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Enhancing adolescent Mayan girls' education through peer support

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ABSTRACT

The aim of this paper is to evaluate how peer support can contribute to the completion of secondary school for girls who have interrupted their education, so that they can achieve higher levels of schooling through a supportive community network in villages of the Yucatan peninsula in southeast Mexico. For this purpose, qualitative social science research methodology was used with a participatory approach. The findings demonstrated that beyond existing school reintegration programs, it is the strength of purpose in the girls' minds and the influence of the people that surround them that determines the degree of success or failure. The originality of this research is to be found in the collection of primary information from groups of adolescents regarding aspects that encourage them to reach, or stop them from reaching, higher levels of education, while compiling the intervention of key actors in the communities in favor of girls' education in the state of Yucatan.

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Introduction

In Mexico, indigenous peoples suffer from poverty and discrimination (Iturriaga 2016), and therefore from unequal opportunities (Mijangos, Castillo, and Reyes 2017) compared to the non-indigenous and immigrant populations. Across the country there are 68 linguistic groups, many containing subgroups (INPI 2019), the majority of whom live in disadvantaged circumstances that affect their educational advancement, limiting their possibilities for social mobility.

According to the National Council for the Evaluation of Social Development Policy in Mexico, 69.5% of indigenous people live in poverty (Consejo Nacional de Evaluación de la Política de Desarrollo Social 2018) with low academic levels. In education, research from the General Directorate of Indigenous Education of the Secretariat of Public Education shows that only 47% of indigenous students enrolled in primary school continue their studies at secondary level, and only 39% of indigenous people have achieved the same levels of education as the non-indigenous population (Dirección General de Educación Indígena 2017).

In southeast Mexico there is a clear division between indigenous and non-indigenous populations, manifested in social status and labor opportunities, and consequently in unequal income, depending on cultural background (Bracamontes and Lizama 2003). In this region, even enrolment in public education is a challenge for Yucatecan Mayan girls (Bracamontes and Lizama 2003), since gender norms limit their participation in their village schools even further (Osorio 2017). Even if a girl has the support of her family to be enrolled at primary level, she has only a 48% probability of continuing her studies at secondary level (Secretaría de Educación Pública 2018). However, it has been statistically proven that once girls finish secondary level, the possibility of achieving higher levels of schooling increases considerably. Therefore, girls attending secondary school should have appropriate levers of support to help them finish this academic level successfully, considering also that secondary school coincides with another crucial life period, which is adolescence, where behaviors such as unprotected sex, teenage pregnancy and cohabiting with a male partner are all too common in this disadvantaged context.¹

For socially marginalized adolescents, access to second chances during adolescence, such as the opportunity to re-enter education or gain technical skills, can play a key role in fostering well-being (Reavley and Sawyer 2017, 4). Accordingly, Mexico has well-established governmental programs and internationally funded initiatives which support adolescent girls in continuing their education if they want to. However, as research has shown, the rate of completion after drop-out is low.

Therefore, the proposed study seeks to gain understanding of how peer support could contribute to the academic advancement of girls in Mayan communities in the Yucatan peninsula, which includes three of the seven states with the largest indigenous populations in Mexico: Yucatan (51.8%), Campeche (22.7%) and Quintana Roo (30.4%) (INEGI 2017), where Yucatecan Maya is the predominant group. Moreover, Yucatecan Maya is the second most spoken indigenous language in basic education (7.1%) (The United Nations Children's Fund 2015).

Description of the pilot study

This paper summarizes the results of a pilot study supported by Echidna Giving, a private foundation based in the US which supports the advancement of marginalized girls from the developing world through education. One of the goals of this organization is to support girls while they complete secondary education, which is an important aspect of this project, taking into account that it is at this educational level that adolescents are at greater risk of dropping out of school. The pilot study was conducted by two researchers. The main researcher was born and raised in the Yucatan peninsula and worked for a long time in Mayan majority areas with the support of Maya-speaking research assistants. As Smith stated in her work (2008) the researcher should have acquired a historical background outside the academy to perform a critical analysis with the communities and for the communities. The second author, due to his research experience, played a role in supporting the methodology of the study and observed a few conversations in the area; his comments have substantially improved this investigation.

The project was carried out in communities in the state of Yucatan from 2018 to 2020. Among the objectives of the research were to understand the reasons for drop-outs, including the cultural context that surrounds them, and to register the circumstances that allow indigenous girls to thrive academically in this context. This was achieved through an educational program that supported Mayan girls who had dropped out of secondary school to achieve higher levels of schooling through peer support.

