

MORE THAN BRIDES ALLIANCE: PAKISTAN

ENDLINE OF THE 'MARRIAGE, NO CHILD'S PLAY' PROJECT IN PAKISTAN

JULY 2021



TABLE OF CONTENTS

ACKNOWLEDGEMENTS
EXECUTIVE SUMMARY
1 INTRODUCTION9
1.1 PROJECT CONTEXT9
1.2 OBJECTIVES OF THE MNCP PROJECT10
1.3 EVALUATION QUESTIONS
2 METHODOLOGY
2.1 STUDY DESIGN12
2.2 OVERVIEW OF THE SAMPLE
2.3 LIMITATIONS
2.4 EXPLANATORY NOTE ON THE RESULTS, FIGURES AND TABLES15
3 PROJECT IMPACT
3.1 CHARACTERISTICS OF INTERVIEWED GIRLS
3.2 CHARACTERISTICS OF INTERVIEWED HOUSEHOLD MEMBERS
3.3 TO WHAT EXTENT DID CHANGES OCCUR IN GIRLS' PURSUIT OF LIFE SKILLS AND RIGHTS?
3.4 TO WHAT EXTENT DID CHANGES OCCUR IN GIRLS' EMPOWERMENT?26
3.5 TO WHAT EXTENT DID CHANGES OCCUR IN GIRLS' ENABLING ENVIRONMENT? 40
4 CONCLUSIONS
4.1 CONCLUSIONS FOR EACH EVALUATION QUESTION
4.2 OVERALL CONCLUSION

RECOMMENDATIONS	53
NNEX	55
6.1 STATISTICAL ANNEX	55
6.2 DETAILS OF THE SAMPLE	65
6.3 EVALUATION DESIGN	74
6.4 LEARNING AGENDA	76
6.5 REFERENCES	79

ACKNOWLEDGEMENTS

This report is based on the information provided by hundreds of girls and their households, who were interviewed in Pakistan's Muzaffargarh and Lodhran districts in Punjab province and Larkana and Shikarpur districts in Sindh province over the course of five years (in 2016, 2018 and 2020). First and foremost, we want to express our gratitude to all of them for participating. Their willingness to give their time and discuss sensitive issues resulted in valuable information to ensure evidence-based and adaptive programme implementation (at baseline and midline stage), and made this evaluation (endline) possible. The evaluation will be useful for accountability purposes as well as for informing the design of future programmes with similar objectives.

This endline evaluation was achieved through the extensive contributions and expertise of the entire MTBA team, including Bedari, Baanh Belli, Indus Resource Centre (IRC), Oxfam staff in Pakistan, the Impact Measurement and Knowledge team of Oxfam Novib, and of course the interviewers.

The endline study is part of a Strategic Partnership between the Dutch Ministry of Foreign Affairs, Save the Children, Simavi, Oxfam Novib and the Population Council.

EXECUTIVE SUMMARY

This report presents the endline findings for five outcomes of the 'Marriage, No Child's Play' (MNCP) project in Pakistan, which is part of the multi-country More Than Brides Alliance (MTBA) programme. The MNCP project was implemented by Oxfam Novib, Oxfam in Pakistan, Bedari, Baanh Belli and Indus Resource Centre (IRC) from 2016 to 2020. The baseline, midline and endline studies were conducted in two districts in the provinces of Punjab and Sindh. The organizations collected baseline data in September and October 2016 and February 2017, midline data in October and November 2018, and endline data in November 2020.

OBJECTIVES OF THE REPORT AND EVALUATION QUESTIONS

The objective of this study was to determine to what extent changes in the empowerment of girls, including pursuit of their life skills and rights, and in the attitudes and norms that create an enabling environment for girls, can be attributed to the MNCP project.

This objective was formulated into one main evaluation question, which focuses on the overall aim of the MNCP project. This main question will be answered by looking at three sub-questions:

To what extent can changes in increased empowerment of girls regarding the decision to marry, and increased pursuit of life skills and rights in an enabling environment, be attributed to the MNCP project?

- To what extent did changes occur in girls' pursuit of life skills and rights?
- To what extent did changes occur in girls' empowerment?
- To what extent did changes occur in girls' enabling environment?

THE 'MARRIAGE, NO CHILD'S PLAY' PROJECT IN PAKISTAN

The objective of the MTBA programme is: young people (especially girls) are able to decide if and when to marry, and to pursue their life skills and rights, in a supportive environment. The MNCP project worked on empowering girls and young people to realize their rights, by: increasing girls' knowledge on life skills and rights; ensuring access to viable alternatives to child marriage, such as education and economic opportunities; influencing attitudes and norms on gender equality and child marriage; influencing policies concerning child marriage and rights of young people; and ensuring that youth and communities take action against child marriage.

METHODOLOGY AND SAMPLING

This evaluation made use of a quasi-experimental design, using a difference-in-differences comparison. It did so by comparing a group of girls and household members who participated in the project (the target group) to a similar group of girls and household members who did not participate in the project (the comparison group). This comparison was carried out at the start (baseline), the middle (midline) and the end (endline) of the project. Taking all studies together, we spoke to 2,541 household members and 2,584 girls in the districts of Larkana and Shikarpur (Sindh) and Muzaffargarh and Lodhran (Punjab). We present results for both the 'long term' (i.e. baseline to endline) and the 'short term' (midline to endline), as partners' reflections on the baseline to midline results meant that some of the MNCP project activities were adapted and additional indicators were added.

FINDINGS

In the first evaluation question, we asked: to what extent did changes occur in girls' pursuit of life skills and rights?

In general, the MNCP project significantly reduced the number of marriages before the age of 18. In addition, the results might predict a continuing decrease in the number of girls marrying before their 18th birthday; however, it is important to emphasize the potential effects of Covid-19 on the lives of girls in Pakistan and around the world. UNFPA (2020) predicted that there will be13 million additional child marriages globally as a result of the pandemic. Indeed, at endline, 42% of girls in Punjab and 30% in Sindh agreed that women and girls were at increased risk of being married off during the Covid-19 lockdown.

In terms of girls' life skills and rights, there has been a positive impact on girls' knowledge of menstruation, the time of the month when conception is most likely and family planning methods. In particular, the knowledge of girls who married before they were 18 has been positively impacted. This was the project's core target group for increased knowledge on life skills and rights.

Girls' knowledge of the legal age of marriage, and of the adverse effects of early marriage, have been positively impacted by the MNCP project.

We did not find that the MNCP project has had an impact on use of life skills services; almost all married girls claimed to use life skills services, and their perceptions of the responsiveness of life skills services did not change over time. The majority of girls having access to life skills services can most likely be explained by the presence of Lady Health Workers in the communities (who ensure access for girls and women to life skills services through household visits), followed by doctors and healthcare clinics.

In the second evaluation question, we asked: to what extent did changes occur in girls' empowerment?

In general, we found no short-term impact of the project on the extent of girls' involvement in the decision about their marriage. An overall positive impact was found for girls being consulted on (i.e. being informed of) the marriage, and in girls having the freedom to accept or reject the marriage, especially in Punjab. This means that participating girls experienced a higher increase in being consulted and being allowed to accept or reject the marriage proposal compared to non-participating girls. A short-term impact is seen in a reduced number of married girls who hadn't wanted their marriage to take place when it did, meaning more participating girls acknowledged that they did not wanted to get married at the time. All indicators for decision-making on family planning were positively impacted in the short term, especially in Punjab. This positive impact is explained by higher increases for participating girls reporting making the decision on family planning methods either together with their partner or by themselves compared to non-participating girls.

In Punjab, the MNCP project has – from midline to endline – positively impacted girls' perceived ability to influence decisions on education, work and marriage, whereas in Sindh this short-term impact is negative, hence girls' level of ability to influence decisions slightly decreased from midline to endline At endline, 43% of the girls in Sindh and 53% of the girls in Punjab perceived that they could self-advocate regarding decisions on their marriage.

The number of girls completing primary school increased from baseline to endline, from 50%, on average, to 58%. However, we found no positive impact of the MNCP project on school completion, as both participating and non-participating girls experienced this increase. Increasing girls' completion of education is a longer-term impact, beyond the scope of what this impact study could measure. Taking into account the fact that completion of primary or secondary education usually takes four years – more for rural areas where girls and boys generally do not go to school all year round, and the five-year timespan of the MNCP project, it is too early to see any effects on girls' school completion. However, results on attendance have been explored and it is found that the MNCP project had a positive impact on girls' attendance of middle school.

We found no impact on girls' perceptions of their school environment as safe, but we did find a positive (short-term) impact of the MNCP project on perceived safety on the road to school.

A key assumption of the MNCP project is that if girls attend school, they are less likely to be married before their 18th birthday. Evidence has found that, in general, the higher the level of education attained, the lower the probability of marriage before 18.

In terms of financial independence and literacy, we found the project had a positive impact on most of the indicators, both from baseline to endline and from midline to endline, and especially in Punjab. The MNCP project positively impacted on girls' contribution to total household income. No impact was found on girls having an occupation, and on whether or not girls are involved in unpaid care work.

Attitudes to gender equality are proxied by two indicators, which both combine several statements into one indicator. Overall, the project seems to have had a positive impact on girls' attitudes to gender equality, especially in the short term and especially in Punjab.

Regarding women's empowerment, we found that the MNCP project had a positive impact on girls' self-assessed level of self esteem and on girls' perceptions about whether they can change things in the community, especially in Punjab. In Sindh, girls' perceptions about women's mobility were positively impacted by the MNCP project, while in Punjab the impact was negative, meaning that mobility for participating girls decreased while they increased for non-participating girls. This suggests that either participating girls in Punjab perceived women's mobility to have decreased, or they were more aware of what women's mobility can mean (and therefore of the limitations on it). We must again acknowledge the influence of Covid-19 and the impact of the lockdowns and restrictions on mobility.

Our third and final evaluation question asked: *to what extent did changes occur in girls' enabling environment?* To assess this, we looked at the surveys conducted with the household members, i.e. the girls' parents.

Four indicators were combined to proxy household members' knowledge of the harmful effects of child marriage and early childbearing. Overall, the MNCP project positively impacted household members' knowledge on these issues, especially in Punjab. The project had a positive impact on the attitudes of household members, especially males, regarding child marriage, with more agreeing that child marriage is a harmful practice mentally and physically, and that men should only marry girls aged 18 years and older.

The majority of indicators (three out of four) that proxy household members' social norms on marrying before 18 were also positively impacted. The project positively impacted household members' personal attitudes regarding child marriage, in the sense of them understanding that 18 years or older is an appropriate age for marriage. The project also positively impacted household members' normative expectations (i.e. respondents say they think more community members would disagree with marriage before 18). Taking these proxies together, we can identify an initial indication of social norms change.

The MNCP project positively impacted household members' attitudes to gender equality, especially those of male household members and household members in Punjab.

Lastly, the evaluation found no impact of the MNCP project on action that household members have taken against specific cases of child marriage. However, indications of change in terms of broader social action are found throughout the survey and in other data sources, such as the qualitative studies.

CONCLUSIONS

In response to the main evaluation question, to what extent can changes in increased empowerment of girls regarding the decision to marry, and increased pursuit of life skills and rights in an enabling environment, be attributed to the MNCP project?, we found that the number of child marriages has significantly reduced over time. Girls have increased their knowledge on life skills and rights, such as family planning and menstruation, and perceive the road to school to be safer, thus have improved access to school. In particular, the project has had a positive impact on the life skills and rights knowledge of girls who were married before their 18th birthday. This was the project's core target group for increasing life skills and rights knowledge. Norms favouring marriage before the age of 18 seem to have become less prevalent, and community members are increasingly opposing child marriage. However, household members were not found to be taking more action against child marriage in specific situations of arranged marriages. Girls are becoming more empowered, and perceive themselves to be better able to advocate regarding decisions about their life; however, challenges remain for girls to be involved in decision-making processes on their marriage, education and economic

opportunities. Girls are not more active in terms of educational and economic opportunities, and there is a mixed picture regarding girls' perceptions on women's mobility. Given the Covid-19 pandemic, which is increasing poverty levels and causing more and more girls to drop out of school and take up additional unpaid care work, there is a fear that in the long term more girls will be forced into early marriage.

RECOMMENDATIONS

Based on the insights, experiences and results presented in this report, the following recommendations have been formulated. These recommendations specifically apply to the assessed districts Sindh and Punjab, but could also be relevant for other districts in Pakistan and for civil society sector and future programmes working on child marriage, life skills, youth empowerment and enabling environment:

- **Contextualized LSBE can be important for girls' life skills**: The roll-out of Life Skills Based Education (LSBE) according to the contextual realities can prove vital in strengthening girls' understanding of their life skills and rights. In Sindh, there was more openness to including LSBE in the existing school curricula. In Punjab, this proved more difficult, and peer-learning groups of young people out of school was the right entry point.
- **Target boys and men:** The MNCP project underscores the importance of taking a dual approach in a restrictive, patriarchal environment. It is not enough to focus solely on working with girls and women. As it is often boys and men who hold power in the household and community, it is crucial to influence their attitudes and their knowledge, for example on the adverse effects of child marriage or the importance of equal rights for girls and boys. Specifically targeting boys and men in the activities increases the decision-making space for women and girls.
- **Contextualize and explore change**: Influencing the attitudes and knowledge of girls, parents and community members involves a social and long-term change. There is a need to better understand the dynamics the project seeks to change and to define what 'success' looks like in a particular situation. For example, being able to talk openly about a sensitive topic could in itself indicate a strong positive change in a conservative community, or exploring what consultation and decision-making mean within the context.
- Invest in creating an enabling environment from the start: Although social norms change usually occurs over a long time, distinct initial shifts in norms had occurred by the end of the MNCP project. We have seen positive changes at the personal and collective level on the topics of child marriage and gender equality. The edutainment activities have created a more enabling environment among parents and community members for girls to raise their voices. Despite these positive changes, a reflection workshop with implementing partners highlighted the need to start these influencing activities at an earlier stage in the project. It takes time to influence key stakeholders, and doing so can act as a strong catalyst for other changes.
- **Combine individual and collective empowerment activities**: To increase girls' and young people's empowerment, combining focused, individual trainings such as GALS with setting up peer youth groups proved effective. Discussing personal goals and challenges with young people, alongside creating a peer network of girls who support each other, has increased girls' confidence and voice, and made them feel safer and more empowered to take action in their communities.
- Explore sustained interventions and donor commitments to respond to sudden crises and shocks: Finally, we have already seen short-term effects of the Covid-19 pandemic on girls and women, and there are many predictions about the heavier, longer-term impacts. We therefore urge donors and practitioners to <u>keep investing in girls and young women</u>, often already vulnerable groups, who will be at increased risk in the aftermath of the pandemic.

