

The effects of the Poverty Stoplight on the agency of families in the community of Cerrito - Benjamín Aceval

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1. Abstract

This research presents the effects of the Poverty Stoplight on the agency of families in the community of Cerrito - Benjamín Aceval. The Stoplight is a metric based on self-assessment and at the same time a methodology that seeks to activate the agency of individuals, families and communities to overcome poverty. This research seeks to understand the meaning of "agency" for the inhabitants of the study area. To this end, data was collected through focus groups, carried out with six groups with an average of six members. The results showed that the concept of agency varies according to the social and cultural context, resulting in collective agency and proxy agency. As for the second phase, whose objective was to understand the moment when agency begins to increase in families and what influence the Stoplight had on this process, the trajectory map methodology was used. The analysis and results of 12 trajectory maps reveal that the Stoplight framework results in increased agency in families. This process begins by facilitating the survey with the support of a mentor who sensitizes, motivates and guides participants.

Keywords

Agency; Multidimensional poverty; Latin America; Paraguay

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2. Introduction and background

For years, poverty has been defined from the monetary approach. However, poverty is now seen from a much broader perspective than just lack of income (Sen 1999a; Alkire et al, 2015). A person in poverty can suffer multiple disadvantages at the same time. In this sense, they may lack nutritious food, clean water, electricity, poor health or low educational levels. Focusing on only one dimension, such as income, is not enough to understand poverty in its entirety. In terms of poverty eradication, many nations, even the most developed ones, have failed in this attempt. According to Godinot et al. (2007), the fundamental factor in the increase and persistence of extreme poverty is often overlooked in Africa and Latin America. Interventions by developed countries can damage the capacity of people in developing countries who have designed and implemented effective strategies to resist extreme poverty for centuries. Godinot et al. (2007), in their article, mention the words of Wangari Maathai, Nobel Peace Prize winner 2004:

"Historically, our people have been persuaded to believe that because they are poor, they not only lack capital but also knowledge and skills to meet their challenges. In return, they have been conditioned to believe that the solutions to their problems must come from outside- The solutions to most of our problems must come from within ourselves" (Maathai, 2005).

The key is to provide tools to unlock the innate potential that people in poverty possess (Reed et al., 2015). In other words, an important factor in overcoming poverty is the agency of people (Hernández, Rodríguez and Mercado, 2010).

Fundación Paraguaya, a social enterprise focused on poverty elimination, has developed a framework known as the Poverty Stoplight (Burt, 2013; Burt and Hammler, 2014). According to Fundación Paraguaya, the Stoplight is a tool that seeks to activate the agency of families to overcome poverty. Using a technology platform, it offers a self-assessment with 50 indicators and an intervention model that allows people to develop practical solutions to overcome their specific needs. Each indicator is defined in three possible levels represented by the traditional traffic light colors and by images that show situations of families in extreme poverty (red), in poverty (yellow) and without poverty (green). This participatory approach provides a framework that seeks to be simple and clear so that the participants themselves can visualize their needs and take action to overcome them (Burt, 2013; Burt and Hammler, 2014; Fundación Paraguaya 2014, 2017).

The mentoring intervention model, a central element of the Stoplight program implemented by Fundación Paraguaya in Paraguay, allows for the accompaniment of families with the objective of supporting them to better understand their situation, aspire to improve it, create a commitment to personal and family goals, and take concrete actions to achieve them. There are several organizations that have used mentoring for poverty elimination, the most highlighted among them being BRAC with the Graduation Approach (Banerjee et al., 2015), and the Household Strategy of the International Fund for Agricultural Development (Bishop-Sambrook, 2014). While Banerjee et al. and Bishop-Sambrook stress the importance of mentoring in their respective programs, there is currently insufficient knowledge about the use of mentoring to increase agency and eliminate poverty. In particular, there is a lack of precise knowledge about whether the Stoplight framework helps families activate their agency on their way out of poverty. Therefore, this study seeks to understand what influence the Stoplight has on the agency of families, starting from the concept that participants handle, to understanding if it increases the agency of families and if there is influence of the Stoplight in that process. The findings of this study may be of interest to professionals, academics, and the community of social sciences in general.

3. Theoretical framework

3.1. Agency

The concept of agency has been related mainly to the ability to act autonomously (Sen, 2000; Deci and Ryan, 1995) and also to choosing goals and achieving them based on the person's own action (Suarez, 2015; Bandura, 1989). This concept refers to the personal ability to act in a social context, where self-efficacy is considered the crucial component of agency (Bandura, 2001; Turner and Roszell, 1994). Self-efficacy allows for the regulation of motivation in the achievement of goals by individuals, where they possess a degree of control that allows them to decide how and when to face goals and obstacles (Bandura, 1996, 1998, 2001). According to Snyder et al., a person needs to have the motivation to advance along the imagined path towards their goal (2000).

Within the capabilities and human development framework, Sen (1999a) refers to agency as the people's ability to define goals that they consider important and act accordingly to achieve them. In other words, it is "the freedom to achieve whatever a person as a responsible agent decides he or she should achieve" (Sen 1985, p. 206). In this sense, the

opposite of agency would be a person who is coerced, oppressed, or passive (Santos, Samman, & Yalonetzky, 2009). Because the person is considered an actor in the social context where the person, family, community or organization has the ability to produce significant change (Hernández, Rodríguez and Mercado, 2010; Pick, Rodríguez and Leenen, 2011), developing his or her agency increases the possibility of acting and provoking positive changes in his or her reality, thus promoting mutual aid among family members and, in addition, influencing his or her community (Pick et al., 2007; Patterson and Grenny, 2007).