The purpose of focusing on this sector of society is that drop-out girls are considered as forgotten girls, because as this research demonstrates, once a girl lives with a male partner, even without children, her society considers her no longer as a girl, regardless of her age, but as a woman with family responsibilities, and she is expected to stay at home, limiting her educational advancement. Therefore it is important to work with them, enhancing their educational opportunities through peer support, changing the societal perception in these communities and influencing others to return to school.

The support system was composed of Mayan girls from the same cultural background, with whom they had friendship or kinship ties. These girls assisted them academically through weekly visits where they studied together to pass an exam and gain a secondary school certificate. In these meetings, they discussed academic themes using didactic materials such as books provided by the National Educational System.

The girls who conducted the visits were Maya, from the same community, with a profile of academic achievement. For their participation in this project the girls who acted as mentors were rewarded with an economic incentive² to support them with their own school expenses. Additionally, the drop-out girls received food³ every month, to incentivize them to participate in the project.

The mentor girls were proposed by the community leaders. The mentor girls in turn, with the support of their mothers, proposed the drop-out girls, with whom they had ties of kinship or friendship. The project was explained to the participants in detail, emphasizing the commitment that the mentor girls should make to support the girls who had dropped out of school, in order to receive the economic incentive.

Once the community approved the project, weekly follow-up visits were implemented, where guidance and didactic materials were provided while information and feedback were retrieved.

During the pilot study girls spent time together, facilitating the educational process, sharing experiences, goals, expectations and even challenges, advising each other, and strengthening the bonds of trust between them in order to understand better the reasons that motivate them or prevent them from continuing their studies.

Therefore the research question was *Is peer support an effective mechanism to achieve higher levels of schooling among adolescent Mayan girls living in isolated villages?*. To monitor their progress during the weekly follow-up visits, data were gathered to measure the impact of peer support on educational outcomes, achievement of goals, career choices, development of well-being, trust, friendship and interpersonal efficacy in both groups of girls. Additionally, their options for returning to formal schooling once they had obtained their secondary certificate were explained to the girls. All these options are available in their community within the National Educational System.

To answer the previous question, the program will be evaluated from the participants' perspective, beginning with their experiences at different levels/components of the implementation process and analyzing them through Contextual Interaction Theory

(CIT). This form of analysis concentrates on the participants' motivations, cognition and resources: observing the background of the target population; the educational progress, certification and follow-up and the social interactions among community members, to reflect on the lessons learned from their experience.

In the following section, the theoretical framework of this study will be presented. The third section provides the case selection and methodology, while the fourth section will present the empirical results, analyzing the implementation process using CIT. In the fifth section the results will be discussed, followed by the conclusion where the research question will be answered.

Theoretical framework

Theory used in the design of the study

In this research project, the theoretical contribution of Emile Durkheim was used, which defines education as a social fact and analyzes the role of society, in conjunction with the theoretical approach of Paulo Freire because of his experience working with marginalized populations. Putnam's concept of social capital (Putnam 2000) and scholarly literature on Indigenous research was included to analyze and understand the context.

Durkheim defines education as 'the action exerted by adult generations over those generations which are not mature to social life. Its objective is to provoke and to develop in the child a number of physical, intellectual and moral conditions' (Durkheim 1978, 52). This theory demonstrates the influence that society has on the decisions taken with regard to girls attending school or not. Because of that, it is important to include Durkheim's approach and identify the elements that could enhance the interactions among family, community and school development in favor of girls.

This theory was of special importance to understand the social interactions that occur in the Mayan indigenous communities of Yucatan, and the supportive relationships that can encourage girls to continue their studies even as adolescent mothers. The theory proposed by Durkheim also helps us identify the main detractors of their educational progress.

The Critical Consciousness Theory of the Brazilian educator Paulo Freire will be used as a reflection on the human being's recognition of his or her essential value. In this regard, Freire explains that any policy, program or project without a bottom-up perspective has little hope of prospering, as they are imposed on the people and do not originate within the community for the development and well-being of the population (Freire 1974).

This theory was applied since the educational program was carried out in the community of the drop-out girls with people from the same population; the main actors who participated in this project have lived for several years in the same geographical space, which favored the educational process, taking into account that they were girls helping other girls in their educational advancement.

Putnam's concept of social capital (Putnam 2000) was used to understand how peer support might improve academic outcomes and support the learning process among Mayan girls. Specifically, bonding social capital was used to register the social interactions of reciprocity and solidarity based on gender and indigenous background.

Indigenous literature was used to show that girls are more likely to develop an interest in certain activities if they can see women from the same cultural background not only practicing them but succeeding in them (Schulenkorf, Sherry, and Rowe 2016; Viswanathan et al. 2004; Darroch and Giles 2014; Etowa et al. 2011; Jull, Giles, and Graham 2017). Particularly, the contributions of Smith (2008) about decolonizing research methods were considered as a reflection about community protocols of indigenous peoples and the benefits that this research project brought to the communities.