1 INTRODUCTION

The 'Marriage, No Child's Play' (MNCP) project is a Strategic Partnership project. The project is implemented by the More Than Brides Alliance (MTBA), consisting of Save the Children, Oxfam Novib, Simavi and the Population Council. The MTBA had a Strategic Partnership agreement with the Dutch Ministry of Foreign Affairs to implement the MNCP project from 2016 until the end of 2020, in five countries. Oxfam Novib was involved in project implementation in three of those countries: Mali, Niger and Pakistan. The Impact Measurement and Knowledge (IMK) team of Oxfam Novib conducted an impact evaluation study of the MNCP project in Pakistan, together with Oxfam in Pakistan and its partners Bedari, Baanh Belli and Indus Resource Centre (IRC). This report focuses on the results of the endline survey (2020) and the impact achieved by the MNCP project in Pakistan compared to baseline (2016) and midline (2018).

The report presents the findings of the endline survey for girls and household members participating in the MNCP project. Chapter 1 gives an introduction to the context of the project, the Theory of Change and the evaluation questions that we set out to answer. Chapter 2 explains the methodology, including the sample and the study limitations, and explains how the findings are presented. Chapter 3 presents the findings of the study for each sub-question. Chapter 4, the conclusion, summarizes the findings to the evaluation questions. In Chapter 5, recommendations are made for future programmes.

1.1 PROJECT CONTEXT

Child protection issues, including child marriage, have long been neglected in Pakistan. The practice of child marriage is widespread and occurs in all regions of the country, with the highest prevalence in South Punjab and the interior of Sindh. At the time of the baseline study, alarming figures emerged: 13.9% of females aged 20-24 reported having married by age 15, and 50.1% reported having married by age 18. As a consequence of child marriage, childbearing occurs early for most females in Pakistan, with 86.2% of all females aged 20-24 reporting having been pregnant or having given birth, rising to 96% among those who were married by age 15 (Population Council, 2009; MTBA, 2016). The issue of child marriage is multi-layered, spanning socio-cultural, religious, economic and legal dimensions. To be effective, measures to address it need to be multi-pronged to confront these various dimensions – an approach taken by the MNCP project. As social norms and values, including concepts of honour and tradition, are major factors in early marriage in Pakistan (Ahmad, 2016), the project interventions aimed to be comprehensive, with multiple entry points, and firmly rooted in the local context.

Since 2016, the context in Pakistan has changed in many ways; in 2018, a change of government brought a shift in policies and the legislative environment in the country. In 2018, the newly installed government initiated policy-level changes for civil society which impacted the work of many international and national NGOs, forcing 18 international aid agencies to shut down their operations and leave the country. This affected communities who were receiving life-saving help, including thousands of children and adolescent girls who were being supported to attain basic human rights, better healthcare and education, and increased economic opportunities. This was the first step towards shrinking the space for civil society in Pakistan and limiting the scope of work that can be done to support children, women and young people.

At provincial level, especially in Sindh, positive developments have been witnessed, such as the approval of the Sindh Youth Policy and the inclusion of Life Skills Based Education (LSBE) in mainstream curricula. In Punjab, following a series of brutal incidents, communities and youth demanded LSBE in schools and education on child protection and prevention of child abuse. This paved

the way for the MNCP project to empower young people on their rights, to educate them on life skills and rights using LSBE (as life skills and rights became a tabooed subject), and to claim a rights-based policy environment to advance the life skills and rights of young people. Additionally, it became easier to work with communities on life skills and rights with the support of local government and district administrations. In Sindh, positive amendments were made to the Child Marriage Bill, while in Punjab more space was created to lobby on this bill.

Covid-19 hit the country in February 2020 and the government announced a nationwide lockdown to limit its spread. In a developing country like Pakistan, with already very low indicators of socio-economic development, Covid-19 has worsened pre-existing gender inequalities and led to an increase in genderbased violence (GBV) and poverty, a decrease in school attendance, a rise in mental health stress, and temporary suspension of essential services. GBV response services became ineffective during this time, and multiple cases of violence went unreported and unaddressed. Worldwide, the pandemic has forced more than 1.5 billion students out of school. There were already 22.5 million children out of school in Pakistan before the pandemic. Girls are particularly affected. (MTBA Pakistan, 2020; HRW, 2018).

In response to the Covid-19 pandemic, the MNCP project started initiatives to support communities by distributing hygiene kits with basic amenities and medicines for use during menstruation and pregnancy. In addition, MTBA partners Bedari and Baanh Belli launched awareness-raising campaigns in Sindh and Punjab by promoting messages through radio, on rickshaws and wall murals, and by distributing information, education and communication (IEC) materials. Through these campaigns, the MNCP project highlighted the impact of Covid-19 on girls, especially regarding lack of access to education and health facilities, and how this can have lifelong negative effects. MTBA sees continued education as the key alternative pathway to delay child, early and forced marriage. However, with schools closed and poverty increasing, the risks for girls of being married off early will be enormous (MTBA Pakistan, 2020).

1.2 OBJECTIVES OF THE MNCP PROJECT

The overall objective of the MTBA programme is: young people (especially girls) are able to decide if and when to marry, and pursue their life skills and rights, in a supportive environment. To achieve this objective, the programme defined seven outcomes:

- 1. Girls are better informed about life skills and rights, including adverse effects of child marriage, and empowered to voice their needs and rights.
- 2. Increased access to formal education for girls at risk of and affected by child marriage.
- 3. Increased access to economic opportunities for girls at risk of and affected by child marriage, and their families.
- 4. Increased access to child protection systems for girls at risk of and affected by child marriage.
- 5. Increased utilization of life skills services that are responsive to the needs of girls, in particular girls at risk of and affected by child marriage.
- 6. Increased engagement and collective social action against child marriage and in support of life skills and rights.
- 7. A supportive rights-based legal and policy environment against child marriage.

The MNCP project in Pakistan focuses on Outcomes 1 and 6. Outcomes 4 and 7 are not covered by this impact measurement study.

1.3 EVALUATION QUESTIONS

The objective of this study was to determine to what extent changes in the empowerment of girls, including in their pursuit of life skills and rights, and in the attitudes and norms that create an enabling environment for girls, can be attributed¹ to the MNCP project. This objective was reached by answering the evaluation questions listed in Table 1. These reflect the focus areas of the MNCP project in Pakistan, and enabled us to identify which indicators needed to be assessed to determine whether changes in the outcome areas have occurred.

Table 1 Overview of evaluation questions

Main question:

To what extent can changes in increased empowerment of girls regarding the decision to marry, and increased pursuit of life skills and rights in an enabling environment, be attributed to the MNCP project?

To what extent did changes	To what extent did changes	To what extent did changes
occur in girls' pursuit of life	occur in girls'	occur in girls' enabling
skills and rights?	empowerment?	environment?
 To what extent did changes occur in actual marriage of girls under 18? To what extent did changes occur in girls' life skills and rights, including their knowledge of life skills and rights? To what extent did changes occur in girls' use of life skills services, and to what extent did these services become more responsive to girls' needs? 	 To what extent did changes occur in girls' voice and decision-making power, including regarding the decision to marry? To what extent did changes occur in girls' access to formal education? Does increased education of girls result in less child marriage? To what extent did changes occur in girls' economic opportunities? To what extent did changes occur in girls' empowerment? 	 To what extent did changes occur in household members' knowledge and attitudes on life skills and rights, and child marriage? To what extent did changes occur in household members' attitudes to gender equality? To what extent did changes occur in household members' norms and attitudes against child marriage and in support of life skills and rights? To what extent did the project's activities contribute to changes in people taking action against child marriage?

¹ We use the word 'attribute' as we are comparing a group of girls and household participants (the target group) to a similar group of girls and household members who did not participate in the project (the comparison group) over time. Respondents in the comparison group are assumed to provide a reasonable counterfactual – that is, they represent the situation of respondents in the target group in the absence of the project activities. By using a comparison group, we can 'isolate' the effect (or impact) of the MNCP project. That said, we recognize that behavioural change in girls and their households largely depends on their own decision to act.

2 METHODOLOGY

2.1 STUDY DESIGN

Within the MTBA programme, a large monitoring, evaluation, accountability and learning (MEAL) framework at a global and national level has been established. In the case of the MNCP project in Pakistan, MEAL and the impact studies have been closely linked and integrated throughout. This has been realized through the design of the learning agenda: a set of specific learning themes and underlying questions which were identified and then periodically evaluated by the MTBA team and partners together. We conducted specific, in-depth and mixed methods studies, which enabled us to continually refine the MNCP project's activities.

The study design uses a balanced approach combining qualitative and quantitative methods, the socalled mixed methods approach (Johnson *et al.*, 2007).² For the MNCP project, we chose a multiphase design. Please find an overview of the phases below (Figure 1). This report brings together the findings of all three surveys – baseline (MTBA, 2016), midline (MTBA, 2018b) and endline survey – and three qualitative studies (MTBA, 2018a; MTBA, 2020; MTBA, 2021a), allowing a complete and comprehensive understanding of which changes have occurred, and how these changes have occurred.

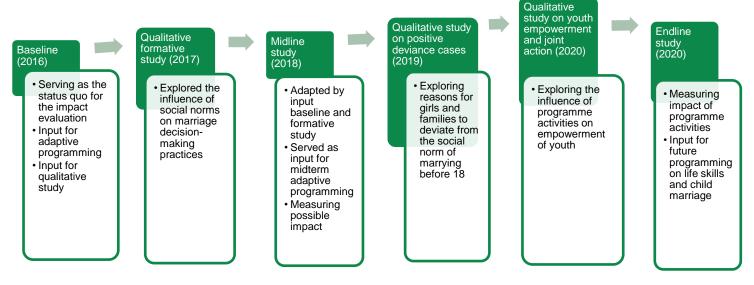


Figure 1 Overview of the phases of the mixed methods study design

The endline study is the last of three evaluations, which together contributed to the impact evaluation design of the MNCP project in Pakistan. This impact evaluation is based on a quantitative study design, focusing on two target groups: girls and the members of their households, i.e. the girls' parents. The endline survey took place in the Larkana and Shikarpur districts of Sindh, and the Muzaffargarh and

² For more information, refer to Annex 6.3

Lodhran districts of South Punjab. The exact locations can be found in Annex 6.2. Data was collected in November and entered in December 2020.

A team consisting of quantitative enumerators and volunteers from the MNCP project were trained by a study coordinator, with virtual support from Oxfam's Impact Measurement and Knowledge team. After the training, girls and household members were interviewed using a paper-based survey. The data collection was based on a scientifically sound sampling strategy designed by Oxfam (see section 2.2). The data was analysed by Oxfam's Impact Measurement and Knowledge team with statistical methods to analyse the learning questions and to measure the impact of the project interventions. Findings were contextualized with partners and Oxfam staff in a virtual reflection workshop.

2.2 OVERVIEW OF THE SAMPLE

Similar to the baseline and midline, a quasi-experimental evaluation design was planned for the endline evaluation, requiring data collection from respondents in a target group (a sample of people that participated in project activities: the 'factual') and a comparison group (a group of people similar to the target group that did not participate in project activities: the 'counterfactual'). Respondents in the comparison group are assumed to provide a reasonable counterfactual – that is, they represent what the situation of respondents in the target group would have been in the absence of project activities. See Annex 6.1 for more details on the evaluation design.

Throughout the project's duration and therefore the entire impact measurement design, the sampling population is: (married and unmarried) girls/women aged 11-24 and their respective households targeted by MNCP activities in Sindh and Punjab (the target group), and (married and unmarried) girls/women aged 11-24 and their respective households not targeted by MNCP activities in Sindh and Punjab (the comparison group).

2.2.1 SAMPLE STRATEGY

The sampling strategy for the survey has the following objectives:

- To allow meaningful comparisons between the target and comparison girls and their households.
- To maximize statistical power within reasonable costs and time effort.

See Annex 6.2 for more details on power calculations.

Bedari implemented MNCP activities in two districts in southern Punjab, and IRC (2016–2019) and Baanh Belli (2019–2020) in two districts in interior Sindh. In total, the MNCP project targeted 80 villages. For this sampling strategy, half of the villages were randomly selected, and in each of the villages the sample was proportional to the size of the village. Households were randomly selected using the 'random walk'³ method. In each household, one household member and one girl were selected for an interview. The comparison villages were randomly sampled using a list of 80 villages with similar characteristics to the 80 target villages, such as poverty levels, distance to schools/healthcare centres, and religion/customs of the community. The comparison villages are in different Union Councils than the target villages in these districts.

