



NOVA

SCIENCE PUBLISHERS, INC.

MICROFINANCE: A SUSTAINABLE PLATFORM FOR NON-FINANCIAL SERVICES

Bobbi Gray
Megan Gash
Scarlett Reeves
Benjamin Crookston

In: "Progress in Economics Research. Volume 20"

Editor: Thomas L. Wouters

ISBN: 978-1-61761-112-4 2011

400 Oser Avenue, Suite 1600

Hauppauge, N. Y. 11788-3619

Phone (631) 231-7269

Fax (631) 231-8175

E-mail: Main@novapublishers.com

<http://www.novapublishers.com>

The license for this PDF is unlimited except that no part of this digital document may be reproduced, stored in a retrieval system or transmitted commercially in any form or by any means. The publisher has taken reasonable care in the preparation of this digital document, but makes no expressed or implied warranty of any kind and assumes no responsibility for any errors or omissions. No liability is assumed for incidental or consequential damages in connection with or arising out of information contained herein. This digital document is sold with the clear understanding that the publisher is not engaged in rendering legal, medical or any other professional services.

Chapter 4

MICROFINANCE: A SUSTAINABLE PLATFORM FOR NON-FINANCIAL SERVICES

***Bobbi Gray¹, Megan Gash¹, Scarlett Reeves²
and Benjamin Crookston²***

¹Freedom from Hunger, Davis, California, USA

²University of Utah, Salt Lake City, Utah, USA

ABSTRACT

Over the past few years, microfinance has been widely heralded as a successful contributor to the alleviation of poverty. Scores of studies have shown the positive impact that microfinance can have on the lives of poor people. However, overall progress has been disappointing. Achievement of poverty alleviation goals will call for new and innovative ways of working rather than more of the same. A strategic, overarching strategy to address poor people's interrelated needs through creative partnerships that build on the best of different development sectors has the potential to lead to exponential rather than incremental reduction of poverty in the developing world. Evidence now supports the integration of microfinance with non-financial services as an approach that has potential for enormous contribution to poverty alleviation. This chapter will focus on the opportunities and challenges for microfinance organizations providing these integrated services. It also will provide supporting evidence that shows promising financial and health benefits of integration for the poor and the institutions that support their self-help efforts.

INTRODUCTION

Microfinance provides people with access to credit and other financial services to start and grow businesses, build productive assets and better cope with financial shocks. Moreover, microfinance institutions strive to serve those most in need. Of the more than 156 million

microfinance clients around the world, it is estimated by the Microcredit Summit Campaign that about 84 percent are women and about 69 percent are “very poor” (in the bottom half of those living below their country’s poverty line, or below US\$1 a day) (Daley-Harris 2009).

While access to financial services is undeniably powerful, credit and savings products address only one factor of many constraining the poor—a lack of liquidity. Increasing income and assets alone is a slow and insufficient strategy for improving such things as health, education and women’s decision-making power (Banajaree, Duflo, Glennester & Kinnan 2009). Yet despite the growth and expansion of microfinance services and the impressive impacts on poverty (Khandker 2005), the development community realizes that other services—in addition to credit and savings—must be available for families to lift themselves out of poverty. The poor need access to a coordinated combination of microfinance and other development services to increase income, build assets and improve health, nutrition, family planning, education, social support networks and more. The integration of complementary services intended for the same population can lead to enhanced operational efficiencies and synergies of benefits. The question is how to develop a scalable strategy for delivering integrated microfinance and other services that meet the multifaceted needs of poor people.

This chapter will build on the case for integrated services made by Dunford, et al. (2007) as well as describe the types of services that can be provided through microfinance organizations to meet the comprehensive needs of their clients. Two microfinance organizations will be highlighted: Crédito con Educación Rural (CRECER) in Bolivia and Bandhan in India. Studies conducted at both organizations will describe how they have integrated financial and health education, respectively, as well as present changes in knowledge, attitudes and behaviors.

Microfinance as a Development Platform

While microfinance is not a development panacea, it offers a robust platform for the delivery of complementary services that are needed—and frequently requested—by poor people. Microfinance institutions (MFIs) serve millions of poor people, especially women, on a regular basis, often extending their services to isolated, hard-to-reach places. What is more, the microfinance sector is focused on market-based business principles and financial self-sufficiency—providing demanded services at a price that is affordable to clients but also covers the institution’s operational costs. MFI clients repay their loans at astonishingly high rates, and their loyalty to and trust in the institution tend to be very strong. Many MFIs provide financial services to groups of clients, who mutually guarantee each other’s loans. These groups meet frequently to make loan repayments and deposit savings with the guidance of MFI field staff. Such regular meetings offer excellent opportunities for the provision of add-on services, such as training in health or financial management. This combination of a vast and rapidly growing network of distribution to hard-to-reach, loyal, economically active groups of poor people, a steady revenue flow from interest earnings and the drive to develop market-based products that pay for themselves, makes microfinance an attractive core component of a development program that draws on the principles of self-help to alleviate poverty.

Multifaceted and Sustainable Solutions to Poverty Alleviation

Microfinance institutions are motivated to have a healthy clientele and a business and financially savvy clientele. A healthy and financially savvy client is one who repays loans on time, takes larger loans, makes smart investments and continued savings deposits and is a longer-term client, all of which have an impact on the bottom line of the institution. Clients who are consistently ill, who must take time away from their businesses to care for a sick child, who divert loan payments to pay for health care or who are forced to sell their one productive asset to pay for a life-saving operation, do not make good financial risks. There is a clear financial argument for MFIs to protect the health and financial status of their clients, especially when such services can be designed to pay for themselves.

Recognizing the vicious cycle of poverty and ill health and poor “financial health,” and witnessing its impact on clients’ ability to repay, build assets, avoid over-indebtedness and pull themselves out of poverty, some microfinance institutions have added non-financial services, such as dialogue-based education and linkages to health products and providers, to impressive effect. The following descriptions illustrate the types of non-financial services microfinance organizations have provided around the globe and the evidence that currently exists to demonstrate their effectiveness on client health and client financial outcomes.