All these theoretical backgrounds contributed to our hypothesis that peer support from within the community might be an effective way to stimulate the drop-out girls to re-enter education.

Analysis of the process using CIT

Contextual Interaction Theory has been developed as an analysis model of the implementation process of programs and public policies. It conceptualizes implementation processes as social interaction between the actors involved, considering not only their motivations, cognition and resources (Bressers 2004), but also the context in which these interactions take place. This model is based on programs that are applied by and to human beings, with their perspectives, capacities, and limitations. Hence, in the social interaction during the implementation of the program it is possible to observe the deficiencies of the program, as well as the degree of its success.

Due to its characteristics, CIT was chosen to evaluate the research project, since more than simply providing an educational program to help girls who have dropped out school to finish their secondary level education, it is important to identify whether peer support could be an effective mechanism for the re-entry of girls into the national educational system, taking into account that this project has a strong community component.

In Contextual Interaction Theory, motivations drive the actors' actions; cognition represents the subjective knowledge held to be true and resources provide the actors with the capacity to act and influence other actors. These actor characteristics are seated in and

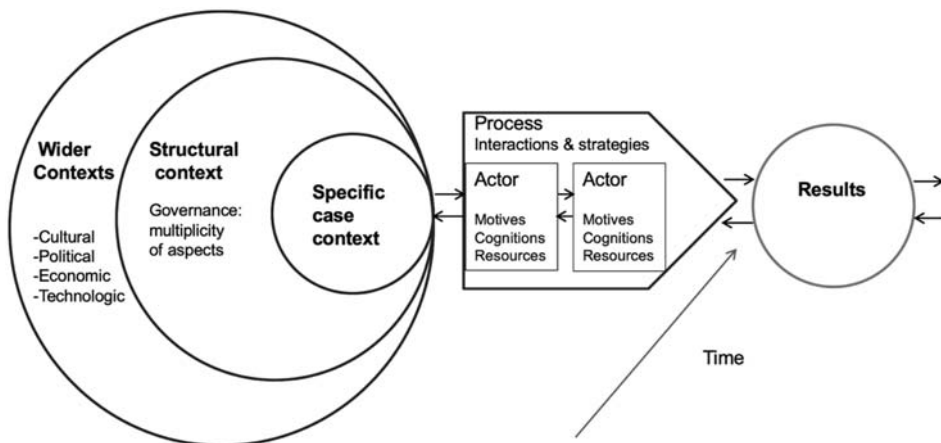


Figure 1. The key actor-characteristics that drive social-interaction processes and the layers of context that shape them – Source: adapted from Bressers (2009).

influenced by several layers of context (Figure 1). In this study we will pay attention to the wider cultural and socio-economic context, but only as it manifests itself in the specific case context. The same is true for the role of the Catholic church. As for the structural context, the National Educational System will be taken into account.

Case selection and methodology

In the following lines, the project implementation process will be described, taking into account the demographic characteristics of the communities, the participating actors and the context, all of which influenced the project's results.

Case selection

Initially, nearly 10 Mayan communities⁴ in the state of Yucatan were visited to find the villages in which to develop the project with the approval of the community members. All of them share the characteristics of poverty and the presence of gender norms that undermine the opportunities of indigenous girls.

At first, the project was presented to local politicians, as these political leaders represent the population of the villages and were democratically elected by the people of these communities. However, none of them could gather a sufficient number of girls to participate in this project, which was designed to have five girls in each group, which means five mentor girls and five drop-out girls. As recommended by Smith (2008: 15) there are many levels of entry which must be negotiated when researchers seek information. For this reason, other community leaders were contacted, among them religious leaders in the form of the local Catholic priests⁵ with indigenous Maya background. In summary, first democratic leaders were contacted to participate in the project and when that did not work the participation of religious leaders was requested.

The communities initially selected were Maxcanu, San Jose Tzal and Buctzotz, all located in the state of Yucatan.

The first community was Maxcanú, with a total population of 21,704 people, located about 65 kilometers west of Merida, capital of the state of Yucatan. The average education level of the population above 15 years old is 7.1 years, which means incomplete secondary school. Of the total population 8695 are Maya speakers, which represents 40% of the total population (INEGI 2019).

In Maxcanu, the project was presented to the local Catholic priest, who was interested in having his congregation participate, since according to him 'it is necessary for girls to study to prevent domestic violence', for which reason he supported the implementation of the project in church facilities located in the town center.

In the community of Maxcanu the priest assigned a project coordinator, who was a female leader of church youth groups from the same community, with extensive knowledge of the population. The participation of the coordinator in the project favored the organization of weekly meetings to monitor the educational progress of the participating girls, and she was always present during the meetings and interview process, although without intervening.

