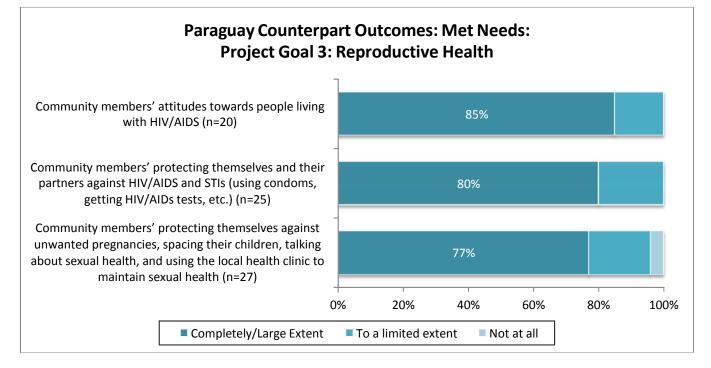
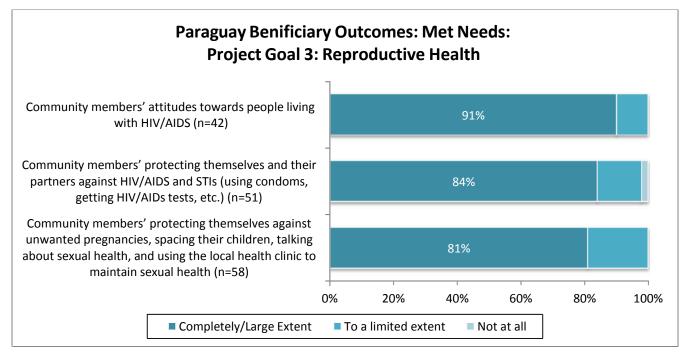


Figure 37: Counterpart Assessment of How Well Project Goal 3 Changes Met Needs

Figure 38: Beneficiary Assessment of How Well Project Goal 3 Changes Met Needs



For sanitary environment outcomes (Project Goal 4), the overwhelming majority of counterparts and beneficiaries responded that the Volunteers' work completely or largely met

their needs (Figures 39 and 40). The respondents did not agree on the most sustained change, but the percentages do not vary widely enough to draw any significance from these differences. Beneficiaries rated families' use of sanitary latrines as the outcome that best met their needs, and this was also their top-ranked outcome in terms of direction of change and sustainability. This information clearly indicates that families' commitment to using sanitary latrines had a very positive impact on the communities taking part in this study.

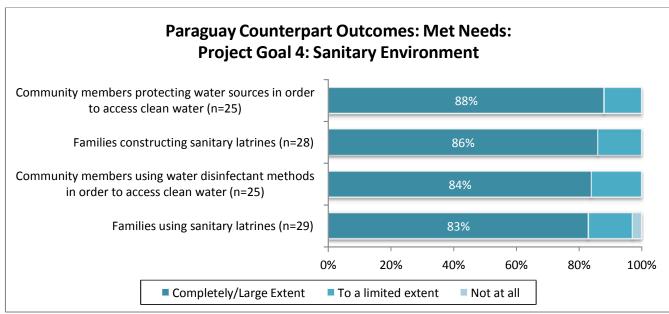
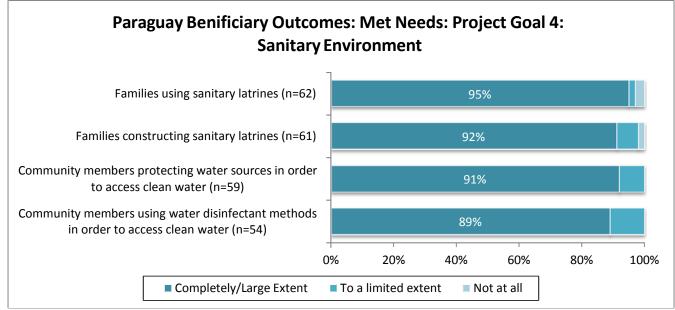


Figure 39: Counterpart Assessment of How Well Project Goal 4 Changes Met Needs

Figure 40: Beneficiary Assessment of How Well Project Goal 4 Changes Met Needs



Finally, stakeholders were asked to identify other areas in which they think Peace Corps Volunteers could help the people of Paraguay. Of the fourteen respondents, eight

recommended projects in the area of agriculture, specifically in beekeeping, horticulture, reforestation, and soil science. While Peace Corps/Paraguay currently operates an agriculture program, the high number of stakeholders indicating the project area as a national need is an indicator is testament to its importance to local community members. Two stakeholders suggested that the Rural Health and Sanitation Project be expanded to include more communities in need of knowledge on health issues.

Summary

Across all of the Rural Health and Sanitation Project goal areas, counterparts and beneficiaries viewed the following outcomes as having the greatest impact in terms of change, sustainability, and meeting community needs:

Families using improved cooking practices (Average rating: 92.3%)

- 1. Children practicing parasite prevention habits (Average rating 90.0%)
- 2. Families using sanitary latrines (Average rating: 88.0%)
- 3. Families constructing sanitary latrines (Average rating: 87.3%)
- 4. Children practicing good dental hygiene (Average rating: 86.3%)

Across the impact continuum, counterparts and beneficiaries were in agreement that families' improved cooking practices, most notably the use of an improved stove, had the most significant impact in the communities where Volunteers served. As stated earlier, 42 percent of respondents stated the improved stoves were the best contribution of the project, and 39 percent cited the improved stoves as the most positive and lasting change from the project. Project participants see the impact these improved stoves are having on their lives, and, through their comments, made the connection they have with reduced respiratory illnesses and eye inflammation. It is therefore of critical importance for Volunteers not only to continue constructing improved stoves and training community members on their use, but to also train them on how to maintain the improved stoves in order to sustain this positive outcome.

Consistently high rankings were also seen for the parasite prevention habits of children, signifying that all respondents groups were satisfied with the direction of change, sustainability, and having needs met for this outcome. Comments from students on the changes they saw in their school environment specified that they observed their classmates washing their hands and wearing shoes daily. Furthermore, the habits of washing hands and wearing shoes on a daily basis have a positive linkage with reducing gastrointestinal and diarrheal illnesses. As a result, Volunteers will want to continue to stress these topics in their trainings and health talks to maintain the positive impact reported by all respondent groups.

Families' use of sanitary latrines was also ranked and rated highly for its direction of change, sustainability, and meeting the needs of the community. Furthermore, the training provided by the Volunteers on how to construct a sanitary latrine was also highly ranked and rated, indicating that the use of a sanitary latrine is a highly sustainable project outcome.

Counterparts and beneficiaries also observed a positive direction of change, sustainability, and met needs in the area of children's dental hygiene habits. Through their comments, students specified that one of the main changes they observed from the work of the Volunteer is that their classmates are brushing their teeth on a daily basis.

Conversely, counterparts and beneficiaries reported that efforts to improve adults' dental hygiene habits had the least impact. Indeed, the three outcomes devoted to the adult population were ranked and rated in the bottom five of the sixteen project outcomes. Posts' pre-service and in-service training may want to emphasize that Volunteers make a concerted effort to include all generations in their health talks, or devote more time to home visits in order to provide an opportunity for family members to support or reinforce healthy lifestyle practices.

Similarly, the three reproductive health outcomes were ranked and rated in the bottom half of the sixteen project outcomes. To address these findings, post staff will need to introduce additional training during in-service trainings to better realize these outcomes, or, in an effort to more tightly focus project activities, staff may want to eliminate this project goal from the project framework altogether.

Changes at the Individual Level

The project theory of change model (Figure 1) generated a list of individual or personal-level project outcomes. Counterparts and beneficiaries were asked about the extent to which they saw changes in themselves related to each of the following outcomes:

- 1. A change in your dental hygiene
- 2. A change in your parasite prevention habits, such as washing hands and wearing shoes, on a daily basis
- 3. A change in your diet
- 4. A change in your family's cooking practices
- 5. A change in your knowledge of HIV/AIDS prevention
- 6. A change in your ability to make healthy decisions related to HIV/AIDS
- 7. A change in your attitude on reproductive health
- 8. A change in your use of sanitary latrines
- 9. A change in your access to potable water

Counterparts and beneficiaries were asked about individual-level project outcomes through a matrix question. For each individual outcome derived from the project plan, respondents were asked if changes had occurred and about the direction of those changes, whether their needs had been met, and whether they had maintained the change after the Volunteer departed. Students were asked a separate set of questions to assess any personal changes. Stakeholders were not asked about individual level changes since they did not work with the Volunteer on a daily basis, and were more involved in the design and implementation of the project.

Individual Changes Resulting from the Project

As a result of working with the Volunteer, both counterparts (95%) and beneficiaries (95%) agreed that they had experienced the most significant personal change in the area of sanitary latrine use (Figures 41 and 42). This change correlates with their observations within their communities, as respondents ranked sanitary latrine use as third out of sixteen community outcomes.

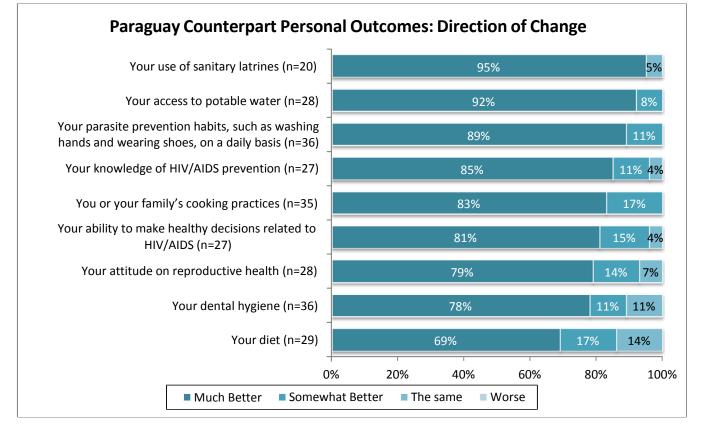


Figure 41: Counterpart Assessment of Individual Changes Related to Project Outcomes

Counterparts (92%) also reported that their access to potable water had improved due to their work with the Volunteer. Beneficiaries also observed positive change in their access to potable water (86%), ranking this outcome fourth in their personal matrix. Within the community matrix, the potable water outcome was not ranked highly by counterparts and beneficiaries when broken out into its component parts: protecting water sources and using water disinfectant methods. However, when reworded into a more general potable water question for individual assessment, the two groups responded very positively. It is unclear if this change can be attributed to the rewording of the outcome or to the difference between community and individual training dynamics.