Health, business and financial education

Equipped with more income and decision-making authority, microfinance clients have choices—often for the first time in their lives. As a result, coupling microfinance with behavior-change education can be especially powerful. Many MFIs are offering training in topics such as the prevention and treatment of diarrhea, malaria and HIV/AIDS; breastfeeding; rational use of local health services; as well as self-esteem, microenterprise management and financial planning. The combination of greater knowledge of sound health practices and the increased income to act on that knowledge leads to dynamic, positive change.

Considerable evidence of impact has been documented for integrated microfinance and education, or *Credit with Education*, programs. Rigorous studies conducted in Ghana and Bolivia showed significantly improved health and nutrition practices by mothers who attended regular meetings in which microfinance transactions and health education were provided by the same field agent. Participating mothers were more likely to breastfeed their children and delay the introduction of other foods until after six months. They were also more likely to properly rehydrate children who had diarrhea by giving them oral rehydration solution. These changes in nutrition and health-protection practices were manifest in outcome measures such as increases in height-for-age and weight-for-age for children of participants (MkNelly & Dunford 1998, 1999, 2002). Another study conducted in Ghana showed significantly improved practices by clients who attended sessions on malaria prevention, detection and treatment. Participants in the malaria education were more likely to own an insecticide-treated mosquito net and to report at least one child or woman of reproductive age sleeping under a mosquito net (De La Cruz, Crookston, Gray, Alder & Dearden 2009). Also notable, a study of *Credit with Education* clients in Uganda showed that 32 percent of clients had tried at least one HIV/AIDS prevention practice, compared to 18 percent of non-clients (Barnes, Gaile & Kimbombo 2001).

A randomized controlled trial conducted in 2006 in Peru (Karlan & Valdivia 2009) revealed that business education (addressing money management, budgeting, approaches to improving sales, etc.)—when comparing clients who received financial services and the business education to clients who only received financial services—improved the revenues for the education clients in the month prior to the follow-up study. Most notably, when measuring variations in revenues per month, data showed higher revenues for education clients during poor sales months. Thus, it is inferred that the education helped the clients identify strategies to reduce the fluctuations in their sales during months in which revenues dip—thereby having an income-smoothing effect on the income generated from chronically irregular business cycles that the poor face.

A recently completed randomized controlled trial evaluation with Sewa Bank (Rohini, Field & Jayachandran 2009) in Gujarat, India revealed that the women who were randomly assigned to receive the financial education (key features of which included teaching women to identify business expenses, informing them about the need for savings for the future and identifying an important short-term financial goal) took out twice as many loans as those who did not receive the financial education and were more likely to take out loans to support a financial goal, such as buying a house, expanding a business or investing in their children's future.

Health financing and insurance

Having more income and increased knowledge of sound health practices can only go so far. Unexpected health expenses can still wipe out a family's savings and force an MFI client to sell her productive assets. So, in recognition of client demand to protect against health-related financial shocks and the MFI's own interest in protecting its portfolio from illness-induced defaults, some organizations—such as Réseau des Caisses Populaires (RCPB) in Burkina Faso—are going beyond *Credit with Education* to deliver health-financing mechanisms, such as dedicated health savings accounts and health loans.

Health microinsurance takes this solution a step further. In Rwanda and the Philippines, enrollment in microinsurance programs is becoming easier, thanks to the availability of loans from MFIs to spread annual premium payments over time. According to a World Bank report, linkages between MFIs and health microinsurance schemes in Rwanda have increased opportunities for scheme members to access credit for income-generating activities (Diop & Butera 2005).

Although these health-financing products look promising and align well with MFIs' core competencies, they do call for new expertise on analyzing health-seeking behavior, needs and costs, and designing efficient management mechanisms to prevent fraud, among others. The tremendous need and technical complexity associated with health microinsurance make this a particularly crucial area for additional investment and experimentation to devise templates for programs that could be widely adopted and adapted.

Links to healthcare providers

If good local health care is not available, then a microfinance client's increased earnings, good preventive health practices and health financing products will only go so far. Distance, quality and affordability can be major barriers to timely health care—particularly in rural areas, where providers are sparse, transportation is difficult and public services not well

funded. Rather than develop expertise in health care, MFIs can leverage their local influence and business acumen to create reliable linkages with providers, negotiate rates and advocate for better quality and accessibility to health care.

The largest MFI in the Philippines, CARD, has negotiated exclusive discounts for its clients with private providers in rural areas to increase access to more affordable primary care. The Bolivian MFI, CRECER, contracts with doctors who travel to isolated areas to conduct “health days,” during which general checkups, blood-pressure testing, Pap smears and other essential services are offered en masse. In Cambodia, the MFI-run GRET-SKY health insurance project (2005) uses its leverage to improve the quality of care in public facilities and helps channel poor people away from inappropriate and expensive care delivered by private (often traditional) providers and toward local public health centers. Such provider linkages also help to leverage and sustain local medical services, thereby leading to broader community development outcomes.

Access to health products

A package of services to address the poverty and ill health of very poor people is incomplete without access to crucial health products. Increased financial resources and knowledge about preventive health measures cannot help microfinance clients avoid malaria when insecticide-treated mosquito nets are not sold in their community, prevent HIV if condoms are not available, protect children from diarrhea when treatment tablets for contaminated water cannot be found, or buy the prescribed antibiotic when the supply is outdated, the quality of medicines sub-optimal or the prices exorbitant.

In response to such needs, BRAC in Bangladesh uses a network of health workers to sell essential but scarce health products door-to-door, and the fast-growing Indian MFI, Bandhan, is experimenting with a similar model. Some West African credit union networks have purchased insecticide-treated mosquito nets and sold them at group meetings. The Bénin MFI, PADME, is developing a partnership with Population Services International to ensure that essential health products are distributed to shops in target communities and encourages its clients with suitable shops to offer such products.