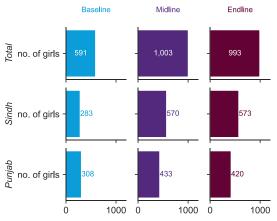
The sampling strategy for the endline was similar to that used in the midline. At midline, the sampling strategy was adapted due to the availability of renewed census information on villages and the underrepresentation of female household members in the baseline sample. Location and population did not change, as no scaling up took place. Information on village size was more accurate following the

³ The random walk method is a sampling method which allows random sampling of households in a given location. One spins a bottle or flips a coin to determine which way to walk, then selects every nth household on the walk.

census, and proportional sampling was adjusted. This increased the *intended* sample of girls and household members together, from 1,200 to 2,000. In reality, the sample used for analysis was lower, due to data collection and cleaning of the data (section 2.2.2). The sample partly consisted of 'panel data', i.e. where observations are of the same subjects each time. In other words, we interviewed some of the same people at baseline, midline and endline.

2.2.2 SAMPLE

After cleaning the data, the entire sample (baseline-midline-endline) includes 2,541 household members and 2,584 girls in the districts of Larkana and Shikarpur (Sindh), and Muzaffargarh and Lodhran (Punjab). Of all households interviewed during the endline survey, 37% had been interviewed for both the baseline and midline surveys, in 2016 and 2018 respectively; 58% of households at endline had also been interviewed at the midline, but not at baseline. Only 5% of households at endline were interviewed for the first time. In a few cases, the interview took place within the same household but with a different girl (2%). In these cases, the most frequently mentioned reason for the same girl not being interviewed again was that she had married and moved out of the household (52%).⁴



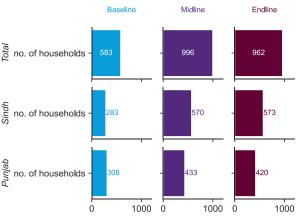
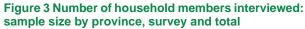


Figure 2 Number of girls interviewed: sample size by province, survey and total



2.3 LIMITATIONS

The first limitation relates to the voices that are not included in this evaluation, including those of boys. Additionally, it was difficult to ensure sufficient representation of female household members in the sample.

The second limitation is around the data collection itself. We used paper-based surveys, which are more prone to errors as they are handwritten and the data is subsequently entered into a system manually. This means we have limited control over mistakes made during data collection and entry.

The third limitation concerns the global Covid-19 pandemic. Due to the restrictions, we were not able to work with enumerators and social mobilizers as planned, and instead worked with a local study coordinator and carried out training virtually. In addition, instead of the planned three-day training, the training was only one day. This meant enumerators were less prepared than they were during the baseline and midline surveys, although some had prior knowledge due to working on the earlier surveys.

The final limitation regards delays to project activity and a change in partner in Sindh. From 2016 to 2019, IRC implemented MNCP project activities in Sindh. In 2020, these project activities – in the same communities and with the same social mobilizers – were taken over by Baanh Belli, due to government restrictions. This meant project activities were put on hold for some months. Second, at community level, project activities were put on hold for several weeks due to the Covid-19 pandemic.

⁴ This means 52% of 59 girls.

2.4 EXPLANATORY NOTE ON THE RESULTS, FIGURES AND TABLES

The next chapter presents the main findings⁵ of the study. The MNCP project was judged to have made a significant impact on an outcome indicator if the change observed among the project participants (target group), from the baseline to the endline, was of a higher magnitude than the changes observed among non-participants (comparison group). Generally, positive impact means that project participants experienced a higher increase in a certain indicator, e.g. level of knowledge on family planning, than non-participants. Negative impact means that the change for non-participants was larger than the change for participants. A negative impact is often, but not always, associated with a decrease in the level of a certain indicator. It could also indicate that a positive change is higher for non-participants, resulting in a negative impact for participants. When the report mentions a significant impact, it means that the difference between project participants and non-participants in that outcome indicator (between the baseline and the endline) was statistically significant at a confidence level of 95%. This means that if the survey were re-run 20 times, we would find that the project had an impact for 19 of those 20 times. In short, a significant impact means that we have enough statistical evidence to believe that a change in an outcome indicator was entirely due to the MNCP project activities.⁶ We do not discuss any impact in this report that was not statistically significant. Hence, if the text does not mention a change, i.e. impact, it means that we did not find a statistically significant change at a confidence level of 95%.

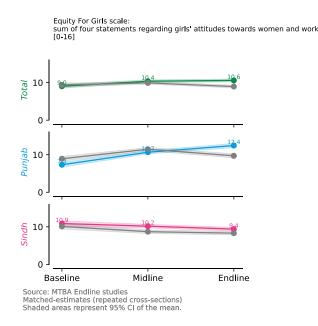


Figure 4 Example of graph shown in this report

Most figures in this report visualize the (impact) results as line or bar graphs that show the average response to a given question by respondents in the baseline, midline and endline studies, or the proportion of respondents answering a question in a certain way in these three surveys. Figure 4 (left) is an example of such a graph.

Because the data is based on responses from a sample of the people in the baseline, midline and endline studies, the results were subject to a degree of sampling error. These errors are visualized with a confidence interval in most figures, representing the range of the estimate at a confidence level of 95%. In the graphs, the confidence interval is depicted as the shaded area under and above the straight lines. Coloured lines and shaded areas represent the target group; grey lines and shaded areas represent the comparison group. As a general

rule of thumb, if the confidence intervals of two estimates overlap, then it is likely that there is no

⁵ Please note that the sample size for each outcome indicator can be different from the sample size mentioned in section 2.2. This could be due to one or both of the following reasons: respondents did not answer the question(s) related to that outcome indicator, or respondents answered 'I don't know'.

⁶ It is worth noting that in some cases, the outcome indicator might not have changed among project participants, but we still may find a significant impact. This can be the case when we observed a negative change in the group of non-participants, but the project helped to maintain an outcome indicator at the same level or helped to reduce a negative trend in the political and socio-economic context.

statistically significant difference between the estimates. If the confidence intervals do not overlap, then there is a statistically significant difference between the estimates. However, there are exceptions to this general rule, and readers are encouraged to rely on the report text and summary tables for definitive results regarding which comparisons or associations were statistically significant and which were not.

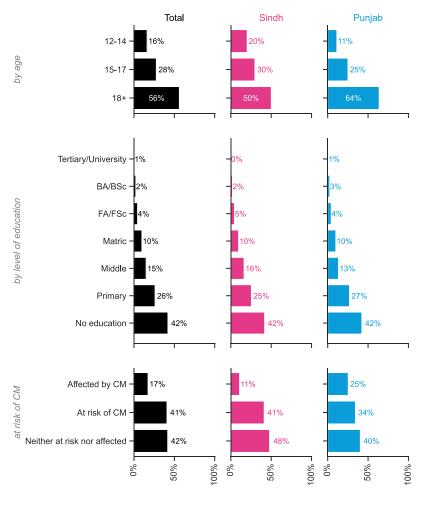
In the following chapter, summary tables are given for each section on the findings. These tables present the results of a number of separate analyses. Most of these specific analyses are described in the text, but the tables provide an overview of all the analyses performed for this report. In these tables, the equal sign (=) means that there is no significant difference or result to report. A plus sign (+) means that there is a significant and positive relationship. A minus sign (-) means that there is a significant and negative relationship. We present results for both the 'long term' (i.e. baseline to endline) and the 'short term' (midline to endline), as partners' reflections on the baseline to midline results meant that some of the MNCP project activities were adapted and additional indicators added. Additionally, we have explored potential initial effects of the Covid-19 pandemic.

In addition to the analysis focusing on 'sign' of impact (i.e. positive, negative or no effects), we have calculated effect sizes. This additional analysis, from which results can be found in Annex 6.1, estimates the magnitude of effects of the MNCP project. Both analyses estimate similar trends and directions of impact. Significance levels and corresponding conclusions can however slightly differ based on analysis method used. Results in the main body of this report focus on sign of impact.

Lastly, in some figures a disaggregation is made related to girls' age and marital status. Girls 'affected by child marriage' (CM) are those who married before the age of 18. Girls 'at risk of child marriage' are those who are not married and are below the age of 18. Girls 'neither at risk of nor affected by child marriage' are those who are 18 years or older and not married, and those who are 18 or older and married after the age of 18.

3 PROJECT IMPACT

This chapter presents the results from the endline study, using both the endline study findings and the findings of all four qualitative studies. Can we say that the lives and women and girls have changed due to participating in the MNCP project activities, and can we understand how these changes occurred? First, we look at the girls (3.1) and household members (3.2) targeted by the MNCP project activities: who they are, and their characteristics. Second, we explore the results of five years of the MNCP project in Pakistan, focusing on the life skills and rights of girls (3.3), the empowerment of girls (3.4) and their enabling environment (3.5).



3.1 CHARACTERISTICS OF INTERVIEWED GIRLS

As explained in section 2.2.2 on sampling, we interviewed 993 girls for the endline study. Figure 5 depicts the key sociodemographics of all airls interviewed at baseline, midline and endline. The majority (56%) of girls interviewed were 18 years or older, followed by the group aged 15-17 (28%) and 12-14 years (16%). In Sindh, slightly more younger girls were interviewed than in Punjab. The majority of girls in both Sindh and Punjab had attained some level of education (58%), while 42% of girls had not received any education.

On average, 17% of the girls were married before the age of 18 (affected by child marriage). Girls at risk of child marriage (younger than 18 and not married), or neither at risk of (older than 18 and not married) nor affected (older than 18 and married after the age of 18) by child marriage, account for 41% and 42%, respectively, of the girls interviewed.

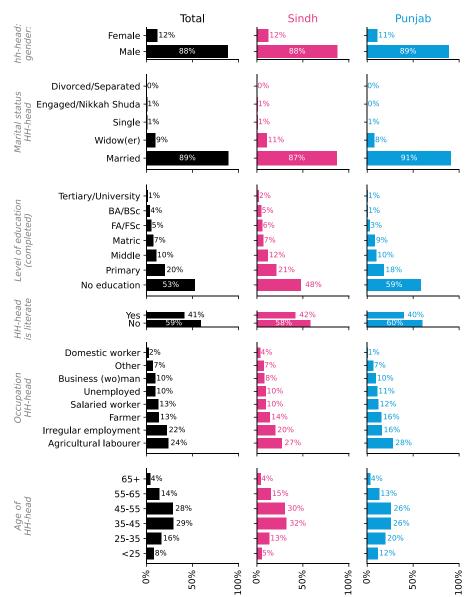
Source: MTBA Endline studies n total=2553 girls (baseline+midline+endline).

Figure 5 Girls' characteristics: age category, level of education, and risk of child marriage (total and by province)

3.2 CHARACTERISTICS OF INTERVIEWED HOUSEHOLD MEMBERS

Figure 6 depicts key socio-demographic characteristics of the household respondents at baseline, midline and endline. One out of eight household respondents were female – they could be a female head of household (often a widow) or the spouse of the household head. The majority (89%) of the

household respondents were married, and 9% widowed were (corresponds with the female interviewees). 59% of the household respondents were illiterate and one out of 10 household respondents were unemployed. Most household respondents were employed in the agricultural sector, either as agricultural labourers or as irregular employees (it is likely that irregular employment is linked to seasonal work such as harvesting). About one in eight household respondents selfidentified as being а farmer. The majority of household respondents were either 45-55 or 35-45 years old.



Source: MTBA Endline studies n total=2534 households (baseline+midline+endline).

Figure 6 Socio-demographic characteristics of household members: gender, marital status, level of education, literacy, occupation and age category (total and by province)

On average, a household consists of six people (Figure 7). In Punjab, the households interviewed are slightly smaller than the households interviewed in Sindh. Overall, the household literacy rate, meaning the percentage of household members aged 16 and above who are able to read and write,

is 46%.⁷ This means that on average, in each household, a little less than half of the adults are literate. There are also households in which no one is literate, and households in which everyone is literate.

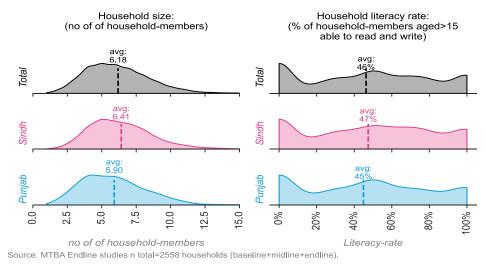
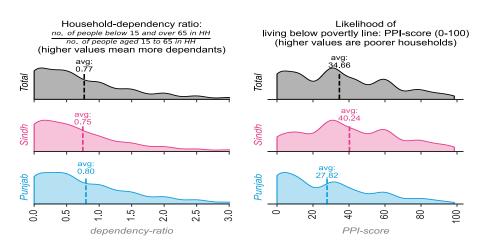


Figure 7 Socio-demographic characteristics of households: household size and household literacy rates

On average, the household dependency ratio is 77% (Figure 8). For example, if a household consists of seven people, three household members would be unable to work to earn an income due to being younger than 15 or older than 65, and four household members would be of working age (regardless of their education or gender norms restricting their ability to work). In this example, the household has more members in the age group generally considered to be economically active than members who are dependent on those of working age. Looking at the Poverty Probability Index (PPI) score (depicted on the right in Figure 8), households in Sindh are slightly poorer than households in Punjab. On average, 34.7% of interviewed households were likely to be categorized as living below the poverty line, i.e. with a household income of less than 320 Pakistani rupees (\$2) a day.



Source: MTBA Endline studies n total=2587 households (baseline+midline+endline). Below poverty line is incomes of <\$2 a day

Figure 8 Socio-economic characteristics of households: household dependency ratio and Poverty Probability Index (PPI) score

⁷ Note that this percentage differs from the literacy rate presented in the previous figure. In Figure 6, we include the literacy rate for household *respondents*. Here we include the average literacy rate for *all* household members above 15 years old.