Counterparts (89%) and beneficiaries (89%) also observed significant change in their parasite prevention habits, like washing their hands and wearing shoes on a daily basis. Within the community matrix, respondents had rated this outcome quite high for youth (counterparts

83%, beneficiaries 86%), but lower for adults (counterparts 76%, beneficiaries 68%). It is not clear from the comments why the respondents observed changes in themselves that they did not also observe in their fellow adult community members at the same high rate.

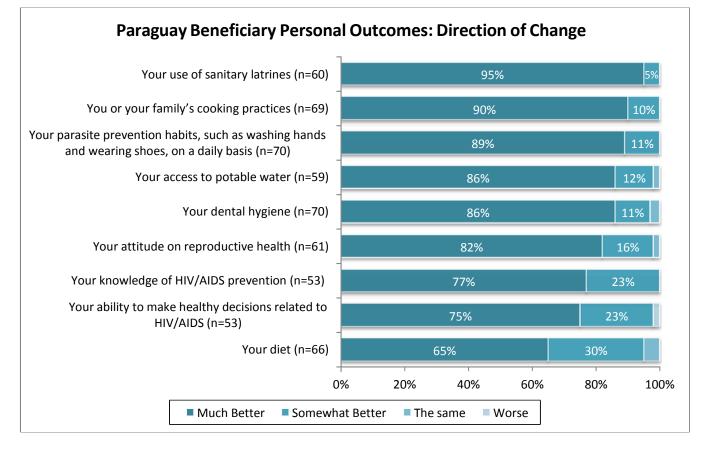
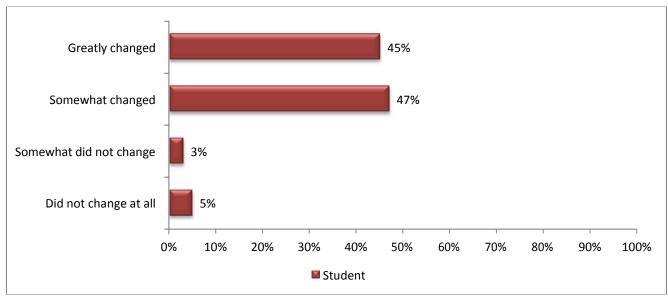


Figure 42: Beneficiary Assessment of Individual Changes Related to Project Outcomes

Beneficiaries (90%) stated that they experienced significant change in their cooking practices. Counterparts (83%) did not observe personal change to the same extent, possibly because the construction of improved stoves was a project activity aimed at project beneficiaries, not counterparts. This personal direction of change does correlate to the change previously seen at the community level (beneficiaries 94%, counterparts 85%).

For counterparts and beneficiaries, the outcome with the smallest observed personal change was their diet (69% and 65%, respectively). This data correlates closely with the community matrix, where respondents ranked the adoption of balanced nutrition practices relatively low for both youth (counterparts 69%, beneficiaries 77%) and adults (counterparts 67%, beneficiaries 73%). While respondents observed significant positive change in relation to utilizing improved cooking practices, the respondents seem to perceive more positive change from the linkage between improved stoves and reduced respiratory illnesses than the linkage between improved cooking practices and the increased consumption of nutritionally balanced meals.

In a separate question on individual change, students were asked how their interaction with the Volunteer changed them personally (Figure 43). Forty-five percent of students indicated that their interaction with a Volunteer changed them greatly, while 47 percent of students reported that they were somewhat changed by the experience. Students provided reasons for these personal changes that can be broken down into two categories: health-related changes and changes to their personality. In terms of health-related changes, eight students stated that they improved their dental health and four students indicated they improved their personal hygiene habits. In terms of changes to their personality, eight students reported that their outlook on life had improved. Four students increased their participation within their school and community, three students indicated that they learned the value of respect, and two students improved their interpersonal skills.





For students, N=38

Sustainability of Individual Changes

Counterparts most often reported their access to potable water as fully sustained (100%, Figure 44). Beneficiaries also observed their access to potable water to be highly sustained (90%, Figure 45). Respondents observed high sustainability in the area of their parasite prevention habits as well, with 94 percent of counterparts and 91 percent of beneficiaries fully sustaining the change in their hygiene habits.

When analyzed from the perspective of both respondent groups, the use of sanitary latrines was the third most sustained outcome, with 90 percent of counterparts and beneficiaries fully sustaining this change. While numerous outcomes ranked above this particular outcome on both the counterpart and beneficiary sustainability matrices, there were discrepancies on how each group viewed the outcome's sustainability, indicating that counterparts and beneficiaries may sometimes differ in their efforts to sustain changes in their individual capacity levels.

As neither respondent group observed a high rate of change in their diet, they also did not sustain the changes at a high rate, with 77 percent of counterparts and 71 percent of beneficiaries stating that they were able to maintain changes to their diet.

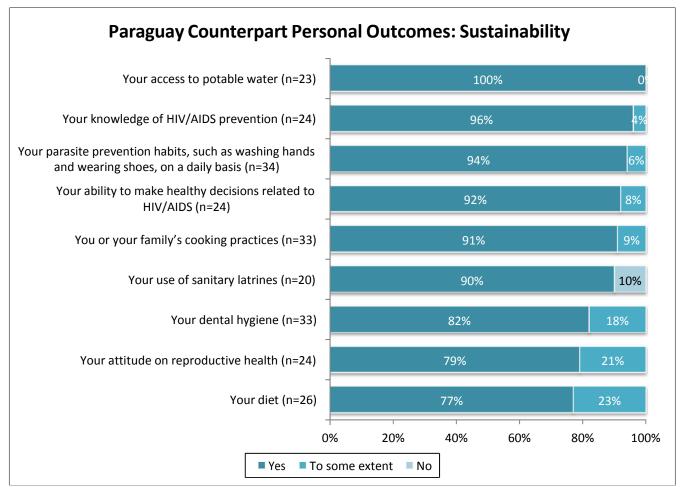


Figure 44: Counterpart Assessment of Sustainability at the Individual Level

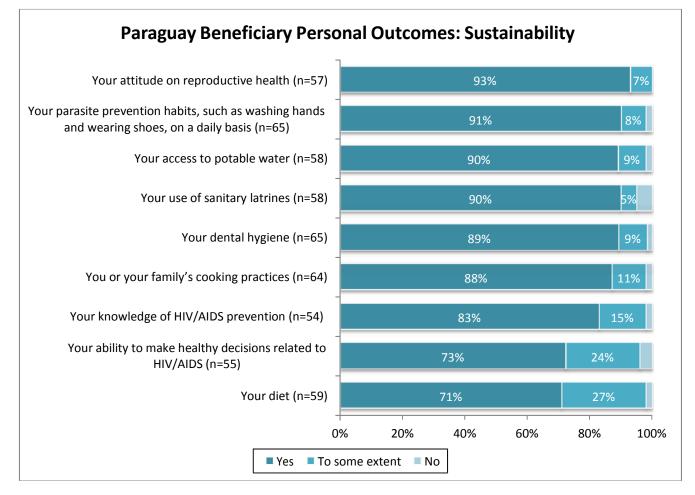


Figure 453: Beneficiary Assessment of Sustainability at the Individual Level

Extent to which Changes Met Individual Needs

The overwhelming majority of counterparts and beneficiaries responded that the outcomes of the Rural Health and Sanitation Project completely or largely met their individual needs (Figures 46 and 47). The project activities on preventing parasites through hand washing and wearing shoes on a daily basis best met the individual needs of counterparts (97%) and beneficiaries (95%). As observed previously, there are some differences between which outcomes best met the individual needs of counterparts and beneficiaries. From a project level, the expressed individual needs of counterparts and beneficiaries will not be the same, and this situation needs to be taken into account when the Volunteer is working with each group to assess their health capacity, particularly in the area of individual capacity versus community need.

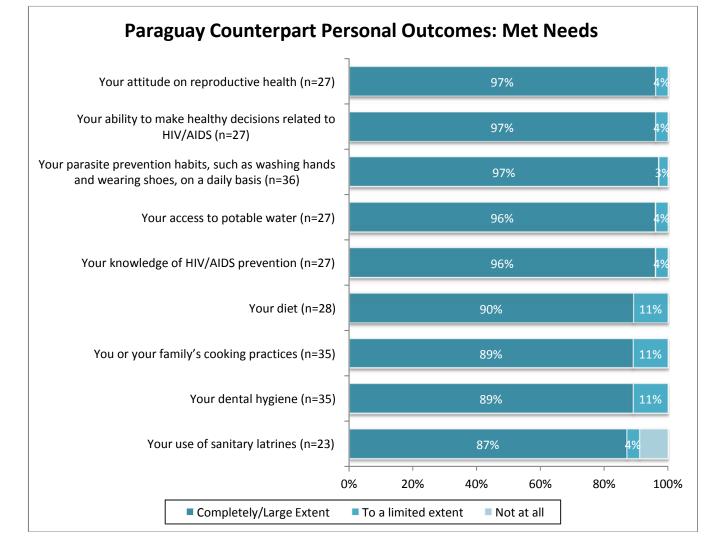


Figure 46: Counterpart Assessment of How Outcomes Met their Individual Needs

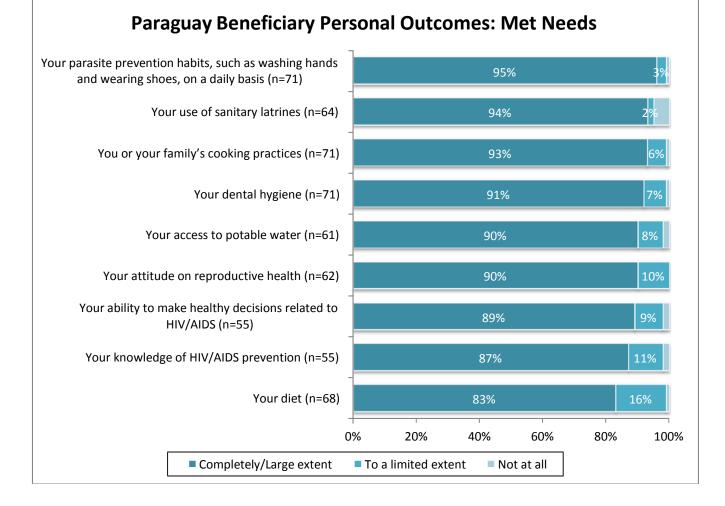


Figure 47: Beneficiary Assessment of How Outcomes Met their Individual Needs

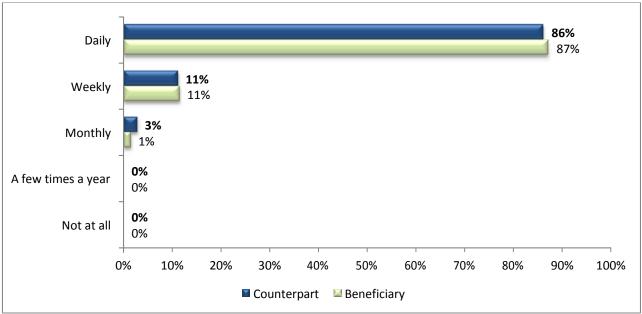
How Often Skills are Used Professionally and Personally

Counterparts and beneficiaries were asked how often they used the skills gained from the project in their personal lives. Counterparts (86%) and beneficiaries (87%) responded overwhelmingly that they use their new skills on a daily basis (Figure 48). Eleven percent of counterparts and beneficiaries use their new skills on a weekly basis. No respondents indicated never using their new skills.