According to Markus and Kitamura (2003), what people do or how they experience agency can vary greatly. There is significant and systematic variability in the way that agency is constructed in different social contexts, and they propose that agency is not separate from these contexts, but is based on the ideas and practices of its environment. Agency is "inevitably constrained by social context" (Sen, 1999b) and can be experienced in different spheres, contexts, dimensions and levels. This is intrinsically related since it implies the link with others and its scope and form of exercise is inescapably associated with cultural patterns (Santos, Samman and Yalonetzky, 2009).

Markus and Kitamura (2003) define agency in two parts: "individual and collective". While Bandura, (2000) defines it in three: "personal agency, collective agency and proxy agency". With regard to individual agency, the most important capacity is the belief that people have in their own ability to exercise control over their own functioning and over their environment (Bandura, 1997). If people do not believe that they can obtain positive results, or anticipate the consequences of their actions, as a result they will have little incentive to act or persist in the face of difficulties (Bandura, 2001). Intentions are motivations that strongly influence the possibility of acting (Navarro, 2007). According to Bandura, "any factor that can operate as a guide and motivator is rooted in the central belief that one has the power to produce effects through one's actions" (2001).

In addition to the ability to act and persist, it is important to work in coordination with others to achieve what may be difficult to accomplish individually. As mentioned by Bandura (2001), people do not lead isolated lives; many of the goals they seek to achieve are only attainable through socially interdependent effort, what is known academically as collective agency. Collective agency involves the cooperation and teamwork of many individuals in order to achieve a given social effect. To exercise this type of agency, individuals must work in synergy. The achievements of these groups are not only the result of their knowledge and skills, but of the coordinated work of their actions.

In many activities, according to Bandura (2001), people have no direct control over the social conditions and institutional practices that affect their lives. In these situations, people seek their well-being through the help of others who have experience or influence in achieving their goals (Shields and Brawley, 2006). This form of agency, known as proxy agency, can be very beneficial in achieving desired outcomes. Bandura also makes it clear that over-reliance on others for this type of practice can limit the development of personal skills (Bandura, 2001).

3.2. Measures of Agency

Intuitively, the role of agency is easy to understand and even to assume situations in which people can exercise it (Santos, Samman and Yalonetzky, 2009), but it is complicated to measure since sometimes it is exercised in different forms in practice (Pick et al., 2007) and behaves in different ways. This can be observed in decision-making, negotiations, assertiveness or other processes of reflection and analysis (Pick et al., 2007; Casique, 2010). Although there is no accepted method for measuring it (Mosedale, 2003), most research has focused on indirect measures such as education level or asset ownership (Santos, Samman and Yalonetzky, 2009). Perhaps an universal measurement is impossible, but there are comparative studies that reveal that some indicators are more universal than others (Malhotra, Shuler and Boender, 2002).

In psychology, agency is linked to and measured through various concepts such as self-efficacy, autonomy, control and self-determination (Pick et al., 2007). In Cognitive Social Theory, Bandura (2001) defined the different core elements of agency as: Intentionality, premeditation, self-reactivity and self-reflection. These characteristics allow the person to respond proactively to life and to the socio-political and economic environment, favoring the development of his or her capacities and well-being (Alsop and Heinsohn, 2005; Pick et al., 2007; Sen, 2000). For this research, both the Scale for Measurement of Personal Agency and Empowerment (Pick et al., 2007) and the Cognitive Theory (Bandura, 2001) were taken into account when analyzing the qualitative data.

3.3. Agency and Poverty

Traditionally, poverty has been defined from the monetary approach as the lack of income (Rowntree, 1901) or consumption of the individual or family. Families were considered to be in a situation of extreme poverty if their total income did not cover the basic

needs of the family food basket (Social Observatory, 2015). In the 1980s, this concept changed and poverty began to be observed from the perspective of human development and is considered multidimensional, taking into account, in addition to income, aspects such as education and health (UNDP, 1997).

Amartya Sen defines poverty as "...the deprivation of basic capabilities and not only as a low income" (2000) where the livelihood of a person is determined by his ability to act and not by the goods he or she possesses (Sen, 1984). Poverty is considered as the lack of freedom to carry out the goals that a person has reason to value (Sen, 1992), in other words, that people cannot be agents of their own lives. People in poverty are deprived of almost all their capabilities and are at a disadvantage compared to people who are not poor (Haughton and Khandker 2009). The greater the deprivation, the greater the level of poverty (Muñetón and Gutiérrez, 2017). These deprivations can be expressed as premature mortality, illiteracy, significant degree of malnutrition, people deprived of their freedom, etc. (Sen, 2000). In general terms, poverty refers to people's inability to live a decent life (UNDP, 1997).

According to Narayan and Kapoor, with insufficient capacities and resources, people in poverty are faced with many limitations in terms of options, climate crises and fighting for better deals for themselves. There are a number of elements that contribute to poverty reduction, such as agency. The empowerment of poor people is influenced by the assets and capacities available to the family in general and by intra-family inequalities in state and power, particularly between men and women. Inclusive and cohesive family relationships can provide a powerful resource for building assets and capabilities, and exercising agency. But when family ties are broken or are fraught with great inequality or conflict, the consequences can be widespread and detrimental to attempts to escape poverty (2007).

3.4. Poverty Stoplight Framework

Deprivation can take many different forms, and some are easier to identify than others (Sen, 2000). In order to measure deprivation, it is necessary to work on the identification of the poor and on the construction of the poverty index. In order to differentiate between the poor and the non-poor, it is necessary to establish poverty criteria and then identify those who do or do not comply with them (Vélez, 2015). In this context, Fundación Paraguaya has developed a framework known as the Poverty Stoplight (Poverty Stoplight, 2019) that enables families to assess their level of multidimensional poverty through 50 indicators (Fundación Paraguaya, 2019). The Stoplight is a self-assessment metric

and at the same time a methodology that seeks to activate the potential of individuals, families and communities to overcome poverty. It was designed to measure and eliminate multidimensional poverty with the family unit as the starting point and main agent of change. For this, it defines a series of indicators organized in dimensions and uses a technology platform that combines self-evaluation with a mentoring intervention model (Poverty Stoplight, 2019).