DEMONSTRATION EFFECT FROM TWO MFIS: HEALTH EDUCATION WITH BANDHAN AND FINANCIAL EDUCATION WITH CRECER

To demonstrate how the integration of education with microfinance or *Credit with Education* occurs and the resulting client outcomes, two case studies are presented below, representing two of the MFIs already mentioned in the introduction, Bandhan in India and CRECER in Bolivia. These two case studies will demonstrate the results from integrating health and financial education, respectively, as well as the challenges and benefits from doing so.

Case Study 1: Bandhan

Kolkata, India-based Bandhan is a young microfinance organization focusing on 17 states across India. As of December 2009, they reported more than 2 million members receiving financial services. The leadership team is comprised of experienced microfinance professionals from BRAC (renowned, large-scale MFI in Bangladesh) and other MFIs in Bangladesh and India. Bandhan delivers one main group-based credit product—to great effect; the institution has seen extraordinary growth and achieved operational self-sufficiency in only the third year of operations. Bandhan, in partnership with Freedom from Hunger, is providing its clients and community members with health education on preventing common illnesses, prenatal and neonatal care, and planning ahead to face health expenses. This education is accompanied by access to affordable, high-quality health products such as oral rehydration salts (ORS), paracetamol and water disinfectant solutions. Both the education and health products are delivered by Health Community Organizers (HCOs) and village-level volunteers selected and trained by Bandhan (Figure 1). The volunteers are also trained to reinforce the educational messages by visiting community households to visit with families regarding current health challenges and encourage them to seek treatment when deemed necessary.

Bandhan is also providing health micro loans to cover major medical expenses. As of December 2009, approximately 52,000 clients from 10 branches were participating in Bandhan's integrated health and microfinance program. They plan to reach 750,000 families in 100 branches by 2014.



© Karl Grobl for Freedom from Hunger.

Figure 1. Bandhan HCO delivering health forum

Methodology

A pre- and post-test study was conducted with clients from the three Bandhan branch areas of Birshibpur, Bagnan and Shyampur, West Bengal, India to assess changes in knowledge, attitudes and behavior regarding several health topics delivered in a community health forum format. Under the Microfinance and Health Protection (MAHP) initiative led by Freedom from Hunger (and funded by a four-year grant from the Bill & Melinda Gates Foundation), nine HCOs were trained to deliver hour-long, dialogue-based community health forums to Bandhan clients and community members on five main health topics: 1) Diarrhea, Sanitation and Safe Water and Personal Hygiene; 2) Cough and Cold: Acute Respiratory Illnesses, including Pneumonia; 3) Breastfeeding and Malnutrition; 4) Antenatal Care, and 5) Neonatal Care.

Prior to delivering the health forums, a cross-section of clients served by the nine HCOs was interviewed. Two hundred and forty clients were randomly selected from the nine HCOs' jurisdictions to participate in the study, and women with children under the age of 1 year were oversampled. All women selected were given the same core survey. Women who had children under the age of 1 year were asked additional questions related to child care and prenatal behaviors. For the post-test, a new cross-section of 180 clients was selected. The survey questions covered knowledge, attitudes and behavior based on the five main health topics covered in the forums as described above. Each survey took 30–45 minutes to complete.

To analyze data at the program level, pre- and post-test frequencies were used to describe the study population, while Pearson's χ^2 tests and f-tests were used to compare pre- and post-test changes in knowledge, attitudes and behaviors. Statistical significance was determined based on a p-value <0.05.

Results

Knowledge and behavior: Breastfeeding and addressing malnutrition

Overall, respondents in the post-test group more often displayed knowledge that corresponds to the target behavior in this category than those in the pre-test group (Table 1). Furthermore, more women in the post-test group reported having target behaviors for breastfeeding and malnutrition. More respondents in the post-test group knew that a child should be breastfed immediately or within one hour after birth and also exhibited this knowledge by reporting that they initiated breastfeeding immediately or within one hour of giving birth. More women in the post-test group also knew that a child should be exclusively breastfed for six months and knew they should add oil, protein or vegetables to the first foods given to their babies to make the foods more nutritious.

Knowledge and behavior: Antenatal and neonatal care

The majority of both groups knew that a woman should visit a medical professional at least three times during her pregnancy, and the majority of women who had given birth in the last 18 months actually visited a medical professional at least three times. More women in the post-test group indicated that they knew that a child should be dried and wrapped immediately after birth. A similar number of women in both groups reported that it is best to wait seven or more days after birth to give a baby its first bath. However, fewer women in the

pre-test group actually practiced this behavior. Similarly, both groups had a nearly equal number of women who responded that they believed women should eat more meals during their pregnancies when compared to not being pregnant.

Knowledge and behavior : diarrhea, sanitation and safe water

Eighty-eight percent of those in the post-test group whose child they cared for had diarrhea in the last three months treated that child with ORS versus 60 percent in the pre-test group. There was also a significant increase in the number of women in the post-test group who had treated their child who had diarrhea at home with special liquids, including coconut water, lentil water or rice water. However, there appeared to be less clarity in the post-test about the amount of these liquids to give a child; 60 percent of the respondents said they gave the child “less than usual” to drink when they treated the child for diarrhea. Women were asked several questions concerning hand-washing before and after certain events, such as before food preparation, eating, and feeding a child and after defecation and assisting a child with defecation. There were no meaningful improvements made in this area.