The second community was San José Tzal, a community located 14 kilometers south of downtown Merida. The total population is 3543 people, with a high degree of

marginalization, and 37% of the population above 15 years old did not finish primary school (SEDESOL 2015). Almost 50% of the population are Maya speakers.

In San José Tzal, the local Catholic priest actively participated in the project, providing church facilities for the weekly follow-up meetings, making recommendations and giving references regarding girls with the appropriate profile to participate in the educational program. In this community, the first author maintained direct contact with both groups of girls.

The third community was Buctzotz, with a total population of 8637 people, about 89 kilometers from the city of Merida, in the north of the state of Yucatan. The average level of education of the population above 15 years old is 6.6 years, which represents complete primary educational level. Of the total population 2270 people, about a quarter, are Maya speakers (INEGI 2019).

In Buctzotz the project was presented to women close to the Catholic church, although the local priest did not participate. The first author tried to contact him repeatedly, but local people indicated that he was working in nearby communities and therefore he was not available. This happened on several occasions and there was never any direct contact with the priest.

In Buctzotz, from the beginning there were irregularities: some of the girls did not attend the weekly follow-up meetings and it was discovered that most of the mentor girls were not giving their classes to the drop-out girls. For this reason, the project was closed during its second month in the community. The relatively few and irregular contacts did not enable us to find out clearly why the project failed in this community.

Therefore the results presented in this paper correspond mainly to the communities of Maxcanu and San José Tzal, where the project was fully developed.

Methodology

Initially, the methodology used was community-based participatory research (CBPR), a methodology which allows the participation of the communities being studied on equal terms with the researchers, in order to create knowledge (Viswanathan et al. 2004; Darroch and Giles 2014; Etowa et al. 2011; Jull, Giles, and Graham 2017). The importance of using this methodology is based on the recognition that community members are the knowledge keepers in these Mayan communities. In particular, the moral leaders – the local priests – played an essential role in influencing the participation of community members in creating significant and sustainable social change in favor of indigenous girls.

However, as the project advanced it was complemented with other forms of qualitative social research methodology. Since some of the girls did not continue with the project, the participation of the community decreased considerably. Therefore, it is more appropriate to say that it was the qualitative methodology of social research that prevailed in the course of this research.

To begin with, the project was proposed at a community meeting, a traditional gathering held when important information must be disseminated among the population. These kinds of meetings usually include the presence of community leaders, who are generally adult men, mostly involved in farming, which is the main economic activity in this context. However, the attendees at these informative meetings were mainly women,

joined by some of the girls' male partners. Additionally, in Maxcanu and San Jose Tzal, the local priest gathered people from the community to facilitate the process of communicating the purpose of the project.

Data gathering

To gather information, weekly meetings were held in Maxcanu and San José Tzal where participant observation and informal talks were carried out with the girls, their mothers, grandmothers, mothers-in-law and husbands, since family attendance at meetings was common.

As the project progressed, focus groups were also used, as well as semi-structured interviews, in-depth interviews, storytelling and archival research for reviewing related documents and official data.

As part of the project, the process of completion of secondary school through peer support was analyzed. To achieve this, the school-aged girls were tested every three months to determine if they were able to obtain their secondary-level certificate. This exam is provided free of charge by the Secretariat of Public Education in Mexico for all persons over 15 years of age who would like to complete basic education.⁶

During the mentoring process, the effects of bonding social capital among girls were registered in order to understand how peer support might also help Mayan girls overall, in addition to educational outcomes.

As the school-aged girls obtained their certifications, follow-up visits were conducted to register outcomes beyond re-enrollment, retention, transition, and completion. Additionally, the impact of the project on the mentor girls was measured in their career choices, pursuit of additional education, community work and gender justice work. The influence of the nuclear and extended family on the educational advancement of the girls was also registered, as well as comments from the neighbors and the community in general regarding their participation in the program and how they achieved their secondary certificates.

Empirical results

The empirical results of the project will be described below. They are based on data collected during the fieldwork, which was in turn based on participant observation and open and directed conversations with project participants.

Background of the girls involved

The mentor girls

In the development of the project two groups of girls were involved. One of the groups was designated as mentor girls. The mentor girls attended school regularly, with excellent academic records, responsible behavior and with kinship or friendship ties to the drop-out girls. The mentor girls were 14 years of age and they were in their third year of secondary level of education. Each mentor girl had the same cultural background as the drop-out girl and they both lived in the same community, to facilitate the teaching-learning process.

None of the mentor girls had a boyfriend and they had stable and supportive family environments.