3.4.1 Poverty Stoplight Metric

The Stoplight has the family as its unit of measurement and intervention and seeks to combine its agency with the organizational capacities of the institutions that use the methodology to achieve the development of efficient solutions designed with and for the user families. Aiming at the growth and strengthening of each family with an integral view, the Stoplight not only covers the dimension of Income and Employment, but also includes: Organization and Participation, Housing and Infrastructure, Health and Environment, Education and Culture, Interiority and Motivation.

It consists of 50 indicators, each defined at three levels: "Green" (representing non-deprivation), "Yellow" (representing moderate deprivation) and "Red" (representing extreme deprivation). The levels of each indicator are represented by illustrations and descriptions that help respondents with reading and writing difficulties identify the response option that most reflects their household's condition. The illustrations are also intended to give a visual representation of a life outside poverty, which is intended to initiate a process of reflection on one's situation and eventually contribute to an increase in aspirations (Poverty Stoplight, 2019).

3.4.2 Poverty Stoplight Methodology

The Poverty Stoplight methodology consists of a self-assessment and mentoring model. The family, represented by one of its members, responds to a visual survey through a technological platform (computer or mobile device). This self-assessment serves as a first diagnosis of the situation of each family and as a fundamental basis for informing plans for exiting poverty. During this process, participants are supported by a mentor through dialogue in order to help them identify where they are and where they could go.

The Stoplight indicators represent achievable and aspirational situations and actions that enable families and individuals to become the central agents of change in their poverty

elimination plans. According to the Stoplight theory, the representation of the green level at the survey stage already serves as a first demonstration of the individual who can achieve a situation of "non-poverty". Once the 50 indicators in the poverty control panel are collected, the family representative, together with the Stoplight mentor, begins to develop a so-called Life Map: from all of his yellows and reds, he or she chooses five priority areas that he or she wants to improve first. These are marked on the platform and, at the same time, written on the Life Map that will remain with the participant. The participant, together with the mentor, reflects on the possible causes of the respective deprivation and formulates concrete steps he or she will take to overcome them.

After a certain time, generally after one year, or when the participant feels he or she has made progress, the participants carry out a Stoplight follow-up survey. Together with their mentor, they reassess their deprivation in all indicators and use that information to reflect on their progress and choose their next priorities for improvement (Poverty Stoplight, 2019).

In this research, we argue that implementing the methodology not only helps people to overcome their deprivation, but does so by helping participants to reflect on their situation, to aspire to a better future and to be agents of their own solutions to overcome poverty.

4. Research design

This research is qualitative in nature because the objective is to understand the process of a family that has managed to increase its agency, specifically to understand what agency means to families, at what point agency begins to increase, and how the Stoplight framework influences that process. Data collection was carried out in two stages; in the first, with the objective of understanding the meaning of "agency" for the inhabitants, the focus group technique was used. In the second stage, the trajectory map was used in order to understand when agency increases and the influence of the Stoplight in this process.

4.1. Sample

For the first stage of this research, 39 families who participate in the Stoplight program in the community of Cerrito - Benjamín Aceval were selected. The sample was made up of one member of each family as a representative of their household, who were selected by members of their own family. To estimate the size of this sample, we took into

account the guidelines provided by Creswell (1998), which suggests that studies using this technique should cover between 30 and 50 participants. The Stoplight program implemented in this community, known as the "Cerrito Initiative", has a total population of 900 families divided into 6 sectors to ensure better implementation and adequate follow-up by mentors. Within these six sectors, two are located within the Toba Qom community, an indigenous community living in the Gran Chaco region, which extends over the territories of Argentina, Bolivia and Paraguay (Tola, 2010).

Taking the six sectors as a basis, it was decided to carry out a focus group for each sector, with an average of six people in each group. According to Morgan and Spanish (1984) the indicated number of participants in a focus group is 6 to 10 people. The sample is intentional and was selected based on those families who managed to change the most reds or yellows to green. In other words, those families who managed to move from poverty to no poverty on most indicators. This allowed us to obtain a lot of information about their experiences with the Stoplight and how they overcome poverty.

For the second phase, whose objective was to understand the moment when the agency begins to grow and what influence the Stoplight has on this process, two people from each sector with the highest number of "greens" were selected from the focus group, that is, a total of 12 trajectory maps were implemented immediately after the end of each focus group. Crouch and McKenzie suggest that a range of less than twenty participants is appropriate for this style of project (2006). Qualitative samples should be sufficient to ensure that important insights are exposed, but at the same time, if the sample becomes too large, the data become repetitive and eventually redundant (Mason, 2010). Based on these references, this study determined a sample of twelve families to be studied using the trajectory map.

4.2. Procedures

4.2.1 Data collection

During the focus group, this research used visual elements such as images and photographs that allowed the dynamics to be initiated, where it was possible to identify the concept of agency that is managed in the community. As mentioned by Bank (2007) "since images are omnipresent in society, the study of images or one that incorporates images in the creation or collection of data could reveal certain sociological information that is not accessible by any other means". Before any image or photograph, the observer projects

something about themselves (Mundó, 2015), and allows participants to create a narrative by expressing what they observe (Romero, 2012). Currently, researchers have a set of data with visual support such as paintings, photographs, films, drawings, etc. These allow the introduction of new interpretative elements that enrich the understanding of the object of study.