Counterparts and beneficiaries were also asked how often they used the skills gained from the project in their professional lives. Seventy-five percent of counterparts and 79 percent of beneficiaries use the skills they learned during the project on a daily basis (Figure 49). Fourteen percent of counterparts and 9 percent of beneficiaries responded that they never use the skills they learned in their professional life. These respondents indicated that the skills they used in

their personal lives, such as improved cooking practices (9 respondents) and personal hygiene habits (2 respondents), were not skills that could be applied to their professional lives.

Overall, this information provides convincing evidence that the skills counterparts and beneficiaries are gaining from Volunteers are being put into practice. The frequency with which these new skills are practiced also indicates that they will be individually sustained and passed on to community members through training and behavior modeling.





For counterparts, n=36, for beneficiaries, n=70

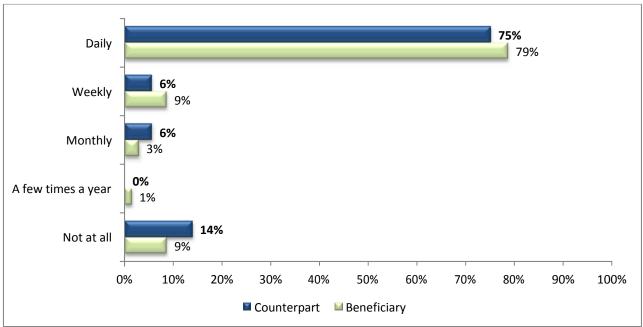


Figure 49: Frequency of Skills Used in Professional Life

For counterparts, n=36; for beneficiaries, n=70

Summary of Individual-Level Outcomes

Overall, counterparts and beneficiaries felt their individual skills for maintaining or promoting a healthy lifestyle had improved as a result of working with the Volunteer. Respondents viewed the following outcomes as having had the greatest individual impact in terms of change, sustainability, and meeting their needs:

- 1. Practicing parasite prevention habits (Average rating: 92.3%)
- 2. Using sanitary latrines (Average rating: 92.3%)
- 3. Access to potable water (Average rating: 91.0%)
- 4. Improved cooking practices (Average rating: 89.7%)

The parasite prevention, sanitary latrine, and improved cooking practice outcomes also appeared among the top-five results listed in the community-level outcome matrix, signifying that these three outcomes are having the greatest impact on all respondents that participated in the Rural Health and Sanitation Project.

Access to potable water outcome did not appear in the top-five list of the community-level outcomes, but it is unclear if this can be attributed to the more general rewording of the outcome in the individual matrix or to the difference between community and individual training dynamics. Counterparts and beneficiaries clearly observed positive impact from this outcome at the individual level, thus substantiating that Volunteers' activities on this health topic were effective.

For the parasite prevention outcome, respondents had ranked this outcome quite high for youth (2nd of 16 outcomes), but lower for adults (12th of 16 outcomes) within the community matrix. It is not clear from the comments why the respondents, who were all adults, observed changes in themselves that they did not also observe in their fellow adult community members at the same high rate.

In the case of the dental hygiene outcome, respondents had also ranked the dental hygiene outcome quite high for youth (5th of 16 outcomes), but lower for adults (16th of 16 outcomes) within the community matrix. In the individual-level matrix, responses from both counterparts and beneficiaries—again, all adults—were more in line with what would have been expected: dental hygiene was ranked 6th of 9 outcomes. Similarly, from their comments on the changes they observed from the project, students, who can all be considered youth, most often noted their improved dental health as well as that of their classmates.

Finally, the ratings and rankings seen in the counterpart and beneficiary responses in the individual-level matrix did not always track as similarly as the responses in the community-level matrix. The expressed individual needs of counterparts and beneficiaries will not be the same, and this situation needs to be taken into account when the Volunteer is working with each group to assess their health capacity, particularly in the area of professional versus community need.

Other Changes and Accomplishments

Projects frequently produce unintended or unanticipated outcomes, both positive and negative. To capture these outcomes, the research teams asked respondents open-ended questions about other changes and accomplishments resulting from the work of the Volunteer not described in the project plan.

Many counterparts and beneficiaries reported that because of the work of the Volunteer their communities learned how to organize themselves to collaboratively affect change in areas of concern. This included how to organize community groups, unite the community (including authorities) around a particular topic, organize participatory meetings, and to work collaboratively with neighbors. Along with these new organizational skills, many respondents noted that the work of the Volunteer engendered an openness to change and empowered community members with the confidence to implement desired changes.

"The change is that neighbors work much more in groups. Before it was not like this. Now the neighbors work on different activities together." – Beneficiary, Solano Escobar

"We work in groups in the community, and we share more among neighbors. These things had never happened before." – Beneficiary, Cerrito

"I think people are now more organized in terms of attending meetings." – Beneficiary, Maria Auxiliadora "Now we work more with the commission to help community members. We're working on getting drinking water and fixing some of the streets." – Counterpart, Santa Rosa

"People are more open to change. The mindset of the community is another change." – Beneficary, Villa Boqueron

Additionally, three project participants are using their new skills in making detergents and soaps to generate family income, four respondents noted that the Volunteers' students learned some English, two respondents learned to use the computer, and two respondents learned to make soy products.

Factors Affecting Outcomes

Respondents were asked a series of questions to ascertain what factors contributed to the success of the project, what factors hindered the project outcomes, any factors that limited the community's ability to sustain changes, and the degree to which the daily interaction with the Volunteer produced the change. This section outlines these factors.

Factors Contributing to the Project's Success

Counterparts and beneficiaries both stated that the primary factor for success in the Community Health Project was community interest in the health topics discussed in the Volunteers' health talks and trainings (33 respondents). Respondents indicated that community interest was generated when the health topics presented were appropriate to the expressed needs of the community. This information is critical, as it reinforces the importance for Peace Corps country staff to develop a project plan that outlines health activities that are salient to Paraguay's impoverished communities. It also charges Volunteers with the task of assessing and prioritizing their community's health needs in order to ensure that their talks and trainings are addressing those expressed needs.

"We were interested in the project because we saw the need." – Counterpart, Ybaroty

"Here at the school, the children were interested to learn new skills for the future." – Beneficiary, Mandiyutygue

Counterparts and beneficiaries also indicated that community participation in project activities is another primary factor for success (31 respondents). While respondents stated that their initial participation is a direct result of community interest in a topic, they expressed that a few additional factors led to their continued participation. First, counterparts and beneficiaries noted that the project topics and activities led to greater community collaboration (14). Project participants were motivated to maintain their participation because they were empowered by their unified strength to accomplish community goals, and also enjoyed the social outlet of working with their neighbors to improve their community. Second, eight respondents noted

that the Volunteer worked with community groups that had been established prior to his/her arrival, such as women's commissions. This lent credibility to the project, and allowed community members to participate in project activities through an organization with which they were already familiar.

"It was the participation of the people who applied determination and hard work for the sake of the project, despite their commitments at home." – Counterpart, Mandiyutygue

"The contribution on our part...we worked hard to achieve this." – Beneficiary, Tuyanguo

"Working together, this team effort - that was most important. Because the Volunteer cannot do it alone." – Counterpart, Apyragua

"There is an organization in our community, the women's commission, that made it easier for [the Volunteer] to do his work." Beneficiary, Yacu Barrero

The Volunteers' character was another primary factor that counterparts and beneficiaries specified as a key to project success (31 respondents). From the perspective of the Volunteers' background, counterparts and beneficiaries stated that Volunteers' knowledge and capacity to involve and train project participants contributed to project success. Respondents specified that the Volunteers modeled the behavioral changes they wished to see, and this motivated community members to make the changes themselves.

In terms of the Volunteers' personality, 17 respondents cited that the Volunteers took the time to build and establish trust with the community members, which increased their willingness to participate in project activities. In four cases, community members noted that having multiple Volunteers serving a community over an extended period of time led to a higher level of trust and greater willingness to participate in project activities. Respondents also stated that the Volunteers' dedication, determination, persistence, responsibility, and respectfulness were factors in project success.

"At first it was difficult. But with the Volunteer's patience and humility, we were able to reach the community." – Counterpart, Cerrito

"Their work and their interest were contagious and spread to the whole community." -Beneficiary, Yataity Virgen de Fatima

"At first it was difficult because people said they came to spy. Then with the coming of the second Volunteer people opened up more." – Beneficiary, Cerrito

"With the first Volunteer, we didn't work for nearly a year. But then he gained support. With the second Volunteer, it was easier working with the people because they understood him and wanted to work with him." – Beneficiary, Yataity Virgen de Fatima Finally, counterparts and beneficiaries noted that cross-sectoral support for project activities was a key factor for success (26 respondents). Strong project outcomes were achieved when all sectors of society provided vocal, fiscal, and manual support for project activities, including community leaders, teachers, women's commissions, and families.

"The assistance from the authorities and the community to perform the work." – Counterpart, Guazucua

"The interest of the children and parents, and the support from the principal and the teaching staff." – Beneficiary, Guazucua

Factors that Hindered and Limited Project Outcomes

Counterparts and beneficiaries were asked what obstacles or challenges hindered the project's success. These factors can be categorized into those related to community support, aspects of the project itself, and characteristics of the Volunteer.