3.3 TO WHAT EXTENT DID CHANGES OCCUR IN GIRLS' PURSUIT OF LIFE SKILLS AND RIGHTS?

When girls marry young, they are denied the ability to make critical choices about their future, and are thus denied their basic life skills and rights. Child marriage is a significant contributor to poor life skills and rights outcomes for girls, with impacts which can follow them into adulthood and motherhood, and which can affect the wellbeing of their own children (GNB, 2018). The MTBA programme in Pakistan aims to influence households and girls to marry after the age of 18, by (Outcome 1) ensuring that girls understand their life skills and rights, and (Outcome 5) ensuring that life skills services are responsive to their needs. The MNCP project contributes to these objectives by: i) giving trainings on life skills; ii) raising awareness of the negative effects of child marriage and early childbearing; iii) organizing life skills and rights and gender trainings for both women and girls, and men and boys; iv) working together with Lady Health Workers⁸ and doctors; v) providing training for staff in healthcare facilities; and vi) influencing The Child Marriage Restraint Act at provincial level on raising the legal age of marriage.

This section focuses on the impact of the MNCP project activities on the life skills and rights of girls. We aimed to answer the following questions:

- To what extent did changes occur in actual marriage of girls under 18?
- To what extent did changes occur in girls' life skills and rights, including their knowledge of life skills and rights?
- To what extent did changes occur in girls' use of life skills services, and to what extent did these services become more responsive to girls' needs?

Table 2 below shows the MNCP project's long-term (baseline to endline) and short-term (midline to endline) impacts on girls' life skills and rights indicators. Generally, the MNCP project significantly reduced the number of child marriages, especially in the short term.

In terms of girls' knowledge on life skills and rights, the project had a positive impact on girls' knowledge of menstruation, the time of the month when conception is most likely and birth control methods. The impact was especially high for girls who are affected by child marriage; this was the project's core target group for increased life skills and rights knowledge.

In the long term (baseline to endline), the project had a positive impact on girls' knowledge on marriage (i.e. knowing the legal minimum age of marriage and the adverse effects of marrying before the legal age), especially in Punjab and especially for girls affected by child marriage. However, between midline and endline, a negative impact on girls' knowledge on marriage was found in Sindh as the decrease in knowledge was steeper for the girls participating in the project compared to the girls not participating.

On life skills services, we did not compare data between baseline and midline, as we did not explicitly ask about girls' use of life skills services at baseline. Between midline and endline, no impact was found. This is also the case for perceived responsiveness of life skills services to girls' needs. This could potentially be explained by the Covid-19 pandemic, as the lockdown and restrictions to mobility made it difficult, if not impossible, to access all kinds of services.

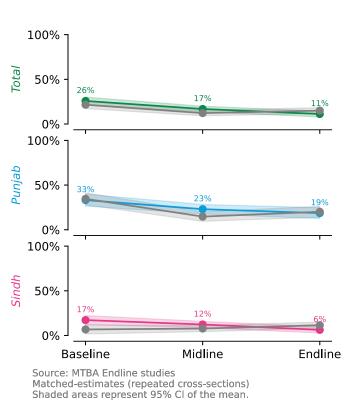
⁸ Lady Health Workers are nurses who live and work in the communities, and who make house visits to girls and women.

Concept			Total		Sindh		Punjab		Girls at risk of CM		Girls affected by CM		ither at of nor d by CM
	Indicator	Long term (Baseline-Endline)	Short term (Midline-Endline)										
Marriage	% of girls who married before 18 years old	-	-	-	-	=	-	na	na	na	na	na	na
	% of girls who have heard of birth control methods and who know about diseases	+	+	=	=	+	+	na	na	+	+	=	+
Knowledge on family planning	% of girls (14 years and older) with basic knowledge on menstruation	+	+	+	+	=	=	na	na	+	+	=	=
	% of girls (14 years and older) who know when they are most likely to get pregnant	+	=	=	=	+	=	na	na	+	+	=	=
Knowledge on	% girls who know and can tell the legal minimum age of marriage	+	=	=	-	+	+	=	=	+	=	=	=
marriage	% of girls who can name at least THREE adverse effects of marriage before the legal minimum age of marriage	+	-	=	-	+	=	+	-	=	=	=	-
Use of life skills services	% of girls who use life skills services	no data	=	no data	=	no data	=	no data	no data	no data	=	no data	-
Responsiveness of life skills services	The extent to which life skills services were responsive to the needs of girls [1 is not at all responsive; 5 is very responsive]	=	=	=	=	=	=	na	na	=	=	=	=

Table 2 Summary table of the MNCP project's impacts on girls' life skills and rights⁹

⁹ The table shows difference-in-difference estimates. An equal sign (=) means that there is no significant difference or result to report. A plus sign (+) means that there is a significant and positive relationship. A minus sign (-) means that there is a significant and negative relationship. In these cases, we can say that the MNCP project activities have had a significant impact on the indicator measured.

TO WHAT EXTENT DID CHANGES OCCUR IN ACTUAL MARRIAGE OF GIRLS UNDER 18?



% of girls married before 18 years old

From baseline to endline, there was a decline in the percentage of girls who married before their 18th birthday. At baseline, 26% of the girls were married before 18; at endline, this had declined to 11%. As the decline was steeper for girls participating in the project than for non-participating girls, this decline can be seen as an impact of the MNCP project.

Child marriage declined in both provinces, although this can only be considered an impact of the MNCP project in Punjab. However, on average, the percentage of girls who married before 18 was higher in Punjab than in Sindh. This might be explained by the difference in the legal age of marriage, which is 18 in Sindh and 16 in Punjab.

Figure 9 Girls have lower levels of marriage before 18

Even though the downward trend seems to predict a continuing decrease in the number of girls who marry before their 18th birthday, it is important to emphasize the potential effects of Covid-19 on the lives of girls. UNFPA (2020) predicted an additional 13 million child marriages worldwide as a result of the pandemic. In the endline survey, 42% of girls in Punjab and 30% of girls in Sindh agreed that women and girls were at increased risk of being married off during the Covid-19 lockdown.¹⁰

TO WHAT EXTENT DID CHANGES OCCUR IN GIRLS' LIFE SKILLS AND RIGHTS, INCLUDING THEIR KNOWLEDGE OF LIFE SKILLS AND RIGHTS?

One of the core objectives of the MNCP project is to ensure that girls understand their life skills and rights. To help reach this goal, partners implemented Life Skills Based Education (LSBE) to enhance girls' understanding of life skills and rights and issues of child, early and forced marriage (CEFM). In Sindh, this involved engaging female teachers in government schools, which led to improvements in girls' autonomy and agency to understand their life skills needs and rights. In Punjab, the project implemented peer-to-peer learning and sharing mechanisms. With the help of schoolteachers, peer educators and young female leaders, more than 15,000 girls participated in LSBE in Punjab and Sindh.

¹⁰ To read more about the short-term impact of Covid-19 on adolescent girls and young women in Pakistan, please refer to this thematic paper: MTBA, (2021b).

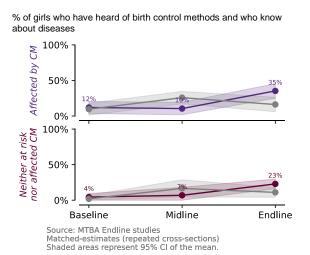
Disseminating life skills and rights information through LSBE was a challenging task, particularly at the start of the project. life skills and rights was seen as a subject that shouldn't be taught to young people, and changing the mindset around life skills and rights at community level was a real challenge. Initially, men did not approve of the life skills and rights sessions for women and girls. The project therefore organized life skills and rights sessions and gender trainings for men, to encourage their approval of women and girls' participation in the sessions. In our experience, young people can only have access to quality life skills and rights information if there are persistent efforts to change social norms, and parents and community elders are sufficiently sensitized to allow



Photo 1: LSBE session. Photo credit: Bedari

% of girls (14 yrs and older) with basic knowledge

young people to access and use this information. In 2018 and 2019, the government demanded national and international NGOs to redesign interventions and the contents of modules had to be adapted. Certain terms could not be used, and sensitive topics such as miscarriage or pregnancy out of wedlock had to be avoided. As a result, interventions were restricted to talking about puberty, menstruation and pregnancy. These are therefore the indicators which were measured in the survey.



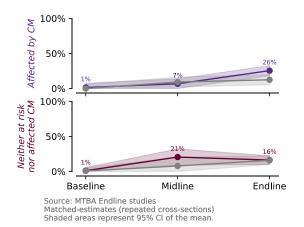
Neither at risk nor affected CM Affected by CM 50% 0% 100% 50% 0% Endline Baseline Midline Source: MTBA Endline studies Matched-estimates (repeated cross-sections) Shaded areas represent 95% CI of the mean.

on menstruation

100%

Figure 10 Participating girls have higher levels of knowledge on birth control methods compared to non-participating girls, especially girls who married before their 18th birthday

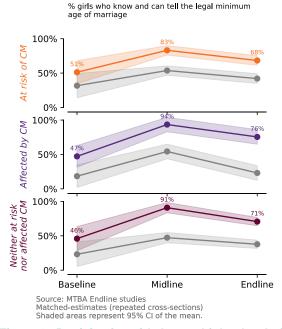
Figure 11 Participating girls who married before their 18th birthday have a higher level of knowledge on menstruation compared to nonparticipating girls



% of girls (14 yrs and older) who know when they are most likely to get pregnant

Figure 12 Participating girls have higher levels of knowledge regarding the most likely time for conception compared to non-participating girls

Figure 10 Participating girls have higher levels of knowledge on birth control methods compared to especially girls who non-participating girls, before their 18th married to Figure 12 Participating girls have higher levels of knowledge regarding the most likely time for conception compared to non-participating girls show the changes in girls' knowledge on birth control methods. menstruation and conception. respectively.¹¹ For girls participating in the MNCP project, especially girls in Punjab and girls who married before they turned 18, the project activities have positively impacted their knowledge on birth control methods and conception. The MNCP project also positively impacted knowledge on menstruation, especially in Sindh and for girls affected by child marriage.



% of girls who can name at least THREE adverse effects of marriage before the legal minimum age of marriage

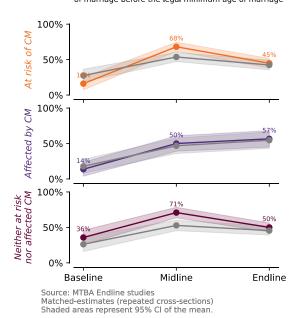


Figure 13 Participating girls have a higher level of knowledge on the legal age of marriage, especially in Punjab, compared to nonparticipating girls

Figure 14 Participating girls have a higher level of knowledge on adverse effects of early marriage, especially in Punjab, compared to nonparticipating girls

Figure 13 and Figure 14 show girls' knowledge of the legal age of marriage, and the adverse effects of marrying before the legal age, respectively. The legal age of marriage is 16 in Punjab and 18 in Sindh. The MNCP project has positively and significantly impacted girls' knowledge on the legal age for marriage, and girls' knowledge on the adverse effects of early marriage.

¹¹ These questions were only asked of girls who were married or had ever been married, and who were 14 years or older. Therefore, the group of girls 'at risk of child marriage' (younger than 18 and not yet married) is not included in these figures.

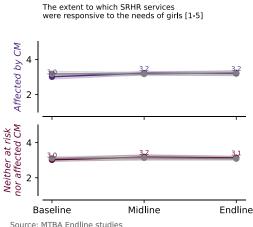
MNCP project: As well as young unmarried and married girls, many elderly women, especially mothers and mothers-in-law, participated in life skills and rights sessions and shared their life experiences to educate girls. Through these sessions with Lady Health Workers and women from all age groups, we succeeded in developing a supportive community of women and girls who were eager to help each other with their life skills needs (MTBA Pakistan, 2020).



Photo 2: Women's session. Photo credit: Bedari

TO WHAT EXTENT DID CHANGES OCCUR IN GIRLS' USE OF LIFE SKILLS SERVICES, AND TO WHAT EXTENT DID THESE SERVICES BECOME MORE RESPONSIVE TO GIRLS' NEEDS?

Often girls either do not know about life skills services, cannot access them due to distance or norms, or do not find them safe to use. To ensure that girls are able to fulfil their life skills needs, as well as ensuring they understand their life skills and rights, access to life skills services must be provided and safeguarded. The MNCP project aimed to raise awareness of life skills services by working with Lady Health Workers (LHWs) and doctors. MNCP project: While working on life skills and rights information, we focused on improving life skills services by engaging doctors and Lady Health Workers. Their involvement enabled us to educate communities about life skills and rights issues and we saw that community members were comfortable speaking to them about their personal issues. Our engagement with 107 doctors and Lady Health Workers helped us declare 49 healthcare facilities as youth friendly, where young people could comfortably go and access doctors/LHWs and discuss their life skills related needs and issues (MTBA Pakistan, 2020).



Source: MTBA Endline studies Matched-estimates (repeated cross-sections) Shaded areas represent 95% Cl of the mean.

Figure 15 Participating and non-participating girls similarly perceive the life skills services as responsive to their needs At endline, 72% of girls affected by child marriage and 56% of girls neither affected by or at risk of child marriage reported making use of life skills services. These services could, for instance, be a visit to a Lady Health Worker or doctor, or to healthcare facilities based in the districts.

From baseline to endline, we did not find an increase in girls' perceptions of life skills services as responsive to their needs (Figure 15).¹² Regardless of their marital status, girls rated the life skills services neutrally. Given the girls' views on responsiveness (which is neutral) compared to the high use of life skills services, it could be worthwhile to explore the efficacy of these life skills services.

¹² This question was only asked of girls who are married or have ever been married. Therefore, the group of girls 'at risk of child marriage' (younger than 18 and not yet married) is not included in this figure.