For this research, ten photographs were used as a research tool, regarding experiences and activities such as markets, forums and vegetable gardens organized by the community itself during the three years of the Stoplight implementation. This dynamic allowed participants to select the image that most caught their attention and to begin their stories based on it. Participants first described everything they observed in the image, mentioning words such as: work, organization and collaboration. Later, and without the need for intervention from the researchers, they began by talking about their own experiences with the subject. During the narrative, the researchers asked questions such as the meaning of work, what represented for them the experience they were telling, what did they do to have that experience, and who was responsible for carrying it out, etc.

In the second phase, the data collection method used was the trajectory map. This method made it possible to obtain a visual representation of the sequence of the particular events (Sheridan, 2011). The use of visual representation and visual methods in social science research is not new (Collier, 1957). This method has been used to encourage storytelling based on memories and stories about the experience. Narrative and time are linked, as narrative almost always involves time and requires a temporal component to be meaningful to participants (Sheridan, 2011). Through the experiences of the families and using the trajectory map, data was collected to understand whether or not they feel more agency when using the Poverty Stoplight and what influence the tool had on this process.

Each participant in this phase was first presented with a panel illustrated with 50 Stoplight indicators in order to select one that they wanted to accomplish and that they have worked on during the implementation of the program. Once the indicator was selected, they were presented with a poster divided into three time periods. According to Rosenbaum the experiences are generally represented horizontally on maps according to a timeline process separated into three periods (2017). In this study, time was divided into: before, during and after the implementation of the Stoplight framework. The "before" period referred to experiences previous to the Stoplight implementation, describing the challenges, problems, and difficulties faced by the families. The "during" period referred to the families' experience from the self-assessment carried out through the technology platform, the completion of their

Life Map, training, interventions, and the follow-up survey. While the "after" period referred to the changes, improvements, and achievements experienced by participants after the implementation.

Each trajectory map was implemented by two researchers to an interviewee representing the selected family. While one researcher was responsible for leading the interview, the other made notes of the story on sticky notes to be placed in the corresponding time period. During the trajectory map, the researchers had three guiding questions referring to "what" the family members needed to change, "why" they needed to change it, and "how" they applied their knowledge to achieve the change. The selection of these guiding questions took into account the knowledge, skills and attitudes model obtained from the "Gender Equality and Empowerment Capacity Assessment Tool" developed by UN Women (2006). This model comprises cognitive (knowledge), affective (attitude) and psychomotor (aptitude) skills. It is used to assess a person's capacity by defining different dimensions of competencies or capabilities with the concept of Bloom's taxonomy (UN Women, 2006).

According to Bloom (1956), the following actions are performed in the knowledge stage: i.e., listing, labeling or naming, etc. Within the context of the Stoplight, when a family chooses an experience of improvement, it is first asked "what" aspect they want to change and lists the actions to be carried out in order to accomplish this. The next question is "why". This highlights the reason behind the problem, to recognize and have the motivation for positive change. This is done through the following actions: describe, contrast, discuss, predict, etc (Bloom, 1956). This phase is closely related to the commitment of each family in its journey out of poverty. According to Lahousen & Popovic, the capacity "attitude" comprises both learning, as well as motivation, dedication and emotions. Finally, the last question involves "how" the knowledge will be applied and how it will be put into practice. According to Bloom (1956), the way to do this is to arrive at a viable solution from what has been learned by performing the following actions: completing, solving, examining, illustrating, and showing.

4.2.2 Data analysis

Each focus group session and trajectory map was audio recorded and notes were taken from both, the main story and the non-verbal aspects, observed during the progress of the sessions. For content analysis, first the transcripts were created and then analyzed with the

MAXQDA program. In order to discover those aspects that are relevant to understanding agency, this study was based on Grounded Theory (Glaser and Strauss, 1967) which allowed a theory to emerge from the data, identifying basic social processes as the central point of the theory. Concepts and data were produced and examined continuously until the end of the study (Saldaña, 2015).

To arrive at the theory, transcripts were coded (Saldaña, 2015) looking for patterns in the data that helped to better explain why those patterns were there in the first place (Bernard, 2006). The coding process allowed these data to be "segregated, grouped, regrouped and re-linked to consolidate meaning and explanation" (Grbich, 2007, p. 21). The codes that emerged were categorized according to the different core elements of agency defined by Bandura in the Cognitive Theory (2001) and by Susan Pick in the Scale for Measurement of Agency and Empowerment (2007). During this process, new codes and categories emerged such as collective agency, proxy agency, and mentoring. Other codes and categories were also merged or removed from the list.

4.3. Ethical considerations

For this study, the ethical research standards (Noreña et al., 2012) were met with the authorization of the participants through a signed consent form which indicated the objectives of the research, informed about anonymity and confidentiality, ensuring the protection of identity, as well as the voluntary nature of participation.

5. Results

The meaning of agency varies according to social and cultural context:

Collective Agency and Proxy Agency.

The research revealed that the term agency, for most participants, means working together with the family or community to achieve the proposed goals; it is the effort between all members and generally cannot be achieved without the cooperation of all those affected. Although the participants' accounts start from stories referring to the concept of personal agency, they also mentioned with much emphasis collaborative work. When human beings relate, they generate something truly collective, which is more than the sum total of their individual lives and cannot be reduced to individual characteristics (Deneulin and Shahani, 2009).

The development of the personal agency of the participants in the Stoplight program allowed people to act and provoke changes that made it possible to improve their quality of life and then to act together with the family and community to achieve a common goal. As mentioned by Bandura (2000) "the shared beliefs of people in their collective power to produce desired outcomes are a key ingredient of collective agency."