In terms of participant support, eight counterparts and beneficiaries stated that community disinterest in project activities hindered the planned outcomes. An additional six respondents expressed that some community members were afraid, or lacked the confidence, to embark on a path of community change. This general disinterest and fear led community members to not attend the health talks or participate in the health trainings, thereby limiting the change that occurred. Fourteen respondents stated that some community members were not willing to put in the work required to achieve the project goals. In some cases, this lack of participation stemmed from community members being frustrated by the slow pace of change or in not immediately receiving promised project incentives, such as improved stoves or sanitary latrines. Lack of support from community leadership (e.g. municipality, mayor, authorities) also posed a challenge to project success (6 respondents). Finally, eleven respondents stated that distrust of the motives or credentials of the Volunteers led community members not to participate in project activities. All of this information correlates with what counterparts and beneficiaries deemed to be the primary factor for project success: the interest and participation of community members.

"Community members wanted to receive the benefits, but did not want to make the effort." – Beneficiary, Ita Moroti Guazu

"There were people that did not participate and showed no interest in [the Volunteer's] work." – Beneficiary, Yataity Virgen de Fatima

"Sometimes, because of the delay, many got tired and left the group." – Beneficiary, Solano Escobar

"We needed more support from the municipality." – Beneficiary, Ita Moroti Guazu

"The people of the community were afraid at first because they said [the Volunteers] came to spy and that they did not practice any religion." – Counterpart, Cerrito

Certain characteristics of the project also posed challenges to success. Thirteen respondents noted a general lack of economic resources as an obstacle to achieving project success, particularly in the area of purchasing materials to build the latrines and improved stoves and to make detergents and soaps. Seven respondents stated that a deficient infrastructure, such as poor roads and limited transportation options, posed a challenge to the Volunteers need to conduct home visits and travel throughout the community – a key component of a being a Rural Health and Sanitation Volunteer. This situation may have reduced both the breadth of change that occurred and, due to prolonged travel time, restricted the amount of time the Volunteer could spend with community members on health activities.

"The distance can be difficult. The Volunteer had to walk a lot." – Beneficiary, Potrero Jardin

"A lack of funds and materials. We had to procure a lot on the side in order to meet all of our needs." – Beneficiary, Tuyanguo

In terms of Volunteer characteristics, seven respondents stated that a Volunteer's poor grasp of the Guarani language frustrated project participants and limited the pace of community change. An additional seven respondents expressed challenges with a Volunteer's character, noting that the Volunteer simply did not understand the culture of the community enough to be able to implement sustainable change, or that their personality clashed with community members and discouraged their participation.

"At first it was difficult with the language because we speak Guarani here. I think that the Volunteers must come trained to speak in a different language." – Beneficiary, Mandiyutygue

"When he wanted to explain something, the Volunteer had trouble speaking Guarani. He was always with his notebook writing down everything and asking the meanings of the words." – Counterpart, Santa Rosa

"The adults found his character was difficult to work with because he took everything very seriously and did not like their jokes." – Counterpart, Barrero Pyta

Factors that Hindered and Limited the Sustainability of Project Outcomes

Counterparts and beneficiaries were also asked to list any factors that limited the community's ability to maintain the changes introduced (Figure 50). Both counterparts and beneficiaries agreed that the lack of financial support and other resources was the primary obstacle to maintaining change (67% and 58% respectively). According to respondents, the lack of funding prevented them from sustaining outcomes that required certain materials or continued

maintenance, such as dental health, making soaps and detergents, keeping up family gardens, and maintaining improved stoves and latrines. This information supports the qualitative comments provided by thirteen respondents that a lack of funds and materials was a main challenge to project success.

Respondents also indicated that a lack of support from community members (counterparts 25%, beneficiaries 15%) and lack of support from community leadership (counterparts 19%, beneficiaries 18%) posed challenges to maintaining changes from the project. This information supports the qualitative comments provided by respondents that a lack of interest and participation were challenges to project success. It also reinforces the need for post staff to develop a project plan that outlines health activities that are salient to Paraguay's impoverished communities, as well as training Volunteers to accurately assess and prioritize their community's health needs in order to ensure that their talks and trainings are addressing expressed needs.

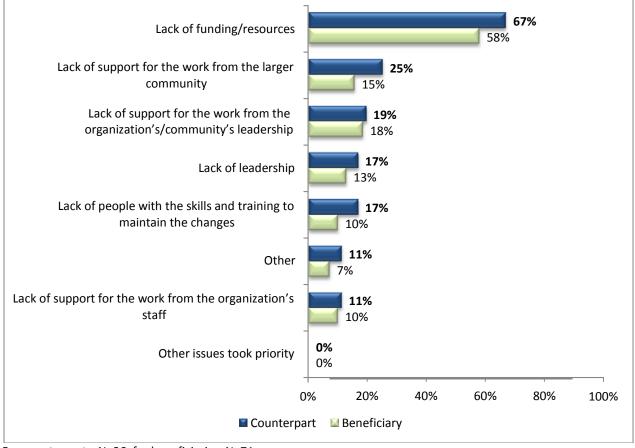


Figure 50: Factors Limiting the Sustainability of Project Outcomes

For counterparts, N=36; for beneficiaries, N=71

Degree to which Daily Interaction with Volunteers Caused the Change

Respondents were asked how important the direct and daily interaction with the Volunteer was in producing the changes they had described. As stated earlier, due to the necessary field work at multiple sites involved in the Rural Health and Sanitation Project, daily interaction among the Volunteers, beneficiaries, and students was limited, with only 24 percent of beneficiaries and 16 percent of students interacting with the Volunteer on a daily basis. Interaction with beneficiaries and students more often took place once or several times a week, through community health talks, home visits, or class talks. The Volunteers' interaction with counterparts was more frequent, with 57 percent of counterparts working with the Volunteer on a daily basis.

A majority of counterparts (83%) and beneficiaries (80%) indicated that consistent interaction was very important in facilitating community change (Figure 51). A further 17 percent of counterparts and 20 percent of beneficiaries stated the daily interaction was somewhat important for facilitating change. Respondents noted that consistent interaction with the Volunteer served as a reminder to practice the healthy lifestyles in which they had received training, allowed time for community members to ask the Volunteer questions, and allowed the Volunteer sufficient time to assess the changing needs of the community as progress was made. All of these observations could be strengthened through more frequent interaction between the Volunteer and the community.

"It gave more encouragement for people to work." – Beneficiary, Solano Escobar

"It was very important. That way they could keep the track of the changes that were implemented." – Beneficiary, Cerrito

Respondents provided information that daily interaction with the Volunteer was highly important to causing change, yet higher levels of daily interaction occurred with counterparts than with beneficiaries and students. This discrepancy does not appear to have had an effect on planned project outcomes, as the counterparts and beneficiaries rated the extent to which their training from the Volunteers enhanced their skills (see Figure 11) and the effectiveness of the Volunteers' work in building individual capacity (see Figure 41) in similar terms. Indeed, when asked to rate their overall satisfaction with project outcomes (see Figure 53), beneficiaries stated they were 'Very Satisfied' at a higher rate than the counterparts.

Through their qualitative comments, respondents felt strongly that the relationships they built with Volunteers were the primary source of change, as ideas for changes within the community could only be realized once bonds of trust had been built. As stated above, project participants noted that taking time to build trust with the Volunteer was a critical factor in project success. Therefore, participants in the Rural Health and Sanitation Project seem to be indicating that the foundation for community change is not built solely upon the frequency of interaction, but also on the similar, yet not identical or time-bound, concept of trust.

"It was very important for the trust between the Volunteer and the community." – Beneficiary, Compañia Pte. Franco

"It was very important. He knew more of the needs of the people and their problems." – Beneficiary, Caraguata-rua

"It is very important because every day we learn more things that the Volunteer teaches us, and also because the Volunteer becomes aware of what the community needs." – Beneficiary, Zaro Caro

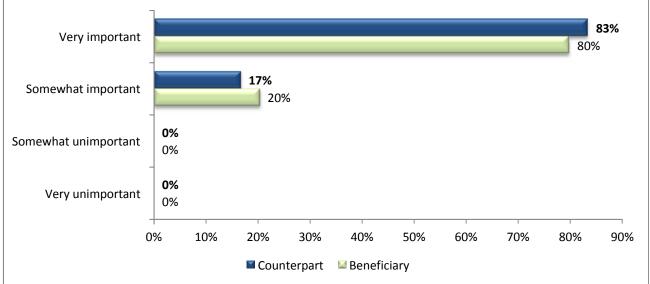


Figure 51: Importance of Daily Interaction in Causing Change

For counterparts, N=36; for beneficiaries, N=69

To further assess the importance of the frequency of interaction with the Volunteer in causing community change, respondents were asked about the importance of the Volunteer living in the local community while working on their project (Figure 52). The results are very similar to the respondents' view of the importance of daily interaction in causing community change. Seventy-eight percent of counterparts and 83 percent of beneficiaries considered the Volunteer living in their community to be very important in producing community change. Respondents noted the mutual benefits arising from this situation, stating that the daily presence of the Volunteer in their community allowed community members to build a relationship with the Volunteer, and provided an opportunity for Volunteers to assess changing community needs and to see the results of their work.

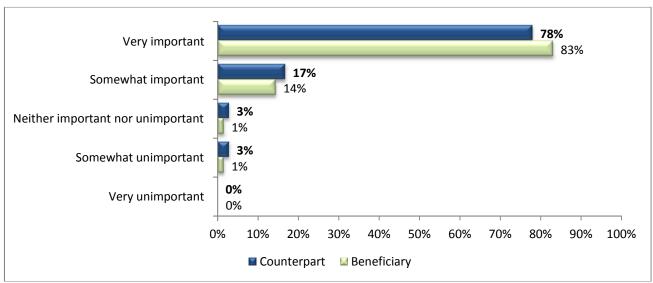


Figure 52: Importance of the Volunteer Living Locally in Causing Change

Summary of Factors Affecting Outcomes

According to respondents, the project's success derives from a combination of three factors: 1) community interest and participation in project activities; 2) the ability of the Volunteer to use their positive personality traits to build trust with community members; and 3) cross-sectoral support for the project goals.

To help ensure success, Peace Corps staff must work with each community to make sure that a foundation of support is built prior to the arrival of the Volunteer. Respondent's comments indicate that assigning a Volunteer to a well-established, community-based organization is particularly effective. Peace Corps staff must then train the Volunteer on how to conduct a community needs assessment to determine the most salient health topics, how to build trust through daily interaction with often skeptical community members, how to implement dynamic health talks and workshops to maintain community interest, and how to engage with community leaders to ensure cross-sector support for project activities.

Counterparts and beneficiaries described several challenges that affected the project's success and therefore capacity building among local participants. In three cases, these negative success factors are just the inverse of the positive success factors: community disinterest and lack of participation, lack of support from community leaders, and distrust of the Volunteer. Peace Corps staff can assist Volunteers by tempering their expectations, while stressing that bonds of trust must be built with the community before any change can be realized. The lack of immediate results may be frustrating to Volunteers, so it is helpful to underscore that this situation is not only acceptable, but expected.