3.4 TO WHAT EXTENT DID CHANGES OCCUR IN GIRLS' EMPOWERMENT?

The second aim of the MNCP project in Pakistan is to increase girls' empowerment. By strengthening girls' empowerment, the MTBA programme aims to ensure that (Outcome 1) girls are empowered to voice their needs and rights, and therefore can take decisions on their own lives. Additionally, MTBA aims to ensure that girls have access to viable alternatives to child marriage: girls have (Outcome 2) increased access to formal education and (Outcome 3) increased access to economic opportunities. The MNCP project works towards this by: i) providing trainings in negotiation and leadership skills; ii) holding gender-awareness trainings on the importance of education; iii) putting on edutainment theatre, which highlights the need for and the right of girls to be involved in the decision-making process around decisions affecting their lives; iv) organizing GALS trainings; v) training teachers and peer educators; vi) distributing bicycles to girls to increase their mobility and safety on the way to school; vii) linking girls to income-generating opportunities; and viii) giving financial literacy and vocational trainings.



Photo 3: GALS group. Photo credit: Bedari

The GALS methodology is implemented through groups of young women and men (aged 15-24) that work together towards their personal and economic development and the expansion of such groups. Representatives of these groups were trained on life skills and rights, Life Based Skills Education and comprehensive sex education. They also learned peer education approaches and facilitation skills to enable 'cascade' information sharing among their peers.

This section focuses on the impact of the MNCP project activities on girls' empowerment. We aimed to answer the following questions:

- To what extent did changes occur in girls' voice and decision-making power, including regarding the decision to marry?
- To what extent did changes occur in girls' access to formal education?
- Does increased education of girls result in less child marriage?
- To what extent did changes occur in girls' economic opportunities?
- To what extent did changes occur in girls' perceived empowerment?

Table 3 below shows the MNCP project's long-term (baseline to endline) and short-term (midline to endline) impacts on girls' empowerment indicators. Most of the indicators on decision-making on marriage were added at midline; hence we can only look at short-term impacts

In general, we found no short-term impact on the extent of girls' involvement in decisions about their marriage (ranging from not having been part of the decision-making process to having agreed on the proposal), although in Sindh the impact is negative (non-participating girls experienced a higher increase in involvement over time than participating girls) and in Punjab it is positive (involvement in decision-making decreased for both participating as well as non-participating girls, but the decrease was larger for non-participating girls). In the general model, these impacts balance each other out, meaning that on average the change over time for girls participating in the project was similar to the change for non-participating girls. An overall positive impact is found for girls being consulted on (i.e. being informed about) the marriage, and having the freedom to accept or reject the marriage, especially in Punjab. This means that participating girls experienced a higher increase in being informed and being allowed to accept or reject the marriage proposal compared to non-participating girls. A short-term

impact is seen in a reduced number of married girls who hadn't wanted their marriage to take place when it did, meaning more participating girls acknowledged that they did not wanted to get married at the time. This result is significant for girls living in Sindh but not for girls in Punjab.

All indicators for decision-making on family planning were positively impacted in the short term, especially in Punjab. Regarding girls' decision-making in general, the project had a positive short-term impact in Punjab and a negative short-term impact in Sindh. In general, the short-term impact was significant.

In Punjab, from midline to endline the MNCP project has positively impacted girls' perceived ability to influence decisions, i.e. advocacy, on education, work and marriage, whereas in Sindh the short-term impact was negative. This means that in Punjab girls' level of ability to influence decisions increased for participating girls, while it decreased for non-participating girls. In Sindh, girls' level of ability to influence decisions slightly decreased from midline to endline for both participating as well as non-participating girls, but this decrease was larger for the former group).

From baseline to endline, there was an increase in the percentage of girls who had completed primary school (50% to 58%). We found no positive impact of the MNCP project on primary school completion, as a similar increase was seen for girls not participating in the MNCP project activities. Taking into account the fact that completion of primary or secondary education usually takes four years, and the five-year timespan of the MNCP project, it is too early to see any effects on girls' school completion. However, results on attendance have been explored and it is found that the MNCP project had a positive impact on girls' attendance of middle school. There was no impact on whether girls perceived their school environment as safe, but we did find a positive (short-term) impact of the MNCP project on perceived safety on the road to school.

A key assumption of the MNCP project is that if girls attend school, then they are less likely to be married before the age of 18. Evidence has found that, in general, the higher the level of education, the lower the probability of child marriage.

In terms of financial independence and literacy, the project made a positive impact on most of these indicators in both the long term and short term, especially in Punjab. The MNCP project positively impacted girls' contribution to total household income. We found no impact of the project on girls having an occupation and on whether or not girls are involved in unpaid care work.

Attitudes to gender equality are proxied by two indicators, which each combine several statements. Overall, the project seems to have had a positive impact on attitudes to gender equality, especially in the short term and especially in Punjab.

Lastly, regarding women's empowerment, the MNCP project had a positive impact on girls' selfassessed level of self-esteem and on girls' perceptions about whether they can change things in the community, especially in Punjab. In Sindh, girls' perceptions on women's mobility were positively impacted by the MNCP project, while in Punjab the impact was negative.

Table 3 Summary table of the MNCP project's impacts on girls' empowerment¹³

			Total		Sindh		Punjab		Girls at risk of CM		ffected CM	Girls neither at risk of nor affected by CM	
Concept	Indicator	Long term (Baseline-Endline)	Short term (Midline-Endline)	Long term (Baseline-Endline)	Short term (Midline-Endline)								
	Extent of girls' involvement in the decision about their marriage [1 (not part of decision making process) – 4 (having agreed on the proposal)]	no data	=	no data	-	no data	+	no data	no data	no data	+	no data	-
Decision-	% of girls who are consulted on their marriage	+	+	=	=	+	+	no data	no data	++	+	++	=
making on marriage	% of girls who could accept or reject their marriage	no data	+	no data	=	no data	+	no data	no data	no data	+	no data	=
manage	% of girls who are married who didn't want to get married at that time, who wanted to get married later, or who didn't know how to feel about the marriage at that time	no data	-	no data	-	no data	=	no data	no data	no data	-	no data	-
	% of girls who decide themselves or together with their husband on the method of family planning	+	+	=	=	+	+	no data	no data	=	=	=	=
Decision-	% of girls who can advocate for themselves on decisions about childbearing	no data	+	no data	=	no data	+	no data	no data	no data	+	no data	=
making on family planning	% of married girls with children who wanted to get pregnant at that time	=	+	=	=	=	=	no data	no data	=	=	=	+
pianning	Statement (answered by girls) on whether a woman should have a say in decisions around childbearing [1 strongly disagree; 5 strongly agree]	no data	+	no data	=	no data	+	no data	no data	no data	+	no data	=
Decision- making in general	% of girls who feel they can advocate for themselves (regarding education, work and marriage)	no data	+	no data	-	no data	+	no data	=	no data	+	no data	+

¹³ The table shows difference-in-difference estimates. An equal sign (=) means that there is no significant difference or result to report. A plus sign (+) means that there is a significant and positive relationship. A minus sign (-) means that there is a significant and negative relationship. In these cases, we can say that the MNCP project activities have had a significant impact on the indicator measured.

Attitudes to gender equality	Equity for Girls scale; sum of four statements regarding girls' attitudes towards women and work [0-16]	+	+	=	=	+	+	+	+	=	=	+	=
	Rights and privileges of men scale; sum of nine statements regarding girls' attitudes towards male privilege [0-32]	=	+	-	-	+	+	=	=	+	+	=	=
Educational	% of girls attending school or who had ever attended school (formal)	=	=	=	=	=	=	=	=	=	=	=	=
level	% of girls who completed primary school (formal)	=	=	=	=	=	=	=	=	=	=	=	=
	% of girls who completed middle school (formal)	=	=	=	=	=	=	-	=	=	=	=	=
Safety at	% of girls who find their school environment safe	=	=	=	=	=	=	=	=	no data	no data	=	+
school	% of girls who find the road to school safe	no data	+	no data	+	no data	+	no data	+	no data	no data	no data	=
	% of girls who receive personal allowance or cash	=	+	=	=	=	+	+	+	=	=	=	+
Financial independence	Girls' basic financial literacy level [0 correct answers; 3 correct answers]	+	+	+	=	+	+	=	=	-	=	=	+
and literacy	Girls' level of financial awareness [1 low awareness; 5 high awareness]	+	+	=	=	+	+	=	+	+	+	=	+
	% of girls who have an occupation	Π	=	=	I	=	I	-	=	=	+	=	+
	% of girls who contribute to total household income	+	+	+	=	+	+	=	=	=	=	=	+
Economic participation	% of girls with an occupation and who contribute to total household income	=	=	+	=	=	+	=	=	=	=	+	+
	% of girls doing unpaid care work	no data	=	no data	=								
Women empowerment	Statement (answered by girls) on whether they perceive themselves as someone with high self- esteem [1 strongly disagree; 5 strongly agree]	+	+	=	=	+	+	+	=	=	=	+	+
	Statement (answered by girls) on whether people like them can generally change things in the community if they want to [1 not at all; 5 very easily]	+	+	=	=	+	+	+	=	=	=	=	+
	Girls' perceptions on women's mobility [1 strongly disagree; 5 strongly agree]	=	-	+	+	-	-	=	-	=	=	=	-

TO WHAT EXTENT DID CHANGES OCCUR IN GIRLS' VOICE AND DECISION-MAKING POWER, INCLUDING REGARDING THE DECISION TO MARRY?

One of the core objectives of the MNCP project is to ensure that girls are able to make decisions regarding their own lives. In this subsection, we focus on the decisions regarding girls' marriage and family planning. We look at whether girls are being consulted or are able to give their consent in these decisions, as a result of the MNCP project. From the qualitative study and the midline reflection in 2018, the project learned about the influence of both women and men regarding decision-making, and the need to include men as well as women in awareness and training sessions. Therefore, the project interventions included gender and life skills and rights training sessions for both men and women, and awareness-raising through edutainment activities such as theatre or rickshaw campaigns.



Photo 4: Rickshaw campaign. Photo credit: Bedari

Formative study to understand decision-making processes

To maximize the effectiveness of its interventions, the MCNP project sought to understand the process of decision-making around marriage practices. Through a qualitative formative study (MTBA, 2018a), we gained first-hand insights into the norms at play in communities, by asking girls, boys and parents to respond to and reflect on fictional stories (vignettes) about a girl who got married at a young age. As well as obtaining insights into which individuals were key players in setting norms (reference people) and through which norms were kept in place by positive or negative sanctions (e.g. being gossiped about or shunned for ignoring a norm, or increasing your status by following a norm), we gained a greater understanding of the role of girls, father and mothers in decision-making around marriage practices. The MNCP project had assumed that fathers made the final decision and steered the full process leading up to the decision. However, the formative research highlighted the nuances, in particular the role of mothers, who – often behind the scenes – played a key role in brokering relations between families and setting up an engagement. As such, mothers could play a strong role in influencing the age at which their daughters married. These findings were integrated into edutainment scripts, to reflect the role of the mother and to encourage mothers to act to prevent early marriage.

Overall, we found that the MNCP project had a positive impact on girls being consulted on their marriage (Figure 16 Participating girls have higher levels of consultation on their marriage compared to non-participating girls). Discussions with implementing partner organizations revealed that this *consultation* mostly refers to *informing*, hence there was a positive impact on girls being informed about their marriage. In Sindh, for both participating and non-participating girls we see an increasing trend in girls being informed about the decision, from 35% to 61% from baseline to endline. In Punjab, for non-participating girls there is a declining trend from midline onwards, indicating a positive impact of the MNCP project on participating girls in the short term. Regarding girls' consent to marriage, we can see that girls who participated in MNCP project activities were more likely to have the freedom to accept or reject the marriage (Figure 17). This is especially the case for Punjab.

% of girls who are consulted on the marriage

% of girls that could accept or reject the marriage

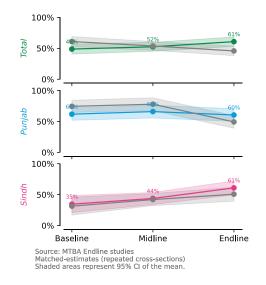
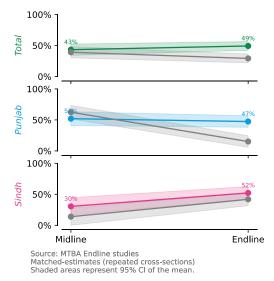


Figure 16 Participating girls have higher levels of consultation on their marriage compared to non-participating girls





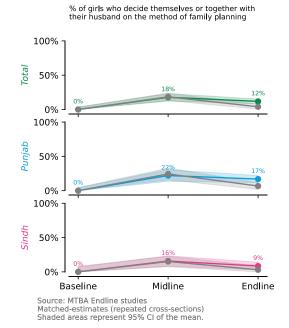
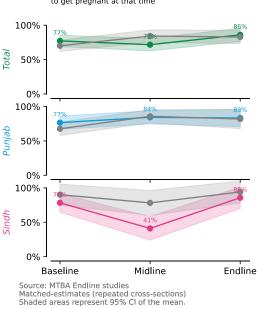


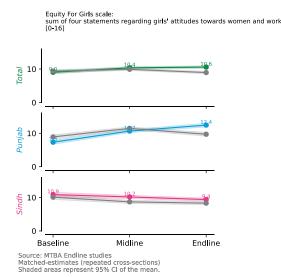
Figure 18 Participating girls have higher ability to decide (alone or with husband) the method of family planning compared to non-participating girls

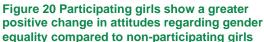




% of married girls with children that wanted to get pregnant at that time

Regarding family planning,¹⁴ from baseline to endline the MNCP project positively impacted girls' ability to decide on family planning methods alone or together with their partner (Figure 18). At endline, on average 12% of girls who were married or had ever been married reported making the decision on family planning methods either together with their partner or by themselves. Figure 19 shows the number of girls (with children) that reported consenting to becoming pregnant. In general, we did not find that the MNCP project has had an impact on girls consenting to pregnancy, but we can see an overall upward trend in consent levels, from 72% girls at baseline to 86% girls at endline.