Although the project was supported by priests of the Catholic Church, all the girls who participated in this project were accepted according to their aptitudes, regardless of the religion they professed. This meant there was participation of mentor girls from Christian but non-Catholic religions. In the case of the mentor girls in Maxcanu and San Jose Tzal, all of them actively participated in religious activities, mainly in youth groups, which are characterized by having weekly meetings to discuss social and religious issues from the Christian perspective.

The drop-out girls

The profile of the drop-out girls included a strong motivation to obtain their secondary level certificate, being under 20 years of age and having completed primary school.

It is worth mentioning that among the reasons given by the girls participating in this project for dropping out of school were adolescent pregnancy, cohabitation with a male partner, lack of financial resources, death of the father and abuse from peers and rural teachers. All drop-out girls identify as Christians, although they do not actively participate in religious activities.

Analysis of the process using CIT

Implementation is a process related to public policies and programs, and in this case, it is applied to an internationally funded program that promotes girls' education. It is a process in which different actors intervene by interacting in social processes, which are unequal in influence and power. [Table 1](#) facilitates an understanding of the motivations, resources and cognition of the actors involved in the implementation process. It is important to note that in addition to the positive characteristics mentioned by the participants (indicated by the sign '+') there are also a number of aspects that were negative or lacking in several members. These are illustrated by the sign '-'.

For any interaction to evolve, the program must contribute positively to the motivation of at least one actor. In the beginning that was certainly the case, every actor involved contributed with active cooperation. However, as the program advanced, lack of engagement among some of the girls was evident. This was most clearly the case in Buctzotz, where the program only lasted a few weeks. However, the same program was applied in San Jose Tzal and Maxcanu with different results.

Government programs and the communities

It is important to emphasize that there are government programs that work for the reintegration of young women into the National Educational System (+). The National Institute for Adult Education (INEA) has specific educational programs to support this sector of the population. Currently, the Education for Life and Work Model (MEVyT) is the educational program designed for young people and adults over 15 years old in Mexico to complete basic education.

Table 1. Overview of motivations, resources and cognition of main actors.

	Motivations	Resources	Cognition
Catholic church	-Education as a way to prevent partner abuse (+) -Promotion of out-of-school activities to prevent alcohol and drug abuse among young people (+)	-Facilities, church building available for the weekly follow-up meetings -Influence through faith (+) -Moral leadership from local priests (+) -Networks inside the community (+)	- Profound knowledge of the people of the community and their personal challenges (+)
National Educational System	-Promotion of national development through access to free education (+)	-Facilities (+) -Books and didactic materials (+) -Teachers (+) -Scholarships (+)	-In some cases, presence of gender norms that undermine the advancement of girls (-)
Community	-Education is a way to promote self-reliance in girls (when supported: +) -Girls are a source of domestic work and income (when supported: -)	-Poverty (-) -Lack of education among most adults (-) -Internet access in the community (+/-) -Social and economic problems present in the community, such as partner abuse and lack of economic resources for education (-) -Abuse of alcohol and drugs among the population (-)	-Patriarchal traditions: women belong at home and their education is thus of minor importance (-) -Societal norm to stay home (thus to drop-out of school) as soon as girls get pregnant or cohabit with a male partner (-)
Mentor girls	-Serve other girls (+) -Make parents proud (+) -The economic incentive (+) -Recognition from the community as responsible and trustworthy girls (when experienced +)	-Strong family support (+) -Strong academic background (+) -Support from the local priest as moral leader in the community (+) -Books and didactic materials (+) -Weekly follow-up meetings (+) -Lack of money to continue their own studies (-), but: money provided by the project (+)	-The achievement of higher level academic success is seen as possible (+) -Also mentor girls need sometimes to defend themselves against patriarchal gender norms (-)
Drop-out girls	-Passing the exam to obtain the secondary level certificate (+) -Re-enrollment at tertiary level of education (+) -Pursuit of a professional career (+) -Providing economic support to their children (+/-) -Facilitating their incorporation into the labor market (+/-) -Criticism from neighbors and some family members (-)	-Meetings with the mentor girls (+) -Books and didactic materials (+) -Internet access (+/-) -Weekly follow-up meetings (+) -Varying degree of family and/or partner support (+/-) -Food provided by project (+)	-Low academic level seen as normal in this context (-) -Traditional social norms also to some extend internalized by the girls themselves (-) -Varying degrees to which the opportunity for a better life is visualized (+/-)

Source: (Authors' own analysis).

INEA has offices in both urban and rural areas, in central locations for easy access of the population, particularly for the indigenous population. INEA has even developed teaching materials in indigenous languages, including Yucatecan Maya. The services are free of charge and they have teaching staff available to support the educational process. However, the completion rate is low.