Respondents also cited various project-specific characteristics that posed challenges. When training the Volunteer in community needs assessment, staff may want to reinforce the

message that the Volunteer needs to consider the readiness and resources available to project participants, as well as local infrastructure, prior to implementing a project intervention.

Satisfaction with Outcomes

Researchers asked counterparts, beneficiaries, and stakeholders about their satisfaction with the project through two different questions. One directly asked about satisfaction level and reasons for satisfaction, while another asked if respondents would host another Volunteer.

Overall Satisfaction

Counterparts, beneficiaries, and stakeholders overwhelmingly reported they were satisfied or very satisfied with the changes resulting from the project (Figure 53). Most frequently, respondents stated that they were very satisfied with the changes (counterparts 75%, beneficiaries 89%, and stakeholders 86%). Another 25 percent of counterparts, 11 percent of beneficiaries, and 14 percent of stakeholders were somewhat satisfied with the changes. Respondents were satisfied primarily because project participants acquired new knowledge that has produced positive change and improved their communities and personal lives. Respondents specifically mentioned their satisfaction with the improved latrines, improved stoves, better hygiene, and better nutrition, which has led to healthier and cleaner communities and homes.

"Very happy. The community is greatly improved, which was not an easy task especially for him because he was the first Volunteer [in our community]." – Beneficiary, Ybaroty

"Very satisfied because he improved the living standards of the people." – Beneficiary, Apyragua

"Had it not been for the work of the Volunteer, we were going to continue here with our ignorance." – Beneficiary, Mandiyutygue

"The stoves, the latrines, the theme of hygiene in the kitchen – all of these things have made our lives easier." – Beneficiary, Barrio Maria Auxiliadora

"I am happy because I see the children wearing their shoes in cold weather, and each one brings their toothbrush to class and washes their hands." Beneficiary and Teacher, Mandiyutygue

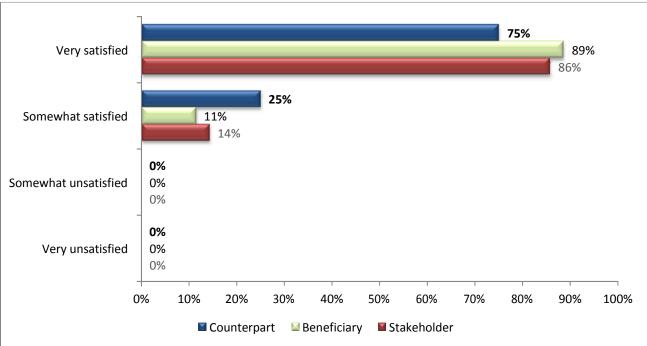


Figure 53: Counterpart, Beneficiary, and Stakeholder Satisfaction

For counterparts, N=36; for beneficiaries, N=70; for stakeholders, N=14

Desire to Work with Peace Corps Again

Another measure of satisfaction is whether counterparts and beneficiaries would want to work with another Volunteer. Respondents overwhelmingly indicated that they wished to work with another Volunteer, with 94 percent of counterparts, 100 percent of beneficiaries, and 98 percent of students expressing this desire (Figure 54).

The few counterparts and students who were unsure about working with another Volunteer reported being apprehensive because the next Volunteer may not be as highly skilled, hardworking, or friendly as the one with which they had already worked. One counterpart stated that their Volunteer had been robbed during service, and expressed anxiety about the level of community safety for another Volunteer.

"Of course! We already know how they are and the community will be glad to have them again. They are people that taught us and helped to organize us." – Beneficiary, Yataity Virgen de Fatima

"Yes, because they helped a lot. It was a pleasure to work with them." – Beneficiary, Caraguata-rua

"Very pleased. Very satisfied with the experience, the changes in the community, and how people are satisfied with the achievements." – Stakeholder, National NGO Office

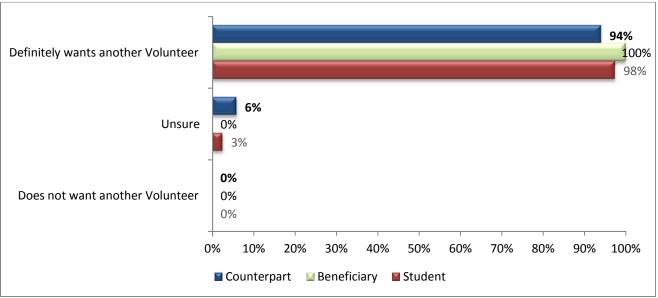


Figure 54: Counterpart and Beneficiary: Want another Volunteer

For counterparts, N= 34; for beneficiaries, N= 65; for students, N=40

Summary of Satisfaction

The overwhelming majority of respondents were very satisfied with the changes resulting from the project and the Volunteer's work, and no respondents were unsatisfied. Additionally, more than 95 percent of all respondents want to work with another Volunteer.

Goal One Conclusion and Recommendations

Overall, Volunteers implemented the eight activities outlined in the Rural Health and Sanitation Project Plan while also implementing sixteen additional activities. Both the counterpart and beneficiary groups felt the training provided by the Volunteers had enhanced their overall skills to affect change in community and personal health issues. Project participants most frequently stated that they received training in the areas of nutrition (including improved cooking practices), dental health, and parasite prevention.

At the community level, the project had the greatest impact in terms of change, sustainability, and meeting community needs in the following outcome areas:

1. Families using improved cooking practices

Across the impact continuum, counterparts and beneficiaries were in agreement that families' improved cooking practices, most notably the use of an improved stove, had the most significant impact in the communities where Volunteers served.

2. Children practicing parasite prevention habits

Consistently high rankings were also seen for the parasite prevention habits of children, signifying that all respondents groups were satisfied with the direction of change, sustainability, and having needs met for this outcome. Comments from students on the changes they saw in their school environment specified that they observed their classmates washing their hands and wearing shoes daily. Furthermore, the habits of washing hands and wearing shoes on a daily basis have a positive linkage with reducing gastrointestinal and diarrheal illnesses, so Volunteers should continue to stress these topics in their trainings and health talks to maintain the positive impact reported by all respondent groups.

- 3. Families using sanitary latrines
- 4. Families constructing sanitary latrines

Families' use of sanitary latrines was also ranked and rated highly for its direction of change, sustainability, and meeting the needs of the community. Furthermore, the training provided by the Volunteers on how to construct a sanitary latrine was also highly ranked and rated, indicating that the use of a sanitary latrine is a highly sustainable project outcome.

5. Children practicing good dental hygiene

Counterparts and beneficiaries also observed a positive direction of change, sustainability, and met needs in the area of children's dental hygiene habits. Through their comments, students specified that one of the main changes they observed from the work of the Volunteer is their classmates brushing their teeth on a daily basis.

At the individual level, the project had the greatest impact in terms of change, sustainability, and meeting needs in the following outcome areas:

- 1. Practicing parasite prevention habits
- 2. Using sanitary latrines
- 3. Access to potable water
- 4. Improved cooking practices

The parasite prevention, sanitary latrine, and improved cooking practice outcomes also appeared in the top-five of the community-level outcome matrix, signifying that these three outcomes are having the greatest impact on all respondents that participated in the Rural Health and Sanitation Project.

The access to potable water outcome did not appear in the top-five of the community-level outcomes, but it is unclear if this can be attributed to the more general rewording of the outcome in the individual matrix or to the difference between community and individual training dynamics. Counterparts and beneficiaries clearly observed positive impact from this outcome at the individual level, so Volunteers' activities on this health topic were effective.

In terms of unanticipated outcomes, many counterparts and beneficiaries reported that , due to of the work of the Volunteer, their communities learned how to organize themselves to work together to affect change in areas of concern. This involved how to: organize community groups; unite the community (including authorities) around a particular topic; organize participatory meetings; and, work collaboratively with neighbors. Along with these new organizational skills, many respondents noted that the work of the Volunteer engendered an openness to change, and empowered community members with the confidence to implement desired changes.

Project success was derived from a combination of three factors: community interest and participation in project activities, the personality and relationship-building skills of the Volunteer, and cross-sectoral support for the project goal. This information is critical; it reflects the value of having Peace Corps country staff develop a project plan that outlines health activities that are important to Paraguay's impoverished communities.

Peace Corps staff should work with each community to ensure that a foundation of support is established prior to the arrival of the Volunteer. Volunteers should assess and prioritize their community's health needs in order to ensure that talks and trainings are addressing those expressed needs. Training the Volunteer on how to conduct a community needs assessment to determine the most salient health topics, how to implement dynamic health talks and workshops to maintain community interest, and how to engage community leaders to ensure cross-sectoral support for project activities should continue to be emphasized. Finally, placing Volunteers at sites with established community groups, such as women's commissions, lent credibility to the project and the Volunteer, and allowed community members to participate in project activities through an organization with which they were already familiar.

Counterparts and beneficiaries reported that efforts to improve adults' dental hygiene habits had the lowest impact. Indeed, the three outcomes devoted to the adult population were ranked and rated in the bottom five of the sixteen project outcomes. Posts' pre-service and inservice training may want to emphasize that Volunteers make a concerted effort to include all generations in their health talks, or devote more time to home visits in order to provide an opportunity for family members to support or reinforce healthy lifestyle practices. Similarly, the three reproductive health outcomes were ranked and rated in the bottom half of the sixteen project outcomes. To address these findings, post staff will need to introduce additional training during in-service trainings to better realize these outcomes, or, in an effort to more narrowly focus project activities, staff may want to eliminate this project goal from the project framework altogether.

Several factors were challenges to project success and therefore capacity building among local participants. In two cases, these negative factors are just the inverse of the positive factors: community disinterest and lack of participation, and lack of support from community leaders. Respondents also indicated that initial distrust of the Volunteer limited project outcomes. Additionally, respondents stated that a Volunteer's poor language skills frustrated project participants and limited the pace of community change. The lack of immediate results may be

frustrating to Volunteers, so expectations need to be managed. Respondents also cited numerous project-specific characteristics that posed challenges such as a lack of economic resources and deficient infrastructure.

Respondents linked daily interaction with the Volunteer to the changes produced and felt strongly that the relationships they built with Volunteers were the primary source of change. Respondents also noted that consistent interaction with the Volunteer served as a reminder to practice healthy lifestyles, encouraged community members to ask the Volunteer questions, and allowed the Volunteer adequate time to assess the changing needs of the community. This would seem to indicate that participants in the Rural Health and Sanitation Project consider that the foundation for community change is not built solely upon the frequency of interaction, but also on the similar, yet not identical or time-bound, concept of trust.