Knowledge and behavior : acute respiratory illnesses

Although there were no significant changes for knowledge or behavior indicators in the pre-test and post-test regarding acute respiratory illnesses, it should be noted that knowledge and reported behaviors were already high at the pre-test. Regarding whether respondents could identify a danger sign of a child with a cough that signifies that the child should be taken for medical care, the pre-test outcome was 94 percent and the post-test outcome was 89 percent (there was no clear indication as to the reason for the slight decrease). There were similar results in both groups for women who sought advice or medical treatment for an ill child with cough in prior 2 weeks who had trouble breathing or fast-breathing as well, but with a slight increase.

Table 1. Bandhan Health Education Outcomes

Characteristic	Pre-Test Averages	N	Post-Test Averages	N (who attended education)
Breastfeeding and Addressing Malnutrition				
<i>Knowledge</i>				
Percentage who knew how soon after birth a child should be breastfed (answer: immediately or within 1 hour)	71%	240	98% ⁺⁺⁺	62
Percentage who knew a child should be exclusively breastfed for 6 months	75%	240	92% [†]	62
Percentage who knew should add oil, protein or vegetables to first foods for baby in order to make them more nutritious	86%	230	97% ⁺⁺⁺	62
<i>Behavior</i>				
Among women who have or care for child 12 months of age or younger, percentage of infants who were breastfed within 1 hour of birth	61%	98	96% ⁺⁺⁺	57

Characteristic	Pre-Test Averages	N	Post-Test Averages	N (who attended education)
Among women who have or care for a child 7–12 months old, percentage who exclusively breastfed for at least 6 months	N/A	N/A	53%	51
Percentage who reported introducing complementary foods into a child's diet at age 6 months or older	39%	106	55% ^{†††}	48
Among women who have or care for a child 7–12 months old, percentage who reported adding oil, protein or vegetables to the baby's food in order to make it more nutritious	79%	52	77%	30
Antenatal and Neonatal Care				
<i>Knowledge</i>				
Percentage who knew a woman should visit a medical professional at least 3 times during pregnancy	95%	172	96%	101
Percentage who knew immediately after a baby is born, should be dried and wrapped	54%	151	77% ^{††}	60
<i>Behavior</i>				
Percentage of women who were pregnant or had been pregnant in prior 18 months who visited a medical professional at least 3 times	85%	39	86%	99
Percentage of women who delivered a child at home and reported drying and wrapping the baby immediately after birth	89%	103	93%	28
Diarrhea, Sanitation and Safe Water				
<i>Behavior</i>				
Percentage who used soap in the last week when washing their hands		240		180
Sometimes	42%		59% ^{††}	
Usually	39%		27%	
Always	17%		10%	
Percentage with a child in their household or care who had diarrhea in the last 3 months who treated that child with ORS	60%	10	88% [†]	42
Percentage who treated their child with special liquids at home (such as coconut water, lentil water or rice water)	30%	10	69% [†]	42
Percentage who gave their child with diarrhea less than usual to drink	40%	10	60% ^{†††}	42
Cough and Cold: Acute Respiratory Illnesses				
<i>Knowledge</i>				
Percentage who could name at least 1 danger sign for child with cough that tells you to take child for medical care	94%	185	89%	157
<i>Behavior</i>				
Percentage who had an ill child with a cough in prior 2 weeks who sought advice or medical treatment when child had trouble breathing	88%	57	96%	24

Significant difference between pre-test cohort and post-test cohort: [†] $p \leq 0.05$, ^{††} $p \leq 0.01$, ^{†††} $p \leq 0.001$

Analysis

The results from this study suggest that MFI clients participating in a community health forum focused on knowledge and behavior change about various relevant health topics such as neonatal care and diarrhea, can see important improvements. There were important and potentially life-saving breastfeeding behaviors detected, even during a short window of opportunity to put the breastfeeding behaviors into practice. More mothers indicated they treated a child with diarrhea with special liquids, and more indicated that they treated a child with ORS. Both are important measures to ensure quicker and full recovery from diarrhea.

When interpreting the findings from Bandhan's health training, we also have to take into account that clients were also exposed to community health workers who helped reinforce and emphasize the key learning objectives of the community forums. Most likely this greatly contributed to the positive results detected among the clients participating in the forums.

These results, however, suffer from several limitations. First, the study design used here cannot establish a causal link between the provision of education by microfinance organizations to their clients and subsequent client knowledge, attitudes and especially behavior change. Further, the pre- and post-test clients are comparable, but were not randomly assigned to the program and thus likely include differences that are unmeasured that may contribute to the outcomes reported. Additionally, this type of education may only influence the way clients respond to the survey questions; thus, we may be detecting their knowledge of the "correct" response even though the responses do not represent actual behavior. This is the inherent problem with self-reporting of knowledge, attitudes and behavior.

With the Bandhan data, two different firms collected the pre- and post-test data; thus, there is likely some variation in the interviewing techniques as well as data-entry techniques. This variability could have influenced some of the final results. Finally, we have to consider that the changes seen do not control for the bias of self-selection to join the microfinance programs or to attend education sessions. Thus, the results may not be generalizable to women who do not participate in microfinance programs.

Freedom from Hunger has conducted other evaluations on the combination of health education and microfinance as mentioned in the background section, most notably on our breastfeeding, integrated management of childhood illnesses, diarrhea, infant and child feeding and malaria studies conducted in Bolivia and Ghana (MkNelly & Dunford 1998, 1999, 2002; De La Cruz 2009). The results captured in India further help us understand how MFIs from other parts of the world can replicate the same strategy and see similar positive results. Bandhan's clients appeared to have made important gains in pre-, post-, and neonatal care, diarrhea, breastfeeding and nutrition. We expected greater gains in terms of hand-washing and acute respiratory illness; therefore, additional research that carefully assesses the education and methodology used for these topics is needed. This assessment will help Freedom from Hunger and Bandhan determine how to make improvements in the education as well as to feel more confident in scaling up this program throughout the rest of the Bandhan network of microfinance clients because of its potential benefit. Although a more rigorous study is needed to truly measure impact, the results suggest positive change is likely.