Educational programs exist, and are available for anyone who wants to achieve higher levels of schooling. Nevertheless, there are aspects of society on which it is necessary to work in order to achieve a higher success rate (Patrón 2012). As shown in the table, there are still strong patriarchal structures in these communities that limit girls' educational opportunities and position them in pre-established social roles as mothers and wives which are seen as incompatible with their academic aspirations.

Mentor girls

Both in Maxcanu and San Jose Tzal, the motivation of the mentor girls goes beyond the economic incentive (+), despite the conditions of poverty in which both groups of girls live. According to interviews conducted, the evidence demonstrates that mentor girls who belong to Christian groups have values such as helping others, honesty and responsibility, which have favored their participation and the effectiveness of the project in these communities.

Most mentor girls interpreted their participation in the project as an opportunity to serve other girls who had not had favorable circumstances to continue studying like them. One of them commented: 'I learn from the circumstances of other girls who stopped studying and I realize how lucky I am to be able to attend school and have the support of my parents'. This demonstrates the bonding social capital defined by Putnam as the contact networks within a community (Putnam 2000).

Among the motivations, three mentor girls also mentioned that they need the financial incentive (+) to support their parents with family expenses, to pay their school enrollment and to save.

In almost all cases the mentor girls expressed having strong family support to participate in the project and help another girl study, and thus obtain her secondary degree certificate, except for one of the mentor girls who commented that her father initially did not agree with her participating in the project, since he did not like her to leave the house (+/-). However, at the end of the project, this same girl commented:

my dad told me that he was very proud of me, since I helped another girl get her secondary degree certificate. This was very important for me, because my dad didn't support me in my participation in the project. My dad told me that if I had already found my vocation as a teacher, I should continue to strive to continue my studies and reach my goal.

The mentor girls commented that they wanted to make their parents feel proud through their academic achievements (+), since they had not been able to continue studying for economic reasons, one of them commented:

nobody in my family has a bachelor's degree, my mother would have liked to have one. We are three cousins of the same age and we live nearby and we promised that together we will finish university, to make the family proud, to have a professional career.

Her frame of reference is her sisters and cousins who are already pursuing a professional career (Schulenkorf, Sherry, and Rowe 2016).

During the process, the mentor girls were able to teach the classes (+). If they had any doubts about how to address any of the subjects, they commented this at the weekly meetings and thus worked with the drop-out girls. They mentioned that the subjects were easy for them, since they had already studied them in school. It is worth mentioning that all of them were in the third year of secondary level of education, which represents the last year before entering high school.

The mentor girls were selected for having a good academic performance, in addition to having family support from at least one of the parents, plus the support given by the recommendation of the community priest as responsible and trustworthy girls (+).

Among the resources that the girls had were the books and school supplies that were given to them at the beginning of the project (+). In addition, in San Jose Tzal, the

municipality provided them with access to Internet at no cost, which represented for one of the mentor girls a didactic support to plan her classes with her drop-out girl.

The mentor girls commented that the environment in which they live in the community is not easy, since there are many social problems (–), such as substance abuse among young people. They also affirm that among the main obstacles they could face to continue their studies is the lack of financial resources (–).

Drop-out girls

The goals that the drop-out girls mentioned in all cases were to continue their studies at high school level, which means returning to formal school and having a professional career (+). In addition, one of them mentioned that she would like to have her secondary degree certificate for the benefit of her baby, to give him a better life. Another mentioned that in this way she could get a job in the future.

The drop-out girls commented that they have received strong criticism from neighbors and relatives (–), especially the girls who were already mothers, as they are told that it is not right for them to continue studying, since their main responsibility is to be in their homes, because now they are wives and mothers. Such criticisms affect them more when it comes from family members, for example, their cousins. In another case, it was detected that the boyfriend of the drop-out girl initially agreed with his girlfriend participating in the project and continuing to study, but her mentor girl commented: ‘every time I went to her home, her boyfriend would get upset and he showed it by raising the television to such a high volume that it was not possible to teach the class’. This indicates that the boyfriend did not want his girlfriend to continue studying, since it would mean a loss of control over her. The girl currently lives in the house of her boyfriend’s parents.

This lack of community and family support led to several girls leaving the project. Although the mentor girls demonstrated engagement towards the drop-out girls, in some cases that was not reciprocal. The mothers of the mentor girls said that the mentor girls would arrive punctually at the drop-out girls’ houses to help them study, but some of the drop-out girls did not come out from their houses even though the appointment had already been made. The lack of support from community and family members is stronger than the intentions of the mentor girls. This is related to Durkheim’s theory of how the influence that society has on the decisions taken with regard to girls’ education is crucial in these contexts.