Finally, the overwhelming majority of respondents were satisfied or very satisfied with the changes resulting from the project and the Volunteer's work. Respondents specifically mentioned their satisfaction with the improved latrines, improved stoves, better hygiene, and better nutrition, which has led to healthier and cleaner communities and homes. Additionally, more than 94 percent of each respondent group wants to work with another Volunteer.

Chapter 3: Goal Two Findings

This section addresses how and to what extent Volunteers promoted a better understanding of Americans among the Paraguayans with whom they worked and lived. The section begins with a description of project participants' sources of information about Americans followed by what counterparts, beneficiaries, host families, and students thought about Americans prior to working with a Volunteer and how their opinions of Americans changed after interacting with Volunteers. The next section discusses the causes of change according to respondents, including descriptions of how much and in what ways Paraguayans interacted with Volunteers. The section continues with a description of how the Volunteers affected the respondents' behaviors and outlook on life. The section ends with conclusions and recommendations based on the findings on Goal Two.

Sources of Information about Americans

Prior to meeting a Volunteer, beneficiaries, students, and host family members most often stated that they had no previous information about Americans, with 49 percent of beneficiaries, 66 percent of students, and 55 percent of host family members indicating a lack of information (Figure 55). Counterparts were the most informed about Americans, receiving their information from a variety of sources, such as movies/television shows (44%) and newspapers/magazines (36%).

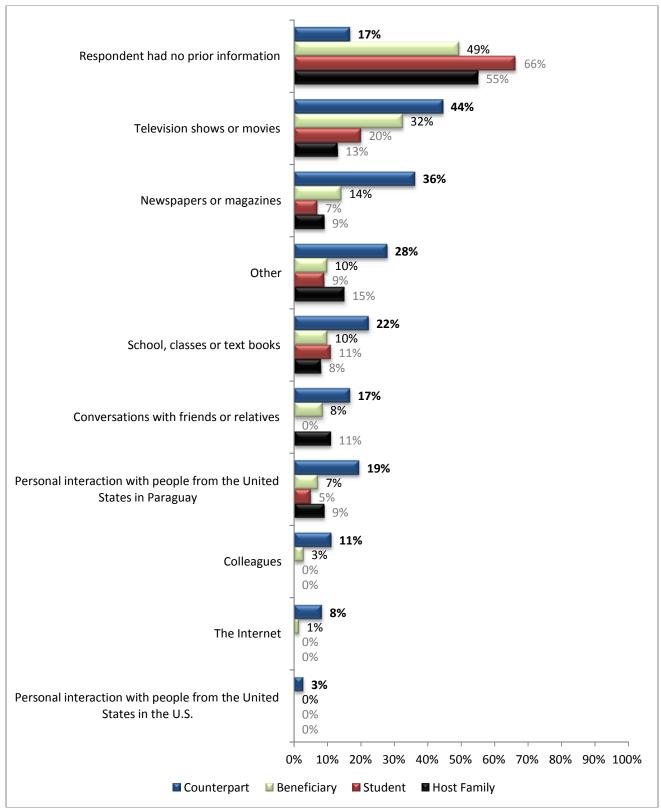


Figure 55: Respondent Sources of Information about Americans

For counterparts, N=36; for beneficiaries, N=71; for students, N=44; for host families, N=53

Changes in Understanding and Opinions about Americans¹³

Counterparts, beneficiaries, students, and host families all exhibited increased understanding of Americans after interacting with a Volunteer. Before interacting with a Volunteer, beneficiaries (53%), students (68%), and host families (65%) most often reported having no knowledge of Americans at all (Figure 56). Counterparts reported higher levels of understanding, with 6 percent having a thorough understanding, 19 percent having a moderate understanding, and 44 percent having a limited understanding.

After interacting with a Volunteer, 16 percent of counterparts reported having a thorough understanding of Americans and 63 percent reported having a moderate understanding (Figure 57). The results from the remaining respondent groups were mostly split between having a moderate understanding (48% of beneficiaries, 49% of students, and 45% of host families) and having a limited understanding (43% of beneficiaries, 43% of students, and 49% of host families). Few respondents indicated that they continued to have no understanding of Americans after interacting with a Volunteer (3% of counterparts, 7% of beneficiaries, 8% of students, and 4% of host families).

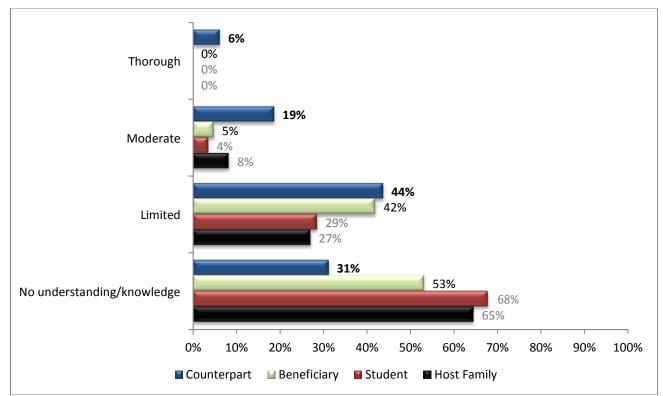


Figure 56: Understanding of Americans before Interacting with a Volunteer

For counterparts, N=32; for beneficiaries, N=62; for students, N=28; for host families, N=48

¹³ Understanding is defined as the level of knowledge about Americans and American culture and is thus differentiated from opinion.

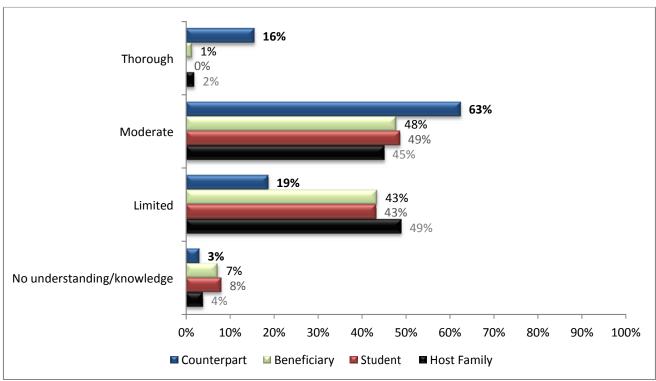


Figure 57: Understanding of Americans after Interacting with a Volunteer

When asked what their opinion was about Americans prior to working with a Volunteer, the majority of each respondent group stated that they had neither a positive nor a negative opinion (64% of counterparts, 78% of beneficiaries, 89% of students, and 73% of host families; Figure 58).

After interacting with a Volunteer, the majority of each respondent group expressed that they had a somewhat more positive opinion of Americans (61% of counterparts, 67% of beneficiaries, 82% of students, and 72% of host families; Figure 59). Additionally, 33 percent of counterparts, 24 percent of beneficiaries, 8 percent of students, and 14 percent of host families stated that they had a more positive opinion of Americans. No respondents had a more negative opinion of Americans, and only 2 percent of host families indicated that they had a somewhat more negative opinion. The host father who had a more negative opinion of Americans after interacting with a Volunteer stated that his opinion was based on an experience with a Volunteer who had lost interest in working with the community on a project when no immediate, tangible progress was realized.

For counterparts, N=32; for beneficiaries, N=69; for students, N=37; for host families, N=51

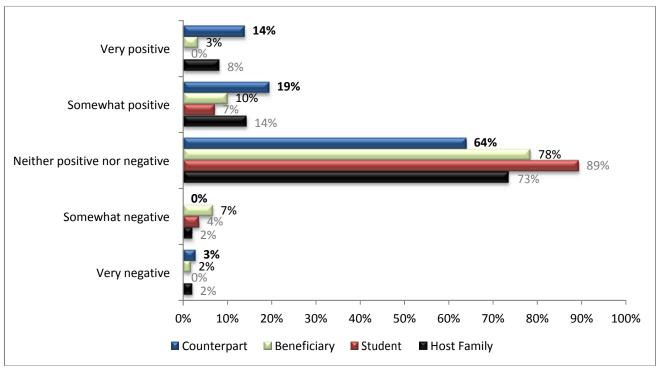


Figure 58: Opinions of Americans before Interacting with a Volunteer

For counterparts, N=36; for beneficiaries, N=60; for students, N= 28; for host families, N=49

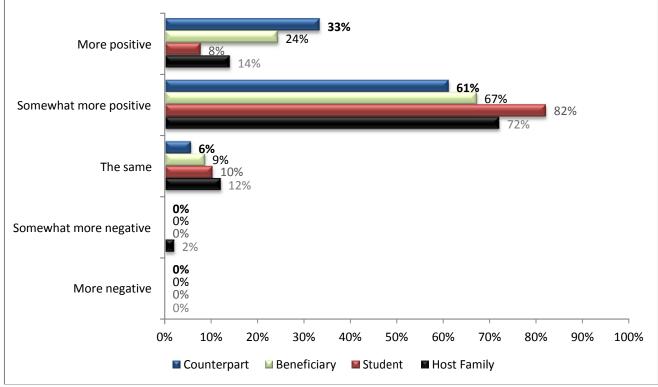


Figure 59: Opinions of Americans after Interacting with a Volunteer

For counterparts, N=36; for beneficiaries, N=70; for students, N=39; host families, N=50

When asked to briefly describe their views of Americans prior to working with Volunteers, only 43 of 204 project participants provided responses due to low levels of knowledge of Americans, as seen in Figures 55 and 56. Of those that responded, approximately half provided positive descriptions of Americans, characterizing them as good (9 respondents), helpful (6 respondents), knowledgeable (4 respondents), and intelligent (3 respondents) people. The other half of the respondents provided negative descriptions of Americans, characterizing them as bad (4 respondents), people who were spies (4 respondents), acted superior to other countries (3 people), and resorted to violence to exert their power (6 respondents).

Asked to describe their views of Americans after interacting with a Volunteer, 186 of 204 counterparts, beneficiaries, students, and host families provided responses. Forty-nine percent of respondents simply described Americans as good people, with another 15 percent describing Americans as friendly, kind, or nice. Thirty-seven percent noted that Americans are helpful and interested in helping disadvantaged communities. Twenty-four percent of the respondents remarked that Americans are intelligent and knowledgeable, and an additional 13 percent noted that Americans are willing to share their knowledge with community members. Sixteen percent of respondents described Americans as hardworking and dedicated.