"I have my family's support [in the business and savings plans], but this is not something that can be done alone (Participant, 50 years old). "Help is mutual, we share between all neighbors and we have possibilities... before the chapel, there were problems, the neighbors didn't want to work... now what we collect from events, holidays, and traditional celebrations we invest in the chapel" (Participant, 45 years old) "It's wonderful for me and my family to work together." (Participant, 40 years old). "If you don't have someone to push you, it doesn't work... When I planted sesame seeds with my children, my partner gave me the idea to open a bakery. Now we have a laundry, a bakery, and in the afternoon, we go to sell in a bakery shop" (Participant, 45 years old). "My neighbor encourages me to sell cake in her dining room." (Participant, 50 years old)

A minority, however, mentioned that the responsibilities in terms of improving or changing the situation of vulnerability faced by each family fall directly on the head of the community. This type of agency was described by Bandura as "proxy agency", where people turn to others to achieve desired results (2001). This could be because people do not have direct control over the social conditions and institutional practices that affect their lives (Bandura, 2000), or because of their political and cultural organization (Tola, 2010). In these situations, people seek their welfare through proxy agency (Bandura, 2000). Participants who practice this type of agency belong to the Toba Qom indigenous community. This concept is the result of their social organization manifested in the caciques, leaders, elders, etc. (Tola, 2010).

"The responsibility for obtaining resources belongs to the Cacique" (Participant, 65 years old). "I asked the Cacique to give me more land for farming because I like to work" (Participant, 40 years old). "We need the government to give us the truck to sell our crafts" (Participant, 46 years old). "My place [land] is not suitable for work, so I asked the Cacique for more space" (Participant, 40 years old). "Many changes are needed in the community, it depends on the leader" (Participant, 60 years). "We came here [to Cerrito] and everything changed. The Cacique also helped us a little, he was the one who built everything up" (Participant, 35 years old).

Although the Toba Qom indigenous community has a great tendency to proxy agency due to its social organization, they also made a small mention of situations where we observe collective agency as a consequence of certain situations or difficulties:

"We collaborate, PYG 10,000 from each person, and we obtain materials from the Chaco. We can't get the truck for free, so we have to pay. To pay for the truck, we collaborate" (Participant, 60 years old).

With all of the above, both in the collective agency and in the proxy agency, we can see how the way people experience agency varies according to the social contexts, ideas and cultural practices of their environment Markus and Kitamaya (2003).

The Stoplight self-assessment accompanied by mentoring activates the families' agency

The self-assessment enables families to be aware of their situation and seemingly engage them in achieving their goals: The self-assessment enables families to know the condition they are in and contribute to an increase in their aspirations. In terms of participants themselves, the Stoplight is:

"A survey that allows you to know what is right and what is wrong, the questions that are asked are to see how we can improve" (Participant, 73 years old). "The Stoplight made us more aware of what we are doing" (Participant, 40 years old). "When I think of the Stoplight, I think of the help they [mentors] give us to move forward" (Participant, 50 years). "I became aware thanks to the courses" (Participant, 46 years old). "One becomes aware of things with the Poverty Stoplight" (Participant, 50 years old).

In the same way, the Stoplight makes families understand their situation and commit themselves to their goals:

"I got pregnant and thought of what I would do with what I was taught by the question of saving, because I had nothing for my first child and I had a very rough time... now I have my savings and I feel very good" (Participant, 39 years old). "I learned how to use credit, we bought things in monthly payments to build the house, but before we refused to do any of that... now I have a house, I have furniture, we have a motorcycle, now we can go out because our house is also far from the main road, we have our bathroom that cost us a lot too... we set ourselves a goal to build all this" (Participant, 40 years old). "I save my money, but I don't even touch it even if I need to" (Participant, 39 years old). "The one that helped was the Stoplight... this was the most important thing because it helped us and this is how we decided to do something about our situation" (Participant, 45 years old). "The situation

changed for the better. Because I was living in a rented house when they made the Stoplight for the first time" (Participant, 50 years old). "The truth is that now I am very well, I am calmer, before I lived in anguish, because the payment due date was coming and I still didn't have the money, now at least that is over, it helped me a lot" (Participant, 40 years old). "The subject of savings is good; I am very happy that they came to my house. If they hadn't come, I wouldn't be saving now, I wouldn't have a single Guaraní (PYG) to save" (Participant, 39 years old). "We are trying to overcome this little by little because it was very difficult for me" (Participant, 35 years old).

The support of a mentor during the self-assessment represents the first step in unlocking families' potential: the accompaniment of a mentor during the metrics unlocks the capacity of the families. It allows to conscientize, motivate and guide people in the design of their goals. This is where the process of increasing agency begins:

"When they made me the Stoplight for the first time, this is when they taught me that I could save, that I could reduce so many expenses" (Participant, 45 years old). "The first meeting we had at home, I took a phrase and set my goal as "to deny my desires and reach my goal" ... then to deny my desires meant that I did not spend without thinking, I did not go out to eat, everything was done at home, I looked for the way to live cheaper" (Participant, 45 years old). "When the questions at the Stoplight came... through these questions that came to my house, they spoke to me about saving money, and then I learned" (Participant, 50 years old). "Before, no one went home to ask me about savings. Because they came to my house, I thought about it" (Participants, 39 years old). "Through the Stoplight we have someone to talk to, they guide us in some things" (Participant, 52 years old).

Mentors represent an important support for families: Mentoring helps to address the barriers family face. It provides knowledge that help develop their skills, builds their confidence to make decisions, and provides tools to improve their situation.

"My mentor taught me many things, I talked with her about how to do things" (Participant, 39 years old). "She taught me how to start the vegetable garden, how to fertilize the plants" (Participant, 40 years old) "I respect my mentor a lot, she changed my life and my way of seeing things" (Participant, 45 years old). "The mentor taught us all how to manage the paperwork to repair the community chapel. (Participant, 40 years old). "I remember my mentor very well, she always came home and asked me everything, she asked me if I was needing anything, and how I was doing with my vegetable garden" (Participant, 45 years old). "The mentor taught us how to write down the income and expenses, he guided us through the process" (Participant, 45 years old). "The mentor taught me many things"

(Participant, 35 years old). "It's important [to] take advantage of the opportunity, when someone comes and wants to help you... [The mentor] helped me a lot, she opened my eyes in terms of economics, because she taught us all those things" (Participant, 45 years old).