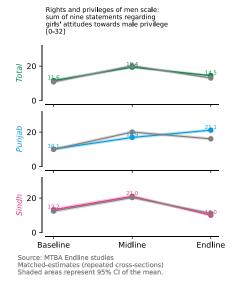
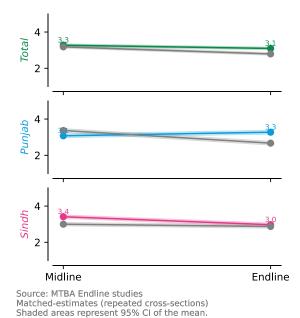


Figure 21 Participating girls show a greater positive change in attitudes regarding gender equality compared to non-participating girls

MNCP project activities included gender and rights sessions for girls, to raise their awareness regarding gender equality. To measure change in girls' attitudes regarding gender equality, we asked girls for their response to a number of statements regarding education, decisions in the household, division of household work and burden, roles of men and women, economic participation, and children. From these statements, an 'Equity for Girls' scale was developed. Over time, the MNCP project positively impacted girls' attitudes on gender equality, especially in the short term (midline to endline) and especially in Punjab (Figure 20 and Figure 21).

¹⁴ These questions were only asked of girls who were married or had ever been married.

Girls who feel they can advocate for themselves (when it comes to education, work, and marriage) [1-5]



In Punjab, from midline to endline the MNCP project positively impacted girls' perceptions of their levels of ability to influence decisions, i.e. advocacy, on education, work and marriage, whereas in Sindh this short-term impact was negative (Figure 22). On a scale from 1-5, at endline girls rated their own ability to influence decisions to be 3.1, on average.

Figure 22 Participating and non-participating girls have similar self-reported levels of advocacy

TO WHAT EXTENT DID CHANGES OCCUR IN GIRLS' ACCESS TO FORMAL EDUCATION?

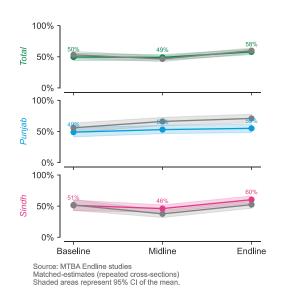
As explained above, the MNCP project aims to ensure viable alternatives to child marriage for girls, including access to education. The project advocated for girl's education and aimed to persuade parents to send girls to school instead of marrying them off at an early age. One major challenge is the absence of educational infrastructure (particularly secondary schools) – especially in Sindh, where communities are spread over large areas. There were many villages in the project area where parents had no choice regarding education because their village has no formal school or vocational centre. In some villages, the nearest school is up to 7km away.

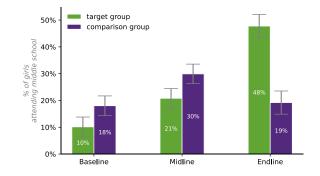


Photo 5 Girls with bicycles distributed by the project. Photo credit: W. Durani

Safe, appropriate ways for girls to reach school were not available, due to the absence of public transport and limited financial resources to pay for private transport. Where mobility was the only factor preventing girls going to school, the project distributed 220 bicycles among girls in Sindh and Punjab, so they could cycle to school every day. However, there are hundreds of girls who want to go to school and need support to overcome their mobility challenges (MTBA Pakistan, 2020).

% of girls who completed primary school (formal)





Source: MTBA Endline studies n total=657 girls eligible to attend middle school. Error bars represent 95% CI, unmatched results

Figure 24 Participating girls are more likely to attend middle school compared to non-participating girls

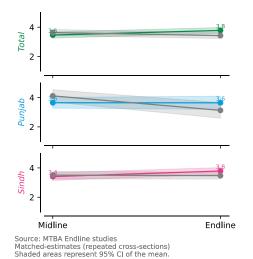
Figure 23 Participating and non-participating girls have similar levels of primary school completion

From baseline to endline, there was an increase in the percentage of girls who had completed primary school (50% to 58%). We found no positive impact of the MNCP project on primary school completion, as a similar increase was seen for girls not participating in the MNCP project activities (Figure 23).

Increasing girls' completion of education is a longer-term impact, beyond the scope of what this impact study could measure. Completion of primary or secondary education usually takes four years, or more if you take into account that in rural areas girls and boys generally do not go to school all year round, but instead attend school irregularly. Considering the five-year timespan of the MNCP project, in which activities focusing on raising awareness on the importance of education for girls started in the second year, it is too early to see any effects on girls' school completion.

In the midline report, a preliminary impact was found on school attendance (MTBA, 2018a). This result has been explored a little further at endline (Figure 24). The graph depicts a result based on (i) girls' school attendance; and (ii) their highest educational level attained. For example, if a girl attends school and her highest level of education completed is primary school, then we assume she is attending middle school (i.e. the next educational stage). Figure 24 supports the notion that the MNCP project had a positive impact on girls' attendance of middle school. As almost all girls attending school have already completed primary education, we cannot estimate the impact of the project on primary school attendance. The contribution to girls' attendance of middle school is promising, and in the next few years may result in a positive impact on girls' completion of middle school.

Girls who experience the road to their school as safe [1-5]



As shown in Table 3, we found no impact of the project on whether girls perceived their school environment as safe, but we did find a positive (short-term) impact of the MNCP project on girls' perceptions of safety on the road to school (Figure 25). Hence, over time, participating girls experienced the road to school as safer than non-participant girls did. This could mainly be explained by the decreased feeling of safety among non-participating girls in Punjab. It could also be because the bicycles provided by the project increased participating girls' feelings of safety on the way to school.



DOES INCREASED EDUCATION OF GIRLS RESULT IN LESS CHILD MARRIAGE?

The overall objective of the MNCP project was to enable young people to decide if and when to marry. One of the project's key assumptions is that if girls attend school, they are less likely to be married before their 18th birthday. In this section, we investigate whether this assumption is correct. As described above, several of the MNCP project activities focused on enabling girls to attend school and raising awareness of the importance of girls' education.

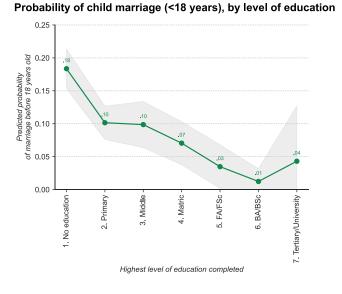


Figure 26 depicts the probability of marriage before 18 in relation to the level of education completed (ranging from no education to tertiary education). In general, the higher the level of education, the lower the probability of early marriage. Although it may appear that for the highest level of education (tertiary/university) there is an probability increased of child marriage, this is not statistically significant, possibly because the sample of girls who had completed tertiary education is very small.

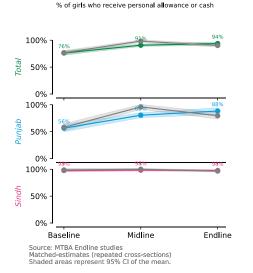
For details of the regression analysis, see Annex 6.1.

Source: MTBA endline studies, total n=2478 girls, Shaded areas represents 95% confidence interval of the estimate. Estimates are marinal effects, controlled for household socio-economic characteristics and girls 'year of birth (at means)

Figure 26 Probability of marriage before 18 years in relation to level of education girls had completed

TO WHAT EXTENT DID CHANGES OCCUR IN GIRLS' ECONOMIC OPPORTUNITIES?

Another viable alternative to child marriage in the MTBA Theory of Change is access to economic opportunities. The MNCP project aimed to increase girls' economic empowerment by providing financial literacy training and linking girls to business opportunities. More than 3,000 girls worked to strengthen their personal and business skills by taking part in programmes such as GALS, financial literacy trainings and vocational trainings. The project also connected around 1,000 girls with existing social protection schemes, scholarship programmes and income-generating opportunities (MTBA Pakistan, 2020).





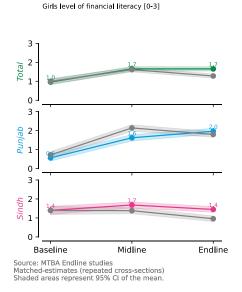
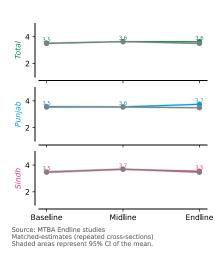


Figure 29 Participating girls are more financially literate than non-participating girls

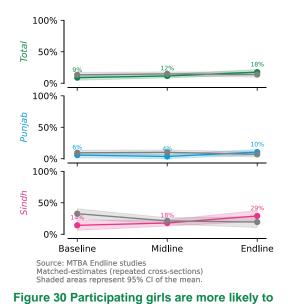


Girls' level of financial awareness [1-5]

Figure 28 Participating girls are more financially aware than non-participating girls

The MNCP project has positively impacted the financial awareness (Figure 28) and financial literacy (Figure 29) of girls, especially in Punjab. Regarding financial awareness, participant girls had quite high levels of awareness at baseline (3.5 out of 4). The MNCP positively contributed to financial awareness as awareness slightly dropped for girls in the comparison group, while the project managed to keep awareness among participating girls stable over time. We also see an upward trend for personal allowance (Figure 27), and the project had a positive short-term (midline to endline) impact on this. However, we found no long-term (baseline to endline) impact of the project on personal allowance.

% of girls who contribute to total income



contribute to total household income compared

to non-participating girls

were more likely to contribute to household income than non-participating girls; this seems to contradict the summary findings in Table 3, where it appears that the MNCP did not have an impact on girls' occupation. It could be that girls who already worked and continued working, were simply earning more. This would especially account for the finding in Sindh. Regarding girls' unpaid care work, where we would expect to see a decrease, we found no impact of the MNCP project. At endline, on average 47% of girls reported participating in unpaid care work (70% of girls in Sindh and 12% in Puniab). The big difference between Sindh and Punjab is puzzling, and could just be a matter of interpretation of the survey question.¹⁵

Over time, girls participating in the MNCP project

TO WHAT EXTENT DID CHANGES OCCUR IN GIRLS' PERCEPTIONS OF THEIR EMPOWERMENT?

MNCP project activities such as GALS and peer education training specifically focused on empowering young people to understand their own ambitions and long-term visions, and to explore how to reach their full potential. At the end of the MNCP project, many of the young people participating in GALS, for

example, had either achieved or were on the way to achieving their dreams. These young people not only advocated for their own rights but also stood up for the rights of others, especially during the pandemic. Young people self-organized and supported community members. They helped to identify the most deserving and marginalized groups to prioritize in the Covid-19 response, and distributed ration bags and hygiene kits. They took it upon themselves to organize sessions within their own homes on Covid-19 precautions and how the pandemic could impact girls and women. Girls who received hygiene kits educated other girls on the importance of using sanitary pads, and helped each other to manage menstrual hygiene (MTBA Pakistan, 2020).

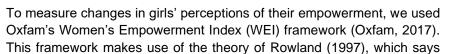




Photo 6 Distribution for Covid-19 response. Photo credit: Bedari

that power can be expressed in four different dimensions: power within, power to, power with and power

¹⁵ We believe this low percentage in Punjab could be due to respondents' interpretation of the corresponding survey question ("Are you currently doing any activities related to unpaid care work? For example, cooking, cleaning, working in fields, taking care of parents, children etc."). Punjab is mainly an agro-based economy, hence girls often help with agricultural tasks for self-subsistence at home. It could be that many girls do unpaid work in the family farm, which can be considered unpaid care work. However, perhaps some of these girls do not consider their work in the family farm as care work.

over.¹⁶ The WEI framework shows how these four dimensions of power interact with different levels of change (personal, relational and environmental). As *power within* and *power to* refer to changes taking place within an individual, they can both be categorized under changes taking place at a personal level. More specifically, *power within* is described by indicators referring to how a woman perceives herself and other women in society. *Power to* is described by indicators relating to a woman's capability to decide on actions and carry them out. In this survey, we aimed to measure *power within* and *power to*, in addition to girls' perceptions about women's mobility in their community.

Unpacking 'power within' and 'power to'

Through a qualitative study carried out with 80 young people in Sindh and Punjab (MTBA, 2021a), the notion of 'power within' was further unpacked. With respect to this notion, most interviewed young people stated that they feel empowered and confident because they see themselves as more knowledgeable, skilled and competent than they were before the MNCP project. Specifically, enhanced awareness about girls' and women's rights and status, the desire to make a change within their community, and the desire to continue their education were stated as key sources of power within.

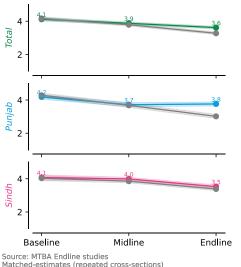
"First of all I take my own case. Mostly I was at home. I talked less. Since becoming part of this project, I now talk effectively, I can convey messages in a good way. I learned a lot of things and I want other girls to learn these things too." Female interviewee, 17, Punjab

In relation to 'power to', participants talked about how they are now more active in their personal affairs, take their own decisions and feel independent. Specifically, the ability and capacity to take decisions regarding their education, the freedom to participate in trainings and activities, the ability to work and earn, and freedom of movement were all cited as key reasons why they felt empowered.

"I also feel empowered. Previously I was not earning, so my family did not accept my decisions. But since I began earning, my family trust my choices and they believe that I will decide well. Now they accept my decisions." Male interviewee, 18, Punjab

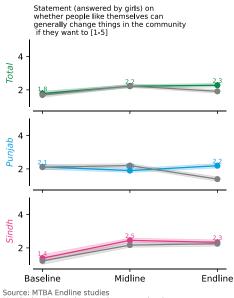
¹⁶ 'Power within' looks at self-confidence as a psychological strength and 'power to' refers to individual agency, meaning the capability to decide on actions and carry them out. 'Power with' recognizes that empowerment is a collective process, which requires the support and interaction of peers and organizations. Finally, 'power over' assesses the power of the strong over the weak, for example measuring power relationships between a woman and other individuals in the household or community where she lives.