"They get a very good opinion from me. They are people who are an example for the youth of our community." – Host Mother, Tuyango

"[The Volunteer] was a miracle for me. I learned so much from him. He is like a son to me. He helped me to recover my desire to live and to serve." – Host Mother, Yataity Virgen de Fatima

"I have more positive thoughts about them and that surprised me. I very much appreciated how he wanted to work with us." – Beneficiary, 3ra Calle Pte. Franco

"I see that they have a positive side. They want to help people and countries with less opportunity. I see that they are good people and have a heart. They can adapt to poor people and have a desire to help and work without asking for anything in return." – Beneficiary, Maria Auxiliadora

Causes for Changes in Opinion

Respondents were asked to discuss what caused the changes in opinions by referencing specific activities, memories, and learning experiences. These narratives were correlated against the frequency of interaction respondents had with the Volunteer who served in their community, as reported earlier in Chapter Two of this report.

Level of Interaction with Volunteers

During work hours, counterparts primarily interacted with the Volunteer by organizing health talks and coordinating home visits. As stated earlier, due to the necessary field work at multiple sites involved in the Rural Health and Sanitation Project, daily interaction among the Volunteers, beneficiaries, and students was limited, with only 24 percent of beneficiaries and 16 percent of students interacting with the Volunteer on a daily basis. Interaction with beneficiaries and students more often took place once or several times a week, through community health talks, home visits, or class talks. The Volunteers' interaction with counterparts was more frequent, with 57 percent of counterparts working with the Volunteer on a daily basis. Outside of work, interaction with the Volunteer was more frequent, with 64 percent of counterparts, 41 percent of beneficiaries, and 30 percent of students indicating they interacted with the Volunteer on a daily basis.

Host family members primarily interacted with Volunteers in a home setting. When asked why they wanted to host a Volunteer, fourteen host families shared that they opened their home because they knew the Volunteer was going to help their community. Thirteen families hosted a Volunteer because they were interested in learning about health issues from the Volunteer. Thirteen families responded that they desired to be a mentor to the Volunteer as they adapted to a new culture, seven families stated that they had known a Volunteer previously and had a good impression of them, and six families expressed interest in learning about a culture different from their own.

Most Frequent Activities

The activities that counterparts, beneficiaries, and students did most often with Volunteers can be broken into two categories: those related to work/school and those that were outside of work/school or were more personal.

At work, counterparts and beneficiaries reported that interaction with the Volunteer was most often centered around the periodic talks given by the Volunteer on a variety of health issues. Beneficiaries reported on their attendance at these talks (33%), while the counterparts indicated their role in helping to plan and coordinate these talks (22%). An additional 8 percent of counterparts and beneficiaries indicated that they interacted with the Volunteer during work-related home visits. At school, students reported that that activity they engaged in the most often with the Volunteer was learning about how to maintain and increase their dental health (25%).

Outside of work, 41 percent of counterparts and beneficiaries stated that they most often shared conversations with the Volunteer, 23 percent said that they cooked together, and 14 percent responded that they drank tereré. Outside of the classroom, students expressed that they most often played sports with the Volunteer (40%) and 28 percent said they shared conversations.

Not surprisingly, 59 percent of host families mentioned cooking and eating as the most frequent activity they did with Volunteers. Eating together was followed by talking (48%), drinking tereré (24%), and gardening (13%).

"We talked about life in the United States and its comparison with Paraguay. He taught me about his country and the world." – Beneficiary, Yataity Virgen de Fatima

"We ate together, drank tereré, and talked about what activities we could do in the community." – Host Mother, Zaro Caro

"At school, we had talks about health. At home, I helped him cook so he would have better food. We played games, like flying saucer. I also learned a little English." – Secondary school student, Caundy

"We talked. We planned work activities and health meetings for the community and the school. We were always coordinating." – Counterpart, Ybaroty

Overall, project participants and host family members improved their understanding and opinion of Americans through their interactions with Volunteers. This information correlates with a key component of Peace Corps' approach to community development: day-to-day interaction not only builds capacity and technical skill, but also deepens participants' understanding and knowledge of Americans and contributes to more positive opinions.

Most Memorable Activities

Activities with Volunteers that counterparts and beneficiaries found to be the most memorable can be broken into three categories: those related to work, those related to the Volunteer's personality, and specific social events.

Counterparts most often talked about the positive experiences they had with the Volunteer when organizing and presenting health talks to community groups and classrooms. These respondents shared memories on how the Volunteers approached their professional activities with enthusiasm and dedication, as well as anecdotes from implementing these activities.

"When building the stoves, she helped a lot. And the muddy mixture would get all over her hands and arms." - Counterpart, Tuyango

"Day by day she was making great efforts to speak Guarani. She had her notebook where she noted everything the community members said, and then later she consulted me." – Counterpart, San Jose

"Their spirit of cooperation with people; helping each other. They managed to convince the people to work together." – Counterpart, Ybaroty

"Their love and respect for the community. They were very attentive and very dedicated to their work." – Counterpart, 3ra Linea Pte. Franco

Beneficiaries provided memories that reflected all three of the categories. These respondents talked about the Volunteer's personality, the health activities implemented in their communities, and provided specific memories of social events.

"His dynamism and how he constantly worked hard." – Counterpart, B^o Maria Auxiliadora

"In order to construct the stove, she did men's work! She prepared the mixture and she got dirty." – Beneficiary, Mandiyutygue

"When he mispronounced words in Guarani." - Beneficiary, Maria Auxiliadora

"Their simple humility when working with people. Their respect for the community. They know how to listen." – Beneficiary, Zaro Caro

"The building of the bathrooms: how we helped and everyone collaborated." – Beneficiary, Ybaroty

When asked about their most memorable activities, host family members most often cited positive aspects of the Volunteer's personality, such as their joyfulness, eagerness to help, and desire to adapt to Paraguayan culture. Host family members also cited specific events from the Volunteer's service, such as making mint-flavored toothpaste, making banana bread, slaughtering a pig, and laughing about mispronounced Guarani words.

"What I will never forget is the desire to help that he had. Until now I still have that memory." – Host Mother, Compañia Pte. Franco

"When he persecuted my rooster for his singing because it bothered him." – Neighbor, Barrero Pyta

"The company - we miss their company a lot." – Neighbor, Cerrito

Students most often talked about how the Volunteer created a dynamic learning experience in their classroom, positive aspects of the Volunteer's personality, and specific social events outside of the classroom.

"His way of being so kind and humble." – Primary school student, Cerrito

"We made drinking glasses from recycled bottles and made writing paper by recycling paper." – Primary school student, 3ra Calle Pte. Franco

"The talks on disease prevention, because he made it very interesting." – Primary school student, Apyragua

What Volunteers did to Change Opinions and What Project Participants Learned about Americans

Counterparts and beneficiaries who reported a more positive opinion of Americans (Figure 36) stated that their opinions improved due to their observations of the Volunteers' work ethic and their personality.

In work situations, counterparts and beneficiaries changed their opinions because they observed Volunteers to be willing to share their knowledge, approached their work with humility and commitment, were respectful, and did not discriminate against community members due to perceived differences.

"I changed my opinion after working with her. She was someone who was able to direct and carry out any goal." – Counterpart, Mandiyutygue

"I had not known about Americans, but because of working with the Volunteer I noted that they are good people. He liked to work in groups and help wherever he could." – Beneficiary, Santa Rosa

"Her kindness and humility. She could have the life she wanted, but instead she chose to be a Volunteer and help people in need." – Counterpart, Villa Boqueron

Outside of work, counterparts and beneficiaries stated that they changed their opinions because they saw that Volunteers as simple, curious, and positive people. The respondents expressed surprise at the Volunteers' ability to adapt to Paraguay and how easy it was to relate to them and form a relationship. The Volunteers' dedication to philanthropic work also impressed the respondents.

"The Volunteers who were here in the village were always very active, good, and very kind and humble. That is why I think of them much more positively." – Counterpart, Villa Boqueron

"I am very poor and at first I was afraid of the reaction that she would have to me because she was not used to my way of living. But I was very surprised." – Beneficiary, Zaro Caro

"They wanted to learn our language and our customs. I think they are people like us." – Counterpart, Mandiyutygue

"He made me feel important." – Beneficiary, Yataity Virgen de Fatima

Host families who reported more positive opinions of Americans most often cited that they changed their opinion through their observations of the Volunteer at work or from witnessing their overall demeanor and approach to life.

In work situations, host families changed their opinions because they observed Volunteers to be inclusive, humble, helpful, willing to share their knowledge, non-discriminatory, and collaborative.

"I had no knowledge of Americans, but now I know something: they are good people and like to help others, regardless of social class." – Host Mother, Santa Rosa

Outside of work, host family members stated that they changed their opinions because they saw that Volunteers were simple, friendly, and helpful people that enjoyed talking and learning about Paraguayan culture. The Volunteers' ability to adapt to Paraguayan culture while continuing to help their community also impressed the host family respondents. The Volunteers' positive demeanor and behavior inspired many host family members to describe them in terms of family.

"I am a humble person with a low economic condition, and I would say that [the Volunteer] did not care about that. She saw other priorities in life besides money and luxury. So my opinion about Americans is very good." – Host Mother, Paccha

"She adjusted to me as if she was part of my family. So I think that is a person with good principles." – Host Mother, Maria Auxiliadora

Students who reported more positive opinions of Americans changed their opinion through their interactions with the Volunteer both inside and outside the classroom. At school, students described Volunteers as punctual, dedicated, and more patient with them as opposed to their Paraguayan teachers. In the community, students changed their opinions of Americans because they observed the Volunteers to be respectful, cheerful, and willing to take part in community activities.

"His desire to help us. We were terrible in the classroom and he had patience with us." – Primary school student, Redondo

"His respect to the elders. He was always attentive in greeting the grandparents." – Primary school student, Barrero Pyta

When asked about what they learned about Americans from the Volunteers, 136 respondents provided a variety of answers. From a project perspective, respondents learned that Americans are hardworking (16 respondents), dedicated (13), responsible (8), collaborative (5), punctual (12), and enjoy sharing their knowledge (16). In terms of personality, respondents learned that Americans are intelligent (8), honest (6), simple (8), adaptable (4), and respectful (7). Respondents also noted that they learned specific cultural details about Americans, such as

wearing green on St. Patrick's Day, eating more fruits and vegetables with their meals than Paraguayans, and leaving their parents' home at a young age to pursue higher education opportunities.