Increased agency in families results in empowerment: According to Susan Pick "once agency begins to impact families, colleagues, organizations, and the community, it becomes empowerment" (2007). This process can be observed through the Stoplight framework:

"For me everything changed when I had savings, because before I didn't have anybefore and I had very difficult moments... Now that I know how to save, I support and instill it in my children, my daughters-in-law and even my friends and neighbors who want to move forward" (Participant, 50 years old). "When we built the house, I was happy and proud. (Participant, 35 years old) "I was telling my neighbors and friends everything I am experiencing" (Participant, 35 years old). "Our small businesses serve us to pay for the electricity, water and other bills, so that we don't owe too much. If you start owing, little by little [the bill] increases a lot" (Participant, 45 years old). "I started selling cakes... everything I do, I sell." (Participant, 37 years old). "I feel very good, now I have everything... what's left for me is prepare for when my baby arrives, but I'm already preparing the clothes, the food, etc." (Participant, 39 years old). "I always want to help, I help my neighbors a lot." (Participant, 39 years old) "We are in various groups with my daughter, wherever we are needed... at school, in a prayer group, neighborhood committee" (Participant, 35 years old). "I want to show you my vegetable garden, when I get home I go and check it out, I water it... come and visit my vegetable garden" (Participant, 45 years old). "Now, for example, at home, I have a vegetable garden. With my youngest daughter we grow peppers... We don't have tomatoes yet. What we did is for our family consumption only, we left the seeds of the vegetables so that they can sprout. My daughter likes animals very much, she has many ducks and chickens... we also eat eggs" (Participant, 39 years old). "In the first year after being with the Stoplight I already had everything. Well, years went by, two years after that and we had our things. In these two years, I had a house and I've already moved" (Participant, 45 years old).

6. Discussion

The guiding question of the research revealed that the concept of agency understood by the participants refers to personal agency and mostly to collective and proxy agency. The concept starts from the personal agency where the participants told experiences such as "now I have my savings", "I have a vegetable garden", "I have my business". However, these same people culminated their stories by mentioning the practice of collective agency by mentioning phrases such as "we share everything among neighbors and we have various possibilities", "this is not to be done alone", "working together". The development of the personal agency of participants in the Stoplight program allowed people to act and provoke changes that made it possible to improve their quality of life and then to influence and act together with the family and community to achieve a common goal. As for the participants belonging to the Toba Qom Indigenous community, the type of agency they practice falls within the proxy agency, mainly due to its social organization manifested in the caciques, leaders, and elders.

As for the second phase, the results of the research reveal that the Stoplight framework, i.e., metrics accompanied by mentoring intervention, results in increased agency in the families. This process begins by facilitating the self-assessment with the support of the mentor who conscientizes, motivates and guides them. The self-assessment, by allowing participants to be aware of their multidimensional poverty situation, enables them to reflect on each indicator that was in red or yellow for the design and implementation of an action plan to reach the green. This in turn results in the commitment of families to achieve their goals, culminating in the empowerment of families and the community.

Because the increase in agency in families begins with the self-assessment in accompaniment of a mentor, it is significant to have a trained person to help families through the process of taking the survey. Developing facilitation skills in a mentor creates a climate of trust, commitment, loyalty and motivation. It helps family members to better perform all that they know how to do, activating their skills and capacities (Cantera, 2002). Furthermore, the collaborative work of family members and the community, through their collective agency, will make it possible to achieve significant and lasting results in the environment in order to generate social change (Bandura, 2001). As a next step in this study, further research is needed to focus on how the Stoplight self-assessment engage families to achieve their goals.

7. Conclusión

The results of this research showed that the concept of agency in the Cerrito community varies according to the social and cultural context of the residents. The development of personal agency allowed participants to act and provoke change within their families and community, working in collaboration to achieve common goals. This teamwork resulted in the practice of collective agency, where agency is seen as working together with the family or community to achieve the proposed goals. It is the effort between all members of the community and generally cannot be achieved without the cooperation of all those affected. Another concept of agency practiced by Toba Qom Indigenous community participants falls within the proxy agency. Due to its social organization, the inhabitants of this indigenous community consider that the responsibility of improving or changing their situation depends directly on the community's chief.

Through the trajectory map implemented in the second phase of this research, it became evident that the Stoplight framework, i.e., metrics combined with mentoring, results in increased agency in the families. This process begins by applying the metrics with the support of the mentor who sensitizes, motivates and guides them during the development of the program.

The results of this research are valid in local terms, but cannot be generalized to other countries due to the possible social and cultural influence experienced by their inhabitants. Further, the results may vary due to the type of interventions implemented by other organizations that use the Stoplight within their programs. Therefore, it is recommended that this research be replicated in other contexts in order to make comparisons that help to better understand the agency process in families.

8. Cited Works

Alkire, S., Foster, J., Seth, S. Santos, M.E., & Roche, J.M. (2015). *Multidimensional Poverty Measurement and Analysis*. New York, NY: Oxford University Press.

Alsop, R., & Heinsohn, N. (2005). *Measuring empowerment in practice: Structuring analysis and framing indicators*. The World Bank.

Bandura, A. (1989). Human agency in social cognitive theory. *American psychologist*, 44(9), 1175.

Bandura, A. (1997). Self-efficacy. *Harvard Mental Health Letter*, 13(9), 4-5.