Statement (answered by girls) on whether they perceive themselves as someone with high self-esteem [1-5]



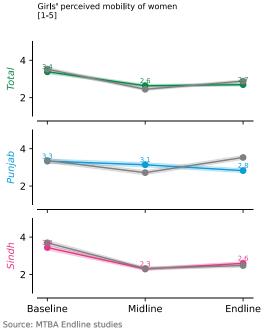
Matched-estimates (repeated cross-sections) Shaded areas represent 95% CI of the mean.





Source: MTBA Endline studies Matched-estimates (repeated cross-sections) Shaded areas represent 95% Cl of the mean.

Figure 32 Participating girls have a higher perception of being able to change things in the community compared to non-participating girls



Matched-estimates (repeated cross-sections) Shaded areas represent 95% CI of the mean.



Regarding girls' self-esteem, hence *power within*, the MNCP project activities had a positive impact, especially in Punjab (Figure 30). On *power to*, i.e. girls' perceptions of whether people 'like them' can generally change things in their community, the MNCP project also had a positive effect (Figure 31).

Girls' perceptions of women's mobility were positively impacted by the MNCP project in Sindh, while in Punjab the impact was negative (Figure 32). The latter could be due to girls feeling that women have less mobility than before, or it could be because girls are now more aware of what mobility could mean for them and, as a result, perceive it to be less. We must also acknowledge the influence of Covid-19, as the lockdown and restrictions made it difficult, if not impossible, to have any form of mobility.

3.5 TO WHAT EXTENT DID CHANGES OCCUR IN GIRLS' **ENABLING ENVIRONMENT?**

Over the past five years, the two most important social change objectives of the MNCP project were to develop girls' agency and leadership so they can take decisions about their own lives (Outcome 1), and to change the social norms that promote child marriage (Outcome 6). To achieve this, the project developed a thorough community-level social mobilization strategy to reach young people and their parents and involve them in various interventions, such as a community-level discussions.

The intervention strategy to influence girls' enabling environment Photo 7: Community discussion. included edutainment activities. These were led by the NGOs IRC, Baanh Belli and Bedari, and organized in close collaboration with established child protection committees and GALS champions.



Photo credit: R. Shuja

The project organized 235 mobile cinema screenings and reached a total of 4,924 people (2,373 men and boys and 2,551 women and girls). All the mobile cinema screenings were followed by a facilitated

Edutainment is an abbreviation of Entertainment-Education (EE). Edutainment engages audiences through the power of attractive, persuasive media, popular culture and arts, and combines this with on-theground and virtual community mobilization. Edutainment can provoke changes in attitudes, beliefs and behaviour on complex and multi-layered themes like values and norms around gender, social roles, genderbased violence and child marriage. Edutainment can take multiple forms, ranging from television and radio soap series to mobile phone messaging, street theatre, talk shows, or a combination of these.

discussion with the audience, and a session around the topic of gender was held within a month of the mobile screening. Various campaigning and mobilization activities were also carried out, with campaign 'spikes' (intensified activity) around important days such as the Day of the Girl Child and International Women's Day. When the Covid-19 pandemic hit, the project organized door-to-door and which reached entire rickshaw campaigns, communities with messages on child marriage but also on the impact of the pandemic, raising awareness on domestic violence and on Covid-19 hygiene measures. Radio broadcasts strengthened these campaigns and were aired in the districts of Larkana and Shikarpur (Sindh), reaching 114,309 listeners in total (MTBA Pakistan, 2020).



Photo 8: Discussion group after mobile cinema screening. Photo credit: R. Shuja



Photo 9: Mobile cinema screening. Photo credit: R. Shuja

This section focuses on the impact of the MNCP project activities on girls' enabling environment. We aimed to answer the following questions:

- To what extent did changes occur in household members' knowledge of life skills and rights and early marriage?
- To what extent did changes occur in household members' attitudes to gender equality?
- To what extent did changes occur in household members' norms and attitudes against child marriage and in support of life skills and rights?
- To what extent did the project activities contribute to household members taking action against child marriage?

Table 4 below show the MNCP project's short-term (midline to endline) and long-term (baseline to endline) impacts on the enabling environment indicators.

Five indicators together proxy household members' knowledge on the harmful effects of child marriage and early childbearing. Overall, we found that the MNCP project positively impacted household members' knowledge on these issues, especially in Punjab.

The majority of indicators (three out of four) that proxy household members' social norms on marriage before age 18 were positively impacted by the MNCP project. First, the MNCP project positively impacted the personal attitudes of household members regarding child marriage, in the sense of them seeing age 18 or older as a more appropriate age for marriage. In addition, the MNCP project positively impacted their normative expectations, i.e. they stated that they think more community members would disagree with marriage before 18. Due to inconsistencies in the data, the impact results on empirical expectations could not be interpreted. Taking these proxies together, we can identify an initial indication of social norms change.

The MNCP project positively impacted household members' attitudes on gender equality, especially those of male household members and of those households in Punjab.

We found that the MNCP project had no impact on household members taking action against a specific case of child marriage.

Table 4 Summary table of the MNCP project's impacts on girls' enabling environment (household members)¹⁷

			Total		dh	Punjab		Male household member		Female household member	
Concept	Indicator	Long term (Baseline-Endline)	Short term (Midline-Endline)								
	Household members listing harmful effects of child marriage [no. of effects listed, 0-9]	=	+	=	-	=	+	=	+	na	na
Knowledge	Household members listing harmful effects of early childbearing [no. of effects listed, 0-5]	Idbearing [no. of + -		=	=	+	+	+	+	=	=
on harmful effects of child	% of household members who believe that it is harmful for girls to marry before they are 18 [= average of the two statements below]		+	=	=	+	+	+	+	=	+
marriage and early childbearing	Statement (answered by household members) on whether a girl marrying under the age of 18 does not cause her any physical harm [1 strongly agree; 5 strongly disagree]	+	+	=	=	+	+	+	+	=	+
	Statement (answered by household members) on whether a girl marrying under the age of 18 does not cause her any mental harm [1 strongly agree; 5 strongly disagree]		+	=	=	+	+	+	+	=	+
	% of household members who personally think that 18 years or older is an appropriate age for a girl to marry [personal norm]	+	+	+	=	+	+	+	+	+	+
Social norms	Statement (answered by household members) on whether men should marry girls aged 18 years or older [1 strongly disagree; 5 strongly agree] [personal norm]	=	+	=	+	=	=	=	+	=	=
on marriage before 18 years old	fore 18 % of household members who think that community members think		+	=	=	+	+	+	+	+	=
	% of household members who think there would be no negative consequences if their daughter was ready for marriage but was not married off [counterfactual belief]	no data	=	no data	+	no data	-	no data	=	no data	=

¹⁷ The table shows difference-in-difference estimates. An equal sign (=) means that there is no significant difference or result to report. A plus sign (+) means that there is a significant and positive relationship. A minus sign (-) means that there is a significant and negative relationship. In these cases, we can say that the MNCP project activities have had a significant impact on the indicator measured.

Attitudes to	Equity for Girls scale (answered by household members); sum of four statements regarding girls' attitudes towards women and work [0-16]	+	+	=	=	+	+	+	+	+	+
gender equality	Rights and privileges of men scale (answered by household members); sum of nine statements regarding girls' attitudes towards male privilege [0-32]		+	-	-	+	+	+	+	=	+
Action against child marriage	% of household members who report having taken action against child marriage		=	na							

TO WHAT EXTENT DID CHANGES OCCUR IN HOUSEHOLD MEMBERS' KNOWLEDGE AND ATTITUDES ON LIFE SKILLS AND RIGHTS AND CHILD MARRIAGE?

To be able to change norms and attitudes, it is necessary to strengthen knowledge among various actors. The MNCP project therefore organized gender and life skills and rights trainings for women/girls and men/boys, to ensure that female and male household members (i.e. mothers and fathers) are aware of the harmful effects of early marriage and early childbearing.

Knowledge of harmful effects of child marriage-scale [0-9]

Knowledge of harmful effects of early child bearing [0-5]

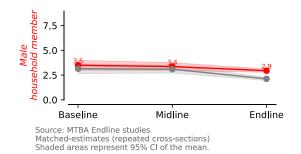


Figure 34 Participating male household members are more likely to have knowledge on the adverse effects of child marriage than non-participating male household members

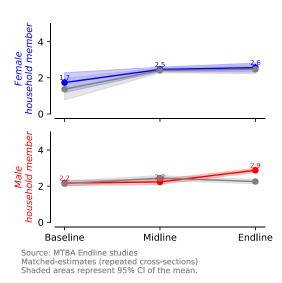
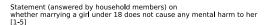


Figure 35 Participating household members are more likely to have knowledge on the adverse effects of early childbearing than nonparticipating household members

The MNCP project has, in the short term (midline to endline), positively impacted male household respondents' knowledge on the adverse effects of child marriage (Figure 34). For female household respondents, we did not have enough responses to detect any impact or trend. Over the long term (baseline to endline), the MNCP project has positively affected household respondents' knowledge on the adverse effects of childbearing (Figure 35), especially among male household members.

Statement (answered by household members) on whether marrying a girl under 18 does not cause any physical harm to her [1-5]



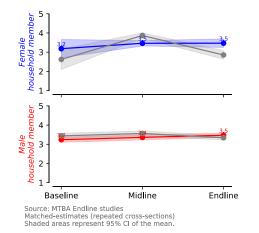


Figure 36 Participating household members are more likely than non-participating household members to agree that marrying under 18 causes physical harm to girls

Statement (answered by household members) on whether men should marry girls above 18 years or older [1-5] [personal norm]

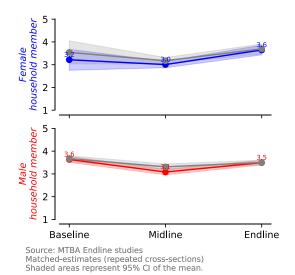
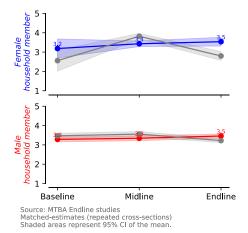


Figure 38 Participating household members are more likely than non-participating household members to agree that men should marry girls aged 18 or above



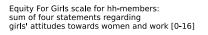


In terms of attitudes, we looked at the extent to which household members agreed that early marriage is harmful physically as well as mentally, and the extent to which they agreed that men should marry girls aged 18 years or older (Figure 36 to Figure 38).

The MNCP project has positively impacted household members' attitudes towards all of the above; this is especially the case for male household members. Over time, participating household members were more likely to agree that marrying under the age of 18 is physically and mentally harmful to girls, and that men should marry girls who are 18 years or older.

TO WHAT EXTENT DID CHANGES OCCUR IN HOUSEHOLD MEMBERS' ATTITUDES TO GENDER EQUALITY?

As explained in the introduction above, through gender awareness sessions held with women's groups and men's groups, and through various influencing activities such as the edutainment activities, the MNCP project aimed to influence the attitudes of household members regarding gender equality. For example, the project promoted the message that girls have equal rights to go to school, and that there should be equal division of unpaid care work among women and men.



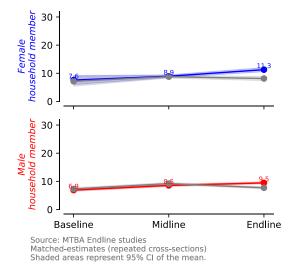
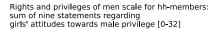
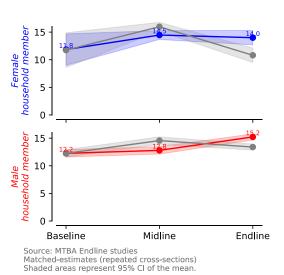


Figure 39 Participating household members are more likely to have positive attitudes on gender equality (Equity for Girls scale) than nonparticipating household members







Household members' attitudes were measured using two scales on gender equality: the *Equity for Girls scale* (Figure 39) and the *Rights and privileges of men scale* (Figure 40). For both scales, we found that the MNCP project positively impacted household members' attitudes on gender equality, especially those of male household members and those of household members in Punjab.

TO WHAT EXTENT DID CHANGES OCCUR IN HOUSEHOLD MEMBERS' NORMS AND ATTITUDES AGAINST CHILD MARRIAGE AND IN SUPPORT OF LIFE SKILLS AND RIGHTS?

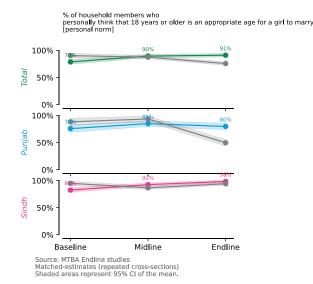
As mentioned above, in addition to providing viable alternatives such as education and economic opportunities (section 3.4), one of the objectives of the MNCP project was to change social norms around child marriage. To this end, the project offered training, implemented awareness campaigns, entered into dialogue with community elders and leaders, and worked with youth champions who shared their personal stories with the community.

In Oxfam's social norms framework (Figure 42), we look at behaviour and attitudes, and at normative and empirical expectations. We compare both concepts by asking people questions about what they would personally do (behaviour), and questions about what they think others would do or what others would think (normative and empirical expectations). Below, we present the questions and responses which helped us to unravel the norms around child marriage.