Case Study 2: Crédito con Educación Rural (CRECER)

CRECER began as a Freedom from Hunger program in Bolivia in 1990 and became an independent Bolivian organization in 2000. CRECER offers integrated financial and non-financial services to all 100,000 clients. All clients receive financial products (credit, savings, insurance) packaged with non-financial services, such as health, business and financial education, and linkages to health services. A client cannot receive a financial product without the non-financial service or vice versa. Ninety percent of CRECER clients are women living in peri-urban and rural areas of Bolivia. In 2007, CRECER began implementing financial education (consisting of debt management, budgeting and savings modules) in waves in seven of nine regions of Bolivia (Figure 2).



© 2007 Freedom from Hunger

Figure 2. CRECER credit officer delivering financial education

Methodology

A study comparing an intervention group (clients who received the financial education) and a control group (clients who had not yet received financial education) was conducted by CRECER with clients in seven of the nine regions of Bolivia served by CRECER. Under the Global Financial Education Program (GFEP) initiative led by Microfinance Opportunities and Freedom from Hunger (and funded by a three-year grant from the Citi Foundation), all of its credit officers were trained to deliver 30-minute, dialogue-based financial education sessions on three topics: Debt Management, Savings and Budgeting.

As part of CRECER's existing program monitoring system, staff has experience conducting short surveys using a methodology called Lot Quality Assurance Sampling (LQAS) (Valadez, Weiss, Leburg & Davis 2003). The smallest unit of operation for CRECER is called the Local Operating Unit, or *unidad local operativo* (ULO). CRECER serves seven regions of Bolivia and there are typically five ULOs per region. To assess its clients' financial education outcomes, 19 participants were randomly selected from each of the five ULOs in each region; 95 surveys were completed in total for the region. When all seven regions were

combined, there were a total of 665 surveys completed. A control group consisting of 665 CRECER clients who did not receive the intervention and were from different villages than those in the intervention groups was randomly selected and interviewed in the same seven regions.

To analyze data at the program level, intervention and control-group frequencies were used to describe the study population, while Pearson's χ^2 tests and f-tests were used to compare intervention and control-group differences in knowledge, attitudes and behaviors. Statistical significance was determined based on a p-value <0.05 . In addition to the quantitative surveys, a few focus-group discussions were completed with both groups to understand current knowledge, attitudes and behavior regarding money management.

Results

Debt management

More respondents in the intervention group knew that they should calculate their debt capacity to avoid overindebtedness and that they should keep their debt to no more than one-fourth their incomes (Table 2). More respondents in the intervention group also knew that taking out a loan to repay another is a key cause for overindebtedness. When asked about what they should keep in mind when asking for a new loan, more respondents in the intervention group answered expenses, income, loan terms and conditions.

Eighty-nine percent of the intervention group indicated they put money aside little by little to repay their loans (as opposed to haphazard strategies for loan repayment) compared to 73 percent of the control group. More of the intervention group compared to the control group also kept a register for each of their loans.

Savings

Similar to debt management, knowledge for the control group was fairly low about strategies for increasing savings. More of the intervention group indicated they knew they should have a savings goal and should reduce their expenses. More clients in the intervention group actually indicated they had reduced their expenses, had put money aside little by little into their savings, and had put whatever money they had left over into their savings. Most used a reduction of their expenses as the method to increase their savings. Seventy-six percent of the intervention group indicated they had a savings plan compared to 48 percent of the control group.

Their main savings goals were to purchase assets, provide for their children's education, and be ready for health expenses and emergencies. When their savings did not cover the emergencies, they borrowed money from relatives or institutions. A few had insurance to be prepared for emergencies. Most of them save in their houses and in formal institutions—in some cases in their husbands' formal savings account.

Budgeting

More of the intervention group knew what a budget was, the components of a budget, and that a budget assists a person in making decisions on how to manage her money, compared to the control group. Sixty-seven percent of the intervention group compared to 45 percent of the control group regularly kept track of their money in the register.

Table 2. CRECER Financial Literacy Outcomes

Characteristic	Control Group (N=665)	Intervention Group (N=665)
Debt Management		
<i>Knowledge</i>		
Percentage who know they should calculate their debt capacity	23	40 ^{†††}
Percentage who know a cause of over-indebtedness is using one loan to pay off another	28	62 ^{†††}
Percentage who know that they should only indebt themselves 1/4 of what they earn	25	35 ^{††}
Percentage who know that they should keep in mind their income, expenses, terms and conditions of the credit, when asking for a loan	63	92 ^{†††}
<i>Behavior</i>		
Percentage who set money aside, little by little, to repay their loan	73	89 ^{†††}
Percentage who control their debts by keeping a register of the amount of each loan	33	44 ^{†††}
Saving		
<i>Knowledge</i>		
Percentage who know that one step for saving is setting a savings goal	18	52 ^{†††}
Percentage who know that one step for savings is reducing expenses	41	60 ^{†††}
<i>Behavior</i>		
Percentage who saved by reducing their expenses	54	64 ^{†††}
Percentage who save by putting money aside periodically from their income	31	47 ^{†††}
Percentage who put money that is left over into savings	24	34 ^{†††}
Percentage who have a savings plan	48	76 ^{††}
Budgeting		
<i>Knowledge</i>		
Percentage who know a budget is a summary of income and expenses during a specified time period	42	72 ^{†††}
Percentage who know the 3 parts of a budget (income, expenses and savings)	57	86 ^{†††}
Percentage who know that a budget helps them make decisions on expenses and savings	58	89 ^{†††}
<i>Behavior</i>		
Percentage who have a register in which they keep track of their money (income and expenses)	54	69 ^{†††}
Percentage who keep track of their savings, expenses and earnings in that register	44	69 ^{†††}
Percentage who keep track of their money daily, weekly or monthly	45	67 ^{†††}

Significant difference between intervention and control groups: [†] $p \leq 0.05$, ^{††} $p \leq 0.01$, ^{†††} $p \leq 0.001$

Analysis

When considering non-financial services provided by microfinance organizations, one could argue that there is a natural relationship between microfinance organizations and financial literacy training, because of the benefit to the microfinance organization as well as the clients—either through improved take-up of a particular financial product or improved performance of the client in loan repayment or savings rates. However, financial literacy training, such as budgeting and debt management, that goes beyond consumer education to promote use of a specific financial instrument, also works to improve a client's overall financial status and helps her work toward achieving specific and personal financial goals. The financial education shared with CRECER clients was one such type of education.