All drop-out girls knew that as part of the undertaking they had to pass exams to accredit secondary school, since it was part of the process to obtain their certificate. However, of the 10 girls who started the project in the two communities where the project ran the complete period, only 6 presented the exam and only 2 obtained their secondary certificate. Both girls are 16-year-old adolescent mothers from San Jose Tzal who live in cohabitation with their boyfriends in their parents’ houses, and who have strong family support (+).

The drop-out girls that made it to the exam said they had support mainly from their mothers (+), who talked with them and told them to do everything they could to obtain their certificate. The families of those who were adolescent mothers took care of their babies so they had time to study. Three of the girls also commented that their boyfriends supported them during the process, studying with them, reviewing their

homework and telling them to move forward to obtain their secondary certificate. The support of sisters and grandmothers was also mentioned and in one case the support of the father of one of the drop-out girls was also mentioned.

Among the resources available to the drop-out girls were books and didactic materials such as pencils and notebooks that were provided at the beginning of the project (+). They were also given a food package on a monthly basis.

Among the interpretations of reality shared by the drop-out girls are that once a girl cohabits with a male partner she must leave school (-). As one of them mentioned:

I stopped attending school because I was told that because I already lived with my boyfriend I was no longer a girl, I was a grown woman and I should no longer attend school, because I was a bad influence on the other girls

In such a way traditional social norms are also to some extent internalized within their own minds. As Smith stated regarding the intersections of race and gender (2008), there are pre-established roles for women and in her context she was no longer considered a girl, despite her young age, but as a woman.

The frame of reference for the drop-out girls is mainly formed by the women in their families (+/-). This positively influenced one of the girls who passed the secondary exam and obtained her certificate, as she explained: 'I want to be like my aunt because despite having a baby she continued her studies'.

The educational level of the parents of the drop-out girls was in most cases only primary level, and they also mentioned major problems in the community such as alcoholism and drug abuse, in addition to economic problems which could be an obstacle to the girls' return to school (-).

Discussion

This project started with the plausible assumption that mentoring by successful girls from the same community and with friendship or kinship bonds with drop-out girls would help the latter to reintegrate into the educational system. Given the positive motivation of these mentor girls there is no doubt they contributed to this goal. But was it enough given the adverse context?

While it was disappointing for the researchers that four of the girls did not present the exam, primarily because of lack of family support, six of them did do so, of whom only two succeeded. We can learn from the results, although evidence is still limited regarding the success of the peer support strategy. Clearly, the most negative impact on the motivation and ability of the drop-out girls was the impact of traditional social and gender norms, especially when transferred by relatives. In our cases the church played a positive role, encouraging the girls' education and not reinforcing traditional norms. Also, the girls had support from some of their family members. Comparing the situation of the two successful girls with the others it is striking that they had even stronger support from their direct family, including their partners. Our conclusion is that such strong support is needed to shield them from the adverse social and gender norms that not only lead to negative interventions, but are also partially internalized by the girls themselves.

Both girls who accredited their secondary studies are 16-year-old mothers, who cohabit with their male partners and each with a child under one year of age. Both

have strong family support to continue their studies, including from their male partner. Both shared a strong bond with their mentor girl: in the first case, they were friends who knew each other through local Catholic youth groups and in the second case they were sisters.

Even though both girls at some point during the project received negative comments from the community, specifically from neighbors and distant relatives, they continued with the program, since both had a strong motivation to obtain their secondary certificate and return to formal schooling. After her certification one of the girls enrolled in high school for the 2019–2020 school year. She commented that much of her success was due to the support she received from her family, since they even helped her by taking care of her son so she could continue studying.

The other girl plans to return to school in the 2020–2021 school year. This is because her baby was born with poor health, which has led to continuous medical check-ups and frequent visits to the hospital. Her concern for the welfare of her son takes precedence over her studies, so she plans to postpone her reintegration into the National Education System until her child's health improves.

In the case of the mentor girls, the project process has strengthened their willingness to continue their studies. However, it did not change their gender perspective, as demonstrated by their comments about gender roles during the interview process. One of the positive consequences which the mentor girls derived from their participation in the project was that communication between girls helped the mentors understand the challenges faced by a girl of the same age with a male partner and children. Comments from the mentors indicated that these talks were very useful for them, since they could observe the consequences of starting a family at such an early age. They said that it was better to continue in school rather than live with a boyfriend, since it is advisable to wait to be more mature and to have completed one's education before making these kinds of life-changing decisions.

Conclusions

This project provides valuable information about the possible sources of support an adolescent girl may find, and the challenges she may face, in her educational path. The results will be shared with the participants of this study in consultation with the community leaders who facilitated the researchers the development of this project.

During the design of the research, it was intended to follow the ethical guidelines established by the communities and to treat all participants with respect as a reciprocal, shared, constantly interchanging principle which is expressed through all aspects of social conduct (Smith 2008, 120).