- Bandura, A. (1998). Personal and collective efficacy in human adaptation and change. *Advances in psychological science*, 1, 51-71.
- Bandura, A. (2000). Exercise of human agency through collective efficacy. *Current directions in psychological science*, 9(3), 75-78.
- Bandura, A. (2001). La teoría cognitiva social: Una perspectiva agencial. *Revisión anual de psicología*, 52, 1-26.
- Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996). Multifaceted impact of self-efficacy beliefs on academic functioning. *Child development*, 67(3), 1206-1222.
- Banerjee, A., Duflo, E., Goldberg, N., Karlan, D., Osei, R., Parienté, W., Shapiro, J., Thuysbaert, B., & Udry, C. (2015). A multifaceted program causes lasting progress for the very poor: Evidence from six countries. *Science*, 348(6236), 1260799. <https://doi.org/10.1126/science.1260799>
- BANKS, M. Using Visual Data in Qualitative Research. Sage Publications, Thousand Oaks, CA. 2007.
- Bishop-Sambrook, C., & Rozel Farnworth, C. (2014). *Household methodologies: Harnessing the family's potential for change*. International Fund for Agricultural Development (IFAD). <https://www.ifad.org/documents/38714170/40198517/Household+methodologie+-+harnessing+the+family's+potential+for+change.pdf/cb0ab278-bfb4-4b4c-a237-e7841bc9e9aa>
- Bloom, B. S. (1956). Taxonomy of educational objectives, handbook I: the cognitive domain. New York: David McKay Co.
- Burt, M. (2013). The "Poverty Stoplight" approach to eliminating multidimensional poverty: Business, civil society, and government working together in Paraguay (innovations case narrative: Fundación Paraguaya). *Innovations: Technology, Governance, Globalization*, 8(1-2), 47-67.
- Burt, M., & Hammler, K. (2014). The Poverty Stoplight: Does Personalized Coaching in Microfinance Help Clients Overcome Poverty?. *Unpublished internal document. Asunción, Paraguay: Fundación Paraguaya*.
- Cantera, F. J. (2002). Sistemas de gestión de conocimiento a través de procesos de Coaching Y Mentoring. *Revista de psicología del trabajo y de las organizaciones*, 18(2-3), 303-318.
- Casique, I. (2010). Factores de empoderamiento y protección de las mujeres contra la violencia. *Revista mexicana de sociología*, 72(1), 37-71.
- Collier, J. (1957). Photography in anthropology: A report on two experiments. *American anthropologist*, 59(5), 843-859.

- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publications.
- Crouch, M., & McKenzie, H. (2006). The logic of small samples in interview-based qualitative research. *Social science information*, 45(4), 483-499.
- Deci, E. L., & Ryan, R. M. (1995). Human autonomy. In *Efficacy, agency, and self-esteem* (pp. 31-49).
- Deneulin, S., & Shahani, L. (Eds.). (2009). *An introduction to the human development and capability approach: Freedom and agency*. IDRC.
- Fundación Paraguaya. (2019, 16 agosto). Semáforo de Eliminación de Pobreza - Fundación Paraguaya. Recuperado 4 febrero, 2020, de <http://www.fundacionparaguaya.org.py/v2/?proyecto=semaforo-de-eliminacion-de-la-pobreza>
- Fundación Paraguaya. 2014. "Manual Metodológico Del Semáforo de Eliminación de Pobreza." Internal Training Document. Asunción, Paraguay: Fundación Paraguaya.
- Fundación Paraguaya. 2017. "Manual de Soluciones Del Semáforo." Internal Training Document. Asunción, Paraguay: Fundación Paraguaya.
- Glaser, B. G. A. L. (1978). Strauss (1967): The Discovery of Grounded Theory: Strategies for Qualitative Research. *London: Wiedenfeld and Nicholson*, 81, 86.
- Godinot, X., Heyberger, C., Heyberger, P., Ugarte, M., & Ugarte, R. (2007). Combatir la extrema pobreza: Aprender de familias de Burkina Faso y Perú. *Salir de la Pobreza*, 269.
- Grbich, C. (2007). Phenomenology. *Qualitative data analysis: An introduction*. Thousand Oaks, CA: Sage.
- Houghton, J., & Khandker, S. R. (2009). *Handbook on poverty+ inequality*. World Bank Publications.
- Hernández-Ponce, L. E., Rodríguez, J., & Mercado, C. (2010). La posibilidad del cambio social: aproximación psicosocial a los conceptos de agencia, empoderamiento y participación. *Temas de coyuntura*, 62, 79-102.
- Maathai, W. (2005). Nobel Peace Prize Speech: Nobel Lecture, Oslo, 10 December 2004. *Meridians*, 6(1), 195-201. Recuperado el 20 febrero, 2020, de www.jstor.org/stable/40338692
- Malhotra, A., Schuler, S. R., & Boender, C. (2002, June). Measuring women's empowerment as a variable in international development. In *background paper prepared for the World Bank Workshop on Poverty and Gender: New Perspectives* (Vol. 28).

Markus, H. R., & Kitayama, S. (2003, January). Models of agency: Sociocultural diversity in the construction of action. In *Nebraska symposium on motivation* (Vol.49, pp. 1-58).

Mason Mark (2010) "Sample size and saturation in PhD studies using qualitative interviews" en Forum: Qualitative Social Research, Vol11, nº3, Art.8, Sept.2010

Morgan, D. L., & Spanish, M. T. (1984). Focus groups: A new tool for qualitative research. *Qualitative sociology*, 7(3), 253-270.

Mosedale, S. (2003). *Towards a framework for assessing empowerment* (No. 1652-2016-136010).

Mundó, A. G. (2015). Elementos metodológicos para el análisis de imágenes. In *Actas del XVIII Coloquio de Historia de la Educación: Arte, literatura y educación* (pp. 346-354). Universitat de Vic-Universitat Central de Catalunya.