The CRECER clients who participated in the financial education appeared to have improved knowledge and behaviors regarding debt management, savings and budgeting. Although there were statistically significant differences between the intervention and control group, we expected to see higher gains in knowledge for all three modules, particularly for the savings and debt-management modules. The qualitative explanations below explore reasons there were not more gains in savings and debt-management knowledge and behavior.

CRECER's assessment suffers from several limitations: inability to draw causal links between participation in the program and the measured results because of the study design itself, the challenge of detecting behavior-change when clients may be sharing what they know is the "correct response" versus indicating their actual behavior, and the inability to control for self-selection bias into microfinance programs. Also, CRECER data suffers from our inability to ensure that the groups are clearly comparable, even though efforts were made to ensure that clients in the intervention and control were similar. One could additionally argue that the data collected by CRECER staff could be biased. Some effort is taken at CRECER to limit this bias by having the interviews conducted by a team responsible for monitoring the education but not for implementing it.

When evaluating the CRECER financial education results, it is important to acknowledge that the poor use multiple formal and informal financial instruments to meet their needs; our understanding of any changes regarding debt management and savings behaviors is restricted to their use of formal financial instruments or formal linkages to those products. Even where we did see increased frequency of savings as reported by the clients, we only asked about savings held with or facilitated by the microfinance institutions. We may have missed changes in savings behaviors as they apply to other, more informal behaviors, such as saving at home.

Qualitative results revealed that clients were eager to learn about debt management. Clients indicated they valued the solidarity-group warranty as the first resource for avoiding default. Those who had received the financial education expressed the difficulties of applying it, such as

- not having enough time to develop a budget;
- calculating their debt capacity; or
- not having the discipline to apply what they had learned.

The participants felt the main constraint was the poor economy and the ongoing fluctuations in their income. Some of them had to take money from their savings to pay their

debts or admitted to, in some situations, taking out another loan or borrowing money from relatives to repay their CRECER loans.

The qualitative assessments also revealed that the intervention-group participants valued the idea of having more savings in order to face emergencies or to achieve their goals but thought putting that into practice and maintaining the savings habit difficult. That is why they valued the compulsory savings they have with CRECER; they can save without even noticing that they are doing so.

Even though clients found saving regularly very difficult, participants who had had financial education felt more motivated to save because most of them had set clear goals and objectives. They knew and admitted that it was difficult for them to get into the habit of saving because of financial pressures, over-indebtedness and the country's economic crisis, but they also thought saving could be possible with effort and perseverance.

The qualitative research also revealed that tracking savings as part of the budget was new knowledge that motivated some clients to save. Clients had the skills to make calculations and, in several cases, kept the family's money separate from the business money. They also tried to write down their debts as well as record money they had lent to others. The training encouraged them to systematically track their money with a structure and objective. Some, however, maintained that they trusted their memory so thought it unnecessary to write down their cash flow.

When clients realized the usefulness of creating a budget, analyzing it and making decisions based on it, they realized how important it was to track their financial transactions. Some participants shared their budgets with their families in order to make joint decisions. Even illiterate participants were willing to register their income, expenses and savings by asking their sons or daughters for help. However, even though they knew a budget was important and that it was useful to have a written budget, it was difficult to change their practices and form new habits. Some of them felt discouraged when they had to write down a budget because it took too much time and effort, but others thought that making a budget was useful for having control of their money. It was difficult for clients to estimate their monthly income, expenditures and savings because their expenses and earnings constantly fluctuated.

Future assessments of financial education should take into account 1) the formal and informal financial instruments and behaviors; 2) the intricate day-to-day behaviors to really detect whether positive change is occurring; and 3) both internal and external factors that influence decision-making and behaviors. When assessing debt-management behaviors, it would be interesting to look at whether client over-indebtedness actually represents a client carrying more debt or whether it represents our ability to detect over-indebtedness as clients move from using more informal sources of credit to more formal sources of credit and thus makes it easier for us to measure a client's current level of debt.

CONCLUSION

The results from both the Bandhan health education study and the CRECER financial education study suggest that the microfinance organizations were able to successfully deliver the education to their clients through either a separate health staff or existing credit staff. Moreover, clients seemed to benefit from their participation in the education sessions. The

data suggest the added benefit microfinance organizations can provide to public health interventions as well as to a population's money-management practices.

When assessing these benefits, it is also important to take into account the actual design of the education implementation. CRECER and Bandhan took different approaches to their education provision, and each methodology has its own inherent benefits and challenges.

“Unified” Education Delivery Versus “Parallel” Education Delivery

Using Dunford's terminology (Dunford 2001), CRECER has adopted a “unified” education delivery methodology in which the same credit officer who provides credit to his/her village banks or self-help groups also provides the education. This unified approach minimizes the marginal cost of providing the education. The greatest expense is the credit officer's travel and time to reach and serve the credit group. If the credit officer is able to add the education component, with only an additional 30 minutes or so for the meeting time, an integrated package of microfinance and education can be a financially feasible product package for MFIs. The intent is to ensure that the revenues from the microfinance services can cross-subsidize the additional costs of adding the education. This helps the MFI reach its financial bottom line by providing sustainable financial products and services, and reach its social bottom line by providing other services that meet client needs, such as business, health and financial education.