It was sought, following Freire, that people from the same community would help the girls who had stopped attending school to obtain their secondary school certificates, with a view to subsequent reintegration into the National Educational System. It is well-known that the implementation of projects designed in other contexts without the consultation of the target population or its participation rarely work, so it was intended that this research project be maintained from a bottom-up perspective, with high community participation. However, it was generally the girls, their families and priests who were most interested in the positive outcome of this initiative.

Not all drop-out girls really demonstrated commitment and interest towards their studies to obtain their secondary certificate. This was reflected in a high dropout rate during the program and exam failure during the course of the project. The most important reason found was rejection in the immediate social context of the idea of a drop-out girl continuing her studies, especially if she is already a mother or cohabits with a male partner. As one of the girls commented, they are already considered 'grown women', which implies that their main responsibility is taking care of others, which in turn limits their future educational and work opportunities. The strong economic and emotional dependence in which these girls live also makes them susceptible to being victims of domestic violence, since they have no other support options besides their partner. Thus our main conclusion is that the negative impact of the traditional social and gender norms in the community is so strong (and will be more or less internalized by the girls themselves) that only solid support from close family, parents and even preferably also their partner can shield them from such norms and prevent them from undermining their motivation and ability to succeed. It appears that a great deal of courage is needed to break away from such norms anyway, even with the good role models of the mentor girls at hand. We still believe that the design of the project with these mentor girls was potentially promising, and that the mentors did actually have a positive impact, but it seems that the project design underestimated the formidable social obstacles that the drop-out girls have to overcome.

On the other hand, the educational services offered by this project were already available in their communities through the INEA, free of charge and with teachers trained to support girls who wanted to finish their secondary studies. Undoubtedly, the incentive scheme was a factor that encouraged them to participate in this study, but without the existence of incentives, this project is hardly sustainable.

One of the recommendations would be to integrate the figure of the mentor girls into the structure of the National Educational System, with a compensation scheme as in the National Council for Educational Development (CONAFE). CONAFE is a federal educational program that invites students to be Leaders for Community Education, which promotes basic education for children in isolated areas of the country.

In this program, students participate for one or two years, and in return they receive a scholarship to continue their studies and a monthly financial support during their service. In turn, CONAFE is responsible for providing the necessary materials and operational support for running the services, which includes the training of teachers, the provision of materials for the classroom and school supplies (CONAFE 2019).

In this way, the continuation of this educational program would be sustainable, since the mentors, who also come from low-income communities, would continue to receive financial compensation to pay for more advanced levels of study. These mentor girls could participate either in the state-funded or federally funded secondary schools, or as part of the INEA.

It is worth mentioning that the participation of the Catholic Church facilitated the organization and development of the project, and the selection of candidates, providing a safe environment for weekly meetings within the church premises, and the contributions of priests as moral leaders of the community helped us to understand more broadly the events that were occurring within social interactions during the years that the project lasted.

Following the basic guidelines aimed at respect for and protection of the rights, interests and sensitivities of the people being studied described by Smith (2008, 119), every research project involving indigenous people should bring a direct benefit towards the community which will be described as follows.

The experience gained by the mentor girls was an opportunity to see the reality of a teenage mother, with her difficulties and time constraints. This made them value even more the circumstances that have favored their upcoming entrance into high school. These talks between both mentors and drop-outs strongly impacted mentors in their determination to continue their studies. However, the greatest satisfaction was the obtaining of secondary certificates by the two adolescent mothers who now have better prospects for their future.

The lessons learned in this project could well be used to institutionalize the educational program of mentors, which, in addition to providing assistance, promotes responsibility, goal achievement and service to others through teaching.

Notes

1. Research conducted by the National Institute of Statistics and Geography (INEGI) in Mexico established that among the population from 15 to 17 years old, the reasons for nonattendance at secondary school were dislike for academic activities (41.9%), lack of economic resources (26%), personal or academic problems (21.9%) and early marriage, teenage pregnancy and child-bearing (10.3%). Within "personal or academic problems" are included personal or academic problems at school due to illness and/or disability, the achievement of educational goals, the person had never been to school, there was no school or there was no place available to attend school (INEGI 2016).
2. \$50 USD dls/\$1000 pesos for each one of the mentor girls paid on a monthly basis.
3. Rice, beans, milk, cookies, salt, lentils, oats, and cornflakes, among other food products.
4. Ticopó, Holactún, Seyé, Tahmek, San José Tzal, Buctzotz, Maxcanú, Conkal.
5. In Mexico 74.96% of the population is Catholic (INEGI 2010).
6. In Mexico, basic education includes 6 years of primary education and 3 years of secondary education in the National Educational System.

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