Muñetón-Santa, G., & Gutiérrez-Loaiza, A. (2017). Pobreza y enfoque de capacidades: un caso de estudio en el programa de superación de la pobreza extrema en Medellín, Colombia. *Entramado*, 13(2), 60-70.

Narayan, D., & Petesch, P. (2007). Agency, opportunity structure, and poverty escapes. *Moving out of poverty: Cross-disciplinary perspectives on mobility*, 1(1).

Navarro, L. P. (2007). *Autoeficacia del profesor universitario: eficacia percibida y práctica docente* (Vol.15). Narcea Ediciones.

Noreña, A. L., Alcaraz-Moreno, N., Rojas, J. G., & Rebolledo-Malpica, D. (2012). Aplicabilidad de los criterios de rigor y éticos en la investigación cualitativa. *Aquichan*, 12(3), 263-274.

Observatorio Social (2015, 26 enero). Nueva metodología de medición de la pobreza por Ingresos y multidimensional. *Serie Documentos Metodológicos. Chile*. Recuperado de:

http://observatorio.ministeriodesarrollosocial.gob.cl/documentos/Nueva_Metodologia_de_Medicion_de_Pobreza.pdf.

ONU. (2014). Online Survey on Promoting Empowerment of People in achieving poverty eradication, social integration and full employment integration and full employment and decent work for all. United Nations Department of Economic and Social Affairs Division for Social Policy and Development. Recuperado de <https://www.un.org/esa/socdev/publications/FullSurveyEmpowerment.pdf>

Patterson, K., & Grenny, J. (2007). *Influencer: The power to change anything*. Tata McGraw-Hill Education.

Pick, S., Rodríguez, G. G., & Leenen, I. (2011). Modelo para la promoción de la salud en comunidades rurales a través del desarrollo de agencia personal y empoderamiento intrínseco. *Universitas psychologica*, 10(2), 327-340.

Pick, S., Sirkin, J., Ortega, I., Osorio, P., Martínez, R., Xocolotzin, U., & Givaudan, M. (2007). Escala para medir agencia personal y empoderamiento (ESAGE). *Interamerican Journal of Psychology*, 41(3), 295-304.

PNUD-Programa de Naciones Unidas para el Desarrollo (1997). Informe sobre Desarrollo Humano 1997. Desarrollo humano para erradicar la pobreza, Madrid: Mundi-Prensa.

Povertystoplight. (2019, 2 agosto). Activemos el potencial de las familias. Recuperado 21 febrero, 2020, de <https://www.povertystoplight.org/es/>

Reed, L., Rao, D. S. K., Rivera, C., Gailly, S., Sanchez, X., Rogers, S., ... Marsden, J. (2015). *Mapping Pathways out of Poverty*. Recuperado de https://www.results.org/wp-content/uploads/SOCR2015_English_Web.pdf

Romero Ruiz, R. (2012). El uso de la imagen como fuente primaria en la investigación social. Experiencia metodológica de una etnografía visual en el caso de estudio: territorialidades de la vida cotidiana en la plancha del Zócalo de la ciudad de México. *Secuencia*, (82), 175-194.

Rosenbaum, M. S., Otalora, M. L., & Ramírez, G. C. (2017). How to create a realistic customer journey map. *Business Horizons*, 60(1), 143-150.

Rowntree, B. S. (1901). *Poverty: a study of town life*. Macmillan.

Russell Bernard, H. (2002). *Research Methods in Anthropology-Qualitative and Quantitative Approaches* (No. BOOK). Altamira Press.

Saldaña, J. (2015). *The coding manual for qualitative researchers*. Sage.

Santos, M. E., Samman, E., & Yalonetzky, G. (2009). Agencia de los padres y logros de los hijos: explorando el caso de América Latina.

Sen, A. (1985). Well-being, agency and freedom: The Dewey lectures 1984. *The journal of philosophy*, 82(4), 169-221.

Sen, A. (1992). Nuevo examen de la desigualdad. Primera edición ed. Madrid: Alianza.

Sen, A. (1999a). Development as Freedom. *New York: Oxford University Press*.

Sen, A. (1999b). Commodities and capabilities. *OUP Catalogue*.

Sen, A. (2000). Las distintas caras de la pobreza. *El País*, 30.

Sheridan, J., Chamberlain, K., & Dupuis, A. (2011). Timelining: visualizing experience. *Qualitative research*, 11(5), 552-569.

Shields, C. A., & Brawley, L. R. (2006). Preferring proxy-agency: impact on self-efficacy for exercise. *Journal of health psychology*, 11(6), 904-914.

Snyder, C. R., Ilardi, S. S., Cheavens, J., Michael, S. T., Yamhure, L., & Simpson, S. (2000). The role of hope in cognitive-behavior therapies. *Cognitive therapy and Research*, 24(6), 747-762.

Springer, Boston, MA. Suárez Elías, M. (2015). *Un análisis de la literatura académica sobre presupuestos participativos en Latinoamérica: los casos de Argentina, Chile, Perú y Uruguay* (Master's thesis, Buenos Aires: FLACSO. Sede Académica Argentina).

Tola, F. (2010). Una revisión de los etnónimos toba (qom) del chaco argentino en función de la categoría de " persona" y de la " vida social". *PUBLICAR-En Antropología y Ciencias Sociales*, (9).

Turner, R. J., & Roszell, P. (1994). Psychosocial resources and the stress process. In *Stress and mental health* (pp.179-210). Springer, Boston, MA.

Vélez, D. F. G. (2015). La pobreza en Ecuador a través del índice P de Amartya Sen: 2006-2014. *Economía*, 40(40), 91-115.

9. ANNEX