Bandhan's “parallel” approach provides education through community health forums offered by a separate staff of HCOs (who do not have credit responsibilities). This requires outside funding or more expensive cross-subsidization. A separate staff, although small compared to Bandhan's team of credit officers, must be recruited and trained. However, the advantage over the unified model is that credit officers are not multi-tasked to provide other services.

The outcomes for any one organization or any education topic might be greatly influenced by the chosen model for education delivery. Those with a unified approach bear the risk of the credit officer being distracted by loan repayment issues, thereby undermining reliable and consistent education provision. However, the revenue from credit operations covers the marginal cost of adding education. Those with the parallel approach miss the efficiencies of the same person providing the financial and non-financial services, thus putting long-term financial sustainability at risk. However, a parallel education staff can focus on being good “teachers.”

Regardless of the different advantages and disadvantages, the data presented from CRECER and Bandhan suggest both approaches can lead to positive client behavior-change.

The Benefits and Challenges of Providing Non-Financial Services for Microfinance Institutions

Many in the field argue that “bankers should be bankers” and non-financial interventions should be left to other organizations that specialize in providing these services. However, where specialist providers are unavailable or uncooperative, MFIs are a financially

sustainable mechanism for meeting non-financial needs of their clients through integrated service delivery. The figure below illustrates both the opportunities and constraints of integrating financial and non-financial services.

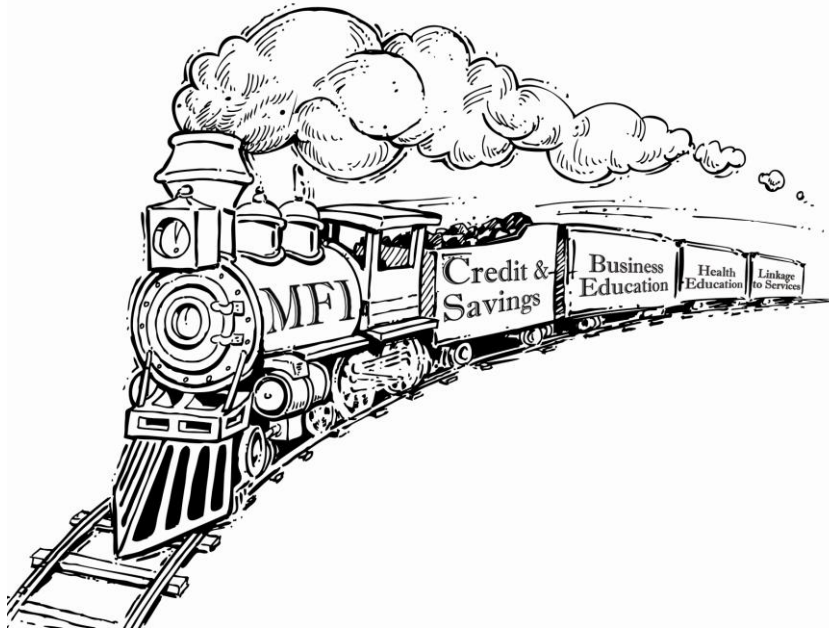


Figure 3. Microfinance as a locomotive

The locomotive is the MFI. The track is the way to get to the destination: the clients. Credit and savings services are both the freight carried to the destination (what the clients want to buy) and the generator of fuel for the MFI locomotive (interest payments by the clients). This represents a pure microfinance business model. But this train analogy strongly implies that credit and savings alone do not take full advantage of what this train could carry. Even a broader range of financial services is incomplete from a human and economic development point of view; there is simply not enough freight to justify laying the tracks and building the locomotive. If you have the tracks to the clients and a locomotive hauling freight to them, there could be additional freight that the locomotive could haul besides financial services.

Poor people, especially, need knowledge of better business and health practices to make better use of their loans and savings. There is even more potential if the MFI can offer actual business- and health-support services, not just education. The challenge to this model is that additional freight is more dead weight for the locomotive to pull. Much as they need them, and say that they want them, people, especially poorer people, cannot or will not pay the full cost of education and services to improve health and business in the same way they willingly pay enough to cover the full cost—and more—for financial services. If we attach too many freight cars to our locomotive, it cannot move forward. Creative compromises are required to make this integration train work, to be profitable even while making non-financial services available to the clients.

Integration of Non-Financial Services Requires Intent and Commitment

The positive client-development outcomes described above are promising, and many microfinance organizations around the world are demonstrating that they can provide and financially sustain non-financial services to their clients. However, regardless of whether it provides non-financial services through a unified or parallel approach, an MFI is challenged by the necessary institutional commitment at all levels of the organization, and the strategic and operational decisions required to provide these services well and at scale. Often, new management systems must be created and revised or new staff positions, training and incentive systems must be built and processes put in place to monitor training quality. MFIs that commit to a unified approach to providing integrated services may require a different type of field officer—one committed to providing financial and non-financial services. Performance-reporting of the MFI has to take into account both its financial and non-financial services. *Ad hoc* integration of financial and non-financial services is doomed to fail.

Integration of Non-Financial Services Can Be a Benefit to the MFI

In addition to important client outcomes, MFIs can experience important improvements as well by integrating non-financial services. In the increasingly competitive field of microfinance, MFIs are keen to find ways to differentiate themselves and better serve the needs of their clients. MFIs can achieve greater client satisfaction and loyalty because they manifest a more caring attitude toward their clients, going beyond concern for loan repayment, often resulting in higher levels of client trust in the institution. The most dramatic evidence of this deeper relationship with clients was seen during the debtors' revolt in Bolivia during 1999. Due to an economic downslide as well as growing over-indebtedness of Bolivia's poor, Bolivians took to the streets to revolt against consumer and microfinance lenders by demanding complete debt relief. Protests were staged outside of several banks and microfinance institutions, and road blocks shut down the country for weeks. However, CRECER credit officers were allowed to travel through these road blocks to reach their groups, which continued to repay their loans on time, despite the movement encouraging them to join the revolt. The only other MFI in Bolivia that was not deeply affected by the revolt was Pro Mujer, the other major Bolivian MFI that integrates financial and non-financial services.