Impact of the Changes on Participants' Behavior and Outlook on Life

As the final question of the interview, respondents were asked how they had changed their behavior or outlook on life as a result of interacting with the Volunteer. Counterparts, beneficiaries, students, and host families who had reported a more positive opinion of Americans (Figure 36) stated that they themselves:

- Are more communicative, in terms of sharing their ideas and opinions with family members and neighbors and socializing with family and friends
- Are more participatory, in terms of attending community events and sharing ideas and opinions at community meetings
- Are more organized, collaborative, unified, and dedicated as a community in their efforts to affect positive change
- Increased their healthy eating habits
- Improved their hygiene habits
- Improved dental health habits
- Have an overall improved confidence and outlook on life, in terms of embracing the philosophy that personal and community change will occur when a sustained effort is made to overcome all challenges and realize the stated goal

"I learned to get out of my confinement. I was very shy before but because of the work activities I met people from different places. Now many people know me from Yhu Hospital and ask me to do work for them." – Host Mother, Yataity Virgen de Fatima

"I take care of the animals, brush my teeth, and eat healthy food. I like reading and doing my homework. I take care of my personal hygiene by bathing every day." – Primary school student, Barrero Pyta

"I have a better lifestyle in terms of personal hygiene, my household, and my grandchildren. And cooking - now I have my improved stove. It is more hygienic to prepare my food. I also continue to make my own detergent." – Beneficiary, Tuyango

"I work more with the community commission so we can achieve what we want. We help each other, because if each person has what they need, it benefits the entire community." – Beneficiary, Santa Rosa

"Seeing people like her makes me think that there are still good people in the world." – Beneficiary, Mandiyutygue

"I learned that everything will not always work out, but you have to try." – Beneficiary, Mandiyutygue

"Value the things that are provided to you, value every moment you have with your loved ones, and live a healthy life." – Beneficiary, San Francisco

"With struggle, one can achieve their goals. Nothing is impossible. Just as they helped our community, we stay and continue to do so. It is very interesting this vision that they have given to us about life!" – Counterpart, Ybaroty

Goal Two Conclusion and Recommendations

Prior to meeting a Volunteer, respondents most often stated that they had no previous information about Americans, with high percentages of counterparts, beneficiaries, students, and host families reported having no knowledge of Americans at all. After interacting with a Volunteer, respondents showed an increased understanding of Americans and improved opinions about Americans. Through living and working with the Volunteer, project participants grew to describe Americans as good, friendly, intelligent, and kind people who are willing to share their knowledge and are helpful, dedicated, and philanthropic.

In work situations, respondents stated that they changed their opinions of Americans through their observations of how the Volunteers were willing to share their knowledge, approached their work with humility and commitment, were respectful, and did not discriminate against community members due to perceived differences. In social situations, respondents stated that they changed their opinions because they saw that Volunteers were simple, curious, and positive people. The respondents expressed surprise at the Volunteers' ability to adapt to Paraguay and how easy it was to relate to them and form a relationship. The Volunteers' dedication to philanthropic work also impressed the respondents. The Volunteers' positive demeanor and behavior inspired many host family members to describe them in terms of family.

Overall, project participants and host family members improved their understanding and opinion of Americans through their interactions with Volunteers. This information correlates with a key component of Peace Corps' approach to community development: day-to-day interaction not only builds capacity and technical skills, but also deepens participants' understanding and knowledge of Americans.

Appendix 1: Methodology

Site Selection

In Paraguay, the team conducted interviews in 24 communities with health education placements. The sample of sites at each post was a representative sample rather than a random sample from the list of Volunteer assignments that ended since 2006. Sites that were extremely remote were excluded. Study sites were randomly selected from the remaining list. Individual respondents were then selected in one of three ways:

- 1. At many sites, only one counterpart had worked with a Volunteer. In those cases, once the site was selected, so was the counterpart.
- 2. With regard to the selection of beneficiaries and host family members, and in cases where more than one possible counterpart was available, post staff and /or the Volunteer proposed individuals known to have had significant involvement in the project or with the Volunteer. Within a host family, the person with the most experience with the Volunteer was interviewed.
- 3. In cases where there were still multiple possible respondents, the research team randomly selected the respondents.

Data Collection

The research questions and interview protocols were designed by OSIRP staff and refined through consultations with the Country Director and regional.

A team of local interviewers, trained and supervised by a host country senior researcher contracted in-country, carried out all the interviews. The interviewers conducted face-to-face structured interviews with the following categories of Paraguay nationals:

- **Rural Health and Sanitation Project partners/counterparts**: community leaders, health professionals, teachers, NGO program managers (36)
- **Rural Health and Sanitation Project beneficiaries:** members of a Women's Commission, community leaders, teachers, health professionals, members of a youth group (71)
- Students: primary school students, secondary school students (44)
- Host family members: families that hosted or served as landlords to Volunteers during all or part of their service (53)
- **Stakeholders:** school directors, mayors, local government officials, SENASA staff, national NGO staff, Ministry of Education officials, Ministry of Health officials (14)

Interviewers used written protocols specific to each category of respondents.

The research teams also reviewed existing performance data routinely reported by posts in Volunteers' Project Status Reports. However, the results presented in this report are almost exclusively based on the interview data collected through this study.

Two hundred and eighteen individuals were interviewed in Paraguay for the study (Table 1).

What data were collected?

Interviewers used written protocols specific to each category of respondents. The counterparts and beneficiaries were asked questions related to both Goal 1 and Goal 2. Host family members were asked only questions related to Goal 2. The categories covered for each of the three groups are shown below (Table 2).

Respondent Type	Question Categories	Approximate Length of interview
Counterpart	 Goal 1 Clarification of the project purpose Respondent's work history in the field and with the Peace Corps Frequency of contact with the Volunteer Project orientation Project outcomes and satisfaction with the project Community and individual-level changes Maintenance of project outcomes 	45 minutes
	 Goal 2 Source of information and opinion of Americans prior to the Peace Corps work Type of information learned about Americans from interaction with the Volunteer Opinion of Americans after interaction with the Volunteer Particular things that Volunteers did that helped improve respondent's understanding of Americans 	
Beneficiary (including students)	 Goal 1 Clarification of the project purpose Frequency of contact with the Volunteer Project outcomes and satisfaction with the project 	30 minutes

Respondent Type	Question Categories	Approximate Length of interview
	4. Community and individual-level changes	
	5. Maintenance of project outcomes	
	Goal 2	
	 Source of information and opinion of Americans prior to the Peace Corps work 	
	2. Type of information learned about Americans from interaction with the Volunteer	
	3. Opinion of Americans after interaction with the Volunteer	
	4. Particular things that Volunteers did that helped improve	
	respondent's understanding of Americans	
Host Family	Goal 2	30 minutes
Member	 Source of information and opinion of Americans prior to the Peace Corps work 	
	2. Type of information learned about Americans from interaction with the Volunteer	
	3. Opinion of Americans after interaction with the Volunteer	
	4. Particular things that Volunteers did that helped improve	
	respondent's understanding of Americans	
	5. Behavioral changes based on knowing the Volunteer	

Evaluation methods

Sampling

Step 1: Upon study initiation, OSIRP staff creates a data file containing all Peace Corps Volunteer assignments for the project over the past 5 years. Volunteers who did not complete at least one year of service are eliminated from the population.

Step 2: OSIRP staff selected a systematic sample of 24 sites.

Step 3: Approximately 5-10 people will be interviewed per site: the counterpart(s); a member of the host family (when Volunteer has lived with a host family); and beneficiaries (students, members of youth/mother's group, etc.). The senior researcher and OSIRP study leader worked closely with post staff to identify individuals in each of these three groups who will be asked to participate in interviews.

Individual respondents were then selected in one of three ways:

1. In some sites, there may be only one counterpart who worked with a Peace Corps Volunteer. In this case, once the site is selected, so is the counterpart.

2. In some sites, more than one possible counterpart may be available because over the two years [at] a site, the original counterpart may have moved and been replaced, the Volunteer worked with more than one organization or group, more than one Volunteer lived in the community and different people worked as their partner/counterparts. The Associate Peace Corps Director made a list of the people who have worked as partners/counterparts. One or two counterparts were picked from the list randomly.

3. Host family members: Post staff provided the senior researcher with the name of the family (families) who hosted the Volunteer at the site. Within a host family, the person with the most experience with the Volunteer was asked for an interview.

4. Beneficiaries: The Associate Peace Corps Director for the project described the groups of people who benefited from the services the Volunteer provided and proposed individuals known to have had significant involvement in the project or with the PCV. Individual participants were randomly selected from that list.

¹⁴ This section was excerpted (with minor edits) from the research report developed by the in-country research team. As a result the formatting, language, and style vary slightly from those used in the body of the report. Nestor Peralta and Rodolfo Elias, *Host Country Impact Study: Final Report: Paraguay Rural Health and Sanitation Project,*" pp. 10-18, 2011.

Distribution of respondents [at each site]

- 3-5 interviews of beneficiaries,
- 1-3 interview of host families/family-like friends at site, and
- 1-2 interviews of counterparts

Information Collection

The research relied on in-depth, face-to-face interviews with individuals who have worked or lived with a Peace Corps Volunteer. Interviewers used a structured interview guide; each interview lasts generally between 30-90 minutes. Host country individuals were interviewed using the interview guide specific to each category of respondent.

The research questions and interview guides were designed by OSIRP staff and refined in consultation with post and regional staff. Senior researchers were encouraged to provide feedback on the questionnaires as well. Two specific opportunities for comments were built into the research: the translation/back translation process and piloting the questionnaires.

Interviews were selected as the primary method to collect the data because they are the best way to gather information about attitudes, awareness, and perceptions. Interviews are also excellent tools for gathering information about general knowledge and behaviours. The interviewer can tailor his or her follow up questions and probes to the specific respondent and gather information in more depth than is possible with a standard questionnaire.

Host Country Individual	Definition
	School Directors
1. Stakeholders	Ministry officials
	Government Offices
	Teachers
	Schools
2 Partners/Counternarts	Community leaders/organizations
2. Partners/Counterparts	Health centers
	Nurses, health promoters, health educators
	Government Officers
	Teachers
	Students
3. Beneficiaries	Community leaders
	Women's commissions
	Youth groups
	Host family or "family-like" friends at site
4. Host family members	Host Family members from one PST site
	Neighbors

Categories of Host Country Individuals Interviewed

Number of Host Country Individuals Interviewed

Host Country Individuals	Number of Interviews
Stakeholders	14
Counterparts	36
Beneficiaries	71
Host Family Members	53
Students	44
Total interviews	218