The institution-level impact of this deeper relationship with clients is likely to be a competitive advantage over other local financial services that do not offer non-financial services. Of course, this advantage is only achieved when there is true competition with one or more other MFIs. Moreover, such a competitive advantage is likely to stimulate the competitor MFIs to follow suit with their own non-financial services. This can result in competing MFIs learning to provide non-financial services more efficiently and effectively to remain competitive in terms of costs to clients.

Growing Knowledge of Integrated Services

Integrated services may become common among microfinance institutions as our knowledge about the breadth, depth and impacts of integrated services grows. We still have to learn more by evaluating the differences in impact between education and other services

being provided through parallel or unified mechanisms. We need to know how to evaluate the quality of education delivery and sustain quality as institutions scale up their interventions, as well as assessing how much education is enough and necessary to see impacts. This is particularly important as other organizations adapt current education curricula to meet different needs of clients, such as shorter sessions, fewer learning objectives, etc.

In the next year, the Microfinance and Health Protection (MAHP) initiative of Freedom from Hunger will significantly add to this body of knowledge by sharing results from research and development of other health-protection services that MFIs can provide: health savings and health loans, microinsurance for hospitalization and basic health care, linkages to healthcare providers and health products. These results are coming from the five commercially viable microfinance institutions: CRECER in Bolivia, Bandhan in India, CARD in the Philippines, RCPB in Burkina Faso, and PADME in Bénin, which partnered with Freedom from Hunger to develop and test these health-protection services. These five MFIs, as well as a growing number of additional MFIs, have heard the demand and have a vested interest in cultivating healthy and financially successful clientele with strong microenterprises.

REFERENCES

- [1] Banajaree, A., Duflo, E., Glennester, R. & Kinnan, C. (2009). The miracle of microfinance? Evidence from a randomized evaluation." *Jameel Poverty Action Lab*. Retrieved January 26, 2010 from: http://www.povertyactionlab.com/papers/101_Duflo_Microfinance_Miracle.pdf.
- [2] Barnes, C., Gaile, G. & Kimbombo, R. (2001). Impact of three microfinance programs in Uganda. USAID-AIMS paper. Retrieved February 2, 2010 from http://www.microlinks.org/file_download.php/Impact-1.pdf.
- [3] Daley-Harris, S. (2009). State of the Microcredit Summit Campaign report 2009. Microcredit Summit Campaign. Retrieved January 26, 2010 from: http://www.microcreditsummit.org/uploads/socr/SOCR2009_English.pdf.
- [4] De La Cruz, N., Crookston, B., Gray, B., Alder, S. & Dearden, K. (2009). Microfinance against malaria: impact of Freedom from Hunger's malaria education when delivered by rural banks in Ghana. *Trans R Soc Trop Med Hyg*. doi:10.1016/j.trstmh.2009.03.018.
- [5] Diop, F. & Butera, J. (2005). Community-based health insurance in Rwanda. *World Bank Findings Report, #256*. Geneva: World Bank.
- [6] Dunford, C. (2001). Building better lives: Sustainable integration of microfinance with education in child survival, reproductive health, and HIV/AIDS prevention for the poorest entrepreneurs. *Journal of Microfinance*. Vol. 3 (2): 1–25. Retrieved January 26, 2010 from: http://marriottschool.byu.edu/esrreview/view_archive.cfm?id=45&issue=fall01.
- [7] Dunford, C., Leatherman, S., Sinclair, M., Metcalfe, M., Gray, B. & Vor der Bruegge, E. (2007). How microfinance can work for the poor: The case for integrating microfinance with education and health services. Freedom from Hunger. Retrieved December, 30, 2009. from: <http://www.microfinancegateway.org/gm/document-1.9.28284/07.pdf>.

-
- [8] GRET-SKY Health Insurance Project, Cambodia. (2005). *Briefing Note*. Retrieved June 27, 2009 from: http://www.sky-cambodia.org/downloads/SKY_Briefing_Note_Dec_2005.doc.
- [9] Khandker, S. (2005). Micro-finance and poverty: Evidence using panel data from Bangladesh. *World Bank Economic Review*, 19(2), 263–286.
- [10] Karlan, D. & Valdivia, M. (2009). Teaching entrepreneurship: Impact of business training on microfinance clients and institutions. *Jameel Poverty Action Lab*. Retrieved December 30, 2009 from: http://www.povertyactionlab.org/papers/39_Karlan_Teaching_Entrepreneurship.pdf.
- [11] MkNelly, B & Dunford, C. (1998). *Impact of Credit with Education on mothers and their young children's nutrition: CRECER Credit with Education program in Bolivia*. Davis CA: Freedom from Hunger.
- [12] MkNelly, B & Dunford, C. (1999). *Impact of Credit with Education on mothers and their young children's nutrition: Lower Pra Rural Bank Credit with Education program in Ghana*. Davis CA: Freedom from Hunger.
- [13] MkNelly, B & Dunford, C. (2002). Using microfinance to improve health and nutrition security. *Global HealthLink*. 118: 9, 22. Retrieved December 30, 2009 from: <http://www.globalhealth.org/publications/article.php3?id=878>.
- [14] Pande, Rohini, E. Field, & Jayachandran, S. (2009 February). Business training and MFI client behavior: findings from a randomized impact evaluation in Ahmedabad. *CMF Focus Note*. Retrieved December 30, 2009 from: www.ifmr.ac.in/cmfmf.
- [15] Valadez, J., Weiss, W., Leburg, C. & Davis, R. (2003). *Assessing community programs: A trainer's guide. Using LQAS for baseline surveys and regular monitoring*. St. Albans, UK: Teaching-aids At Low Cost (TALC).