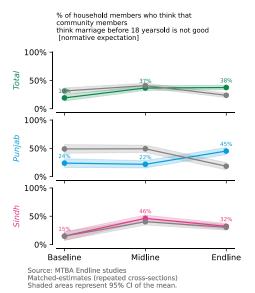
Figure 41 depicts Oxfam's social norms framework through an example. In the middle, we see behaviour and personal attitudes, in other words the way people act and their attitudes regarding that behaviour. These behaviours and attitudes are shaped by surrounding attitudes and pressure created by, for example, family members, friends or community members (reference people). We ask what people think these reference people would do (empirical expectations), what people think these reference people will think of their actions (normative expectations), and what kind of sanctions they would face if they acted

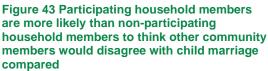






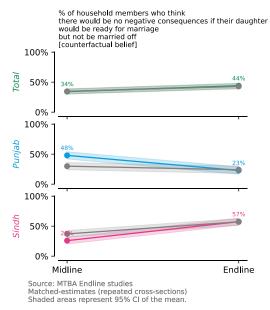


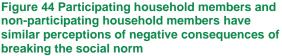




The MNCP project has positively impacted household members' attitudes on child marriage; at endline, participating household members were more likely than non-participating household members to agree that 18 years or older is an appropriate age for marriage (Figure 42, Figure 38). When household members were asked what they think other community members would think of early marriage, we found that their normative expectations have also been positively impacted by the MNCP project. Participating household members were more likely than non-participating household members to agree that other community members think marrying before 18 years old is not good (Figure 43Figure 43 Participating household members are more likely than non-participating household members to think other community members would disagree with child marriage compared).

looks at household Figure 44 members' perceptions regarding negative consequences of breaking the social norm on marriage (with the social norm being early marriage), the so-called 'counterfactual belief'. The MNCP project did not change perceptions that 'no negative consequences' would be faced when breaking the social norm. In other words, perceptions of the negative consequences of breaking social norms remained the same.





Exploring how families in Pakistan have broken social norms

The results presented above suggest that social norms around child marriage are changing because of the MNCP project, and that they are changing for the better. While there is less evidence of change in people's perceptions of the consequences of breaking the social norm, some families do break the norm – or, in other words, deviate from the norm – by delaying their daughter's marriage. An earlier qualitative study (MTBA, 2020) explored drivers of 'positive deviance'. We analysed individual family cases, looking at the personal attitudes and experiences of those involved in the decision-making process, as well as the individuals and interventions that may have influenced them against child marriage. We found that all eight families involved in the study had initially considered and in some cases accepted a marriage proposal, but had then changed their minds once they understood the risks to their daughters, particularly to their health and education.

Several of the girls in those families demanded to have their voices heard, and many of their parents took a supportive attitude. Knowledge of the new law in Pakistan against child marriage contributed to parents' decisions to delay their daughters' marriage. Individuals – including staff of local organizations, friends and family members – played a role, as did the interventions of local organizations, such as awareness-raising sessions and educational movie screenings. Some parents passed on their new knowledge to other families.

The study sought to further unpack the factors, issues and considerations which influenced positive deviance. Our analysis points to: the importance of girls getting an education before getting married; health considerations, mainly relating to physical health; and the difficulties young wives may face in keeping up with household demands. Delayed marriage is also more likely to be considered when daughters are supporting their parents financially or in the household. Although there is overall agreement that girls should be educated and mature before getting married, our results show different understandings of these concepts: some think of education as being about individual empowerment, while others value it for improving girls' marriageability; and maturity can be seen as a matter of age, physical development or personal development.

We explored the impact of legal frameworks on child marriage, with a national law in Pakistan setting the legal minimum age at 16, while some provinces have sought to raise the legal age of marriage through their own provincial law. In Sindh, in 2013 the legal age for marriage was raised to 18, and in Punjab, legislative change is currently being pushed by civil society organizations. Our analysis showed that some people understand and respect the law, some do not know about it, and others

know about it but choose to ignore it. There are limitations in implementation and enforcement, despite efforts by local organizations to disseminate information and promote accountability.

We looked at social sanctions and/or benefits experienced by positive deviant families. No benefits were reported. Some families experienced no negative reactions to their decision to delay their daughter's marriage, but others faced community backlash such as teasing or harassment. Likewise, some were confronted by disagreeing relatives, while others were supported by their wider families. A common experience for many positive deviant families is 'being gossiped about', though many of the families said that they do not care about this.

While the results of the study are limited, reflecting only the experiences of a small number of families, they are encouraging. They point to room for the transformation of deep-rooted social norms, which were previously thought unbendable, in select districts of Sindh and Punjab in Pakistan.

TO WHAT EXTENT DID THE PROJECT'S ACTIVITIES CONTRIBUTE TO CHANGES IN PEOPLE TAKING ACTION AGAINST CHILD MARRIAGE?

One of the long-term outcomes the MNCP project aimed to achieve was a change in attitudes and norms, and through this, to open up the possibilities for community members to take action against child marriage. From the endline data, we do not see any impact of the MNCP project activities on household members taking action in specific cases where a child marriage has taken place, and the share of respondents who claimed to have taken action is very low, at 2%. We would like to note that this question focused on specific cases where the household member was involved in an early marriage, which was reported by only a low number of respondents. A question on broader social action was not included in the survey.

A further reflection which we would like to make is that the MNCP project shifted its initial focus on 'stopping child marriage' to 'preventing child marriage', thereby focusing on broader social action. Examples of social action have been identified throughout this report, ranging from an increase in girls' perceptions of their own ability to advocate regarding decisions about their life, to girls feeling empowered and able to change things in their community.

In addition to the endline survey, many stories have come to the surface in the project's qualitative studies, internal project documents and other resources, reflecting action taken by girls, youth, Lady Health Workers, doctors, teachers, community members, religious leaders, politicians, civil society actors and more. Below is a selection of illustrative quotes (MTBA, 2021a):

"... in my case, my parents wanted to marry me off at a very young age. And I didn't want to, so I spoke to my cousins and my aunt, and they all jointly convinced my parents to let me continue my studies. So, I think it makes a difference when people gather and raise their voice for something." Female interviewee, 22, Punjab

"I prevented my cousin's marriage. [Her uncle] said, 'Who the hell are you to command me to prevent the marriage? I am older than you.' My paternal uncles are narrow-minded. One of my uncles married off his two daughters and they are now both mothers of four children – they are ill and suffering from anaemia and unable to give proper attention to their children. So I said, 'See, these are the consequences of child marriage that I am talking about.'" Female interviewee, 20, Sindh

In these testimonies, together with the survey results on reductions in early marriages and the initial indications of social norms change, we can see that minor shifts are taking place and people are pushing for different outcomes as awareness grows. However, significant changes in social norms and behaviour change occur over a much longer period of time.

4 CONCLUSIONS

This section presents the conclusions of the evaluation study of the MNCP project in Pakistan. The conclusions are presented in three parts. The first part presents the main conclusions from the evaluation questions on girls' pursuit of life skills and rights, girls' empowerment and girls' enabling environment. The second part presents the overall conclusion of the evaluation, by answering the main evaluation question: to what extent can changes in increased empowerment of girls regarding the decision to marry, and increased pursuit of life skills and rights in an enabling environment, be attributed to the MNCP project?

4.1 CONCLUSIONS FOR EACH EVALUATION QUESTION

TO WHAT EXTENT DID CHANGES OCCUR IN GIRLS' PURSUIT OF LIFE SKILLS AND RIGHTS?

In this sub-section, we summarize our findings in response to the questions:

- To what extent did changes occur in actual marriage of girls under 18?
- To what extent did changes occur in girls' life skills and rights, including their knowledge of life skills and rights?
- To what extent did changes occur in girls' use of life skills services, and to what extent did these services become more responsive to girls' needs?

In general, the MNCP project significantly reduced the number of marriages of girls aged under 18, especially in the short term (midline to endline). The results could predict a continuing decrease in the number of girls marrying before their 18th birthday; however, it is important to emphasize the potential effects of Covid-19 on girls' lives. UNFPA (2020) predicted that there will be 13 million additional child marriages globally as a result of the pandemic. Indeed, at endline, 42% of girls in Punjab and 30% of girls in Sindh agreed that women and girls were at increased risk of being married off during the Covid-19 lockdown.

In terms of girls' knowledge of life skills and rights, we found that the project had a positive impact on knowledge of menstruation, birth control methods and the most likely time of conception. In particular, we found a positive impact on the knowledge of girls who were married before they were 18. This was the project's core target group for increasing life skills and rights knowledge.

Girls' knowledge of the legal age of marriage, and of the adverse effects of early marriage, were also positively impacted by the MNCP project.

We did not find any impact of the MNCP project on the use of life skills services, as almost all married girls (participating and not participating in the project) claimed to use life skills services at baseline. The majority of girls having access to life skills services can most likely explained by the presence of Lady Health Workers in the communities (who ensure access for girls and women to life skills services through household visits), followed by doctors and healthcare clinics. Married girls' perceptions of the responsiveness of life skills services did not change over time.

TO WHAT EXTENT DID CHANGES OCCUR IN GIRLS' EMPOWERMENT?

In this sub-section, we summarize our findings in response to the questions:

- To what extent did changes occur in girls' voice and decision-making power, including regarding the decision to marry?
- To what extent did changes occur in girls' access to formal education?
- Does increased education of girls result in less child marriage?
- To what extent did changes occur in girls' economic opportunities?

• To what extent did changes occur in girls' empowerment?

In general, we found no short-term impact of the project on the extent of girls' involvement in the decision about their marriage. An overall positive impact was found for girls being consulted on (i.e. being informed of) the marriage, and in girls having the freedom to accept or reject the marriage, especially in Punjab. This means that participating girls experienced a higher increase in being consulted and being allowed to accept or reject the marriage proposal compared to non-participating girls. A short-term impact is seen in a reduced number of married girls who hadn't wanted their marriage to take place when it did, meaning more participating girls acknowledged that they did not wanted to get married at the time. All indicators for decision-making on family planning were positively impacted by the project in the short term (midline to endline), especially in Punjab. Regarding girls' decision-making in general, there is positive short-term impact.

In Punjab, the MNCP project has – from midline to endline – positively impacted girls' perceived ability to influence decisions on education, work and marriage, whereas in Sindh this short-term impact is negative, hence girls' level of ability to influence decisions slightly decreased from midline to endline At endline, 43% of the girls in Sindh and 53% of the girls in Punjab perceived that they could self-advocate regarding decisions on their marriage.

Overall, the number of girls going to school increased from baseline to endline, from 51%, on average, to 59%. However, as the increase was found among both participating and non-participating girls, the MNCP project had no positive impact on school completion. Increasing girls' completion of education is a longer-term impact, beyond the scope of what this impact study could measure. Taking into account the fact that completion of primary or secondary education usually takes four years – more for rural areas where girls and boys generally do not go to school all year round, and the five-year timespan of the MNCP project, it is too early to see any effects on girls' school completion. However, results on attendance have been explored and it is found that the MNCP project had a positive impact on girls' attendance of middle school. The project had no impact on whether girls perceive their school environment as safe, but we did find a positive (short-term) impact of the project on girls' perceived safety on the road to school.

We found that the MNCP project's assumption that girls who attend education are less likely to be married before they are 18, holds; in general, the higher the level of education, the lower the probability of marriage before 18.

In terms of girls' financial independence and literacy, the project had a positive impact on most of these indicators in both the long term (baseline to endline) and short term (midline to endline), especially in Punjab. The project had a positive impact on girls' contribution to total household income. We found no impact of the project on girls having an occupation, and on whether or not girls were involved in unpaid care work.

Overall, the project seems to have had a positive impact on girls' attitudes to gender equality, especially in the short term and especially in Punjab.

Regarding women's empowerment, the MNCP project had a positive impact on girls' selfassessed level of self-esteem and on girls' perceptions regarding whether they can change things in the community, especially in Punjab. In Sindh, girls' perceptions on women's mobility were positively impacted by the MNCP project, while in Punjab the impact was negative, meaning that mobility for participating girls decreased while they increased for non-participating girls. This suggests that either participating girls in Punjab perceived women's mobility to have decreased, or they were more aware of what women's mobility can mean (and therefore of the limitations on it). We must also acknowledge the impact of Covid-19, as the lockdown and restrictions made it difficult, if not impossible, to have any form of mobility.

TO WHAT EXTENT DID CHANGES OCCUR IN GIRLS' ENABLING ENVIRONMENT?

In this sub-section, we summarize our findings in response to the questions:

 To what extent did changes occur in household members' knowledge of life skills and rights and early marriage?

- To what extent did changes occur in girls' attitudes to gender equality?
- To what extent did changes occur in household members' norms and attitudes against child marriage and in support of life skills and rights?
- To what extent did the project activities contribute to changes in people taking action against child marriage?

To better understand girls' enabling environment, we looked at the surveys conducted with male and female household members, i.e. the girls' parents.

Five indicators together proxy household members' knowledge on the harmful effects of child marriage and early childbearing. Overall, we found that the MNCP project had positively impacted household members' knowledge on these issues, especially in Punjab.

The majority of indicators (three out of four) that proxy household members' social norms on marrying before 18 years old were also positively impacted by the MNCP project. The project positively impacted the personal attitudes of household members regarding marriage, in the sense of them seeing 18 or older as a more appropriate age for marriage. In addition, the project positively impacted household members' normative expectations, i.e. they think more community members would disagree with marriage before 18. Due to inconsistencies in the data, the impact results on empirical expectations could not be interpreted. Taking these proxies together, we can identify an initial indication of social norms change.

The MNCP project positively impacted household members' attitudes to gender equality, especially among male household members and household members in Punjab.

Finally, we found no impact of the MNCP project on household members taking action against a specific case of child marriage. However, indications of changes in broader social action are found throughout the survey and in other data sources, such as the qualitative studies.

4.2 OVERALL CONCLUSION

In response to the main evaluation question, to what extent can changes in increased empowerment of girls regarding the decision to marry, and increased pursuit of life skills and rights in an enabling environment, be attributed to the MNCP project?, we found that the number of child marriages has significantly reduced over time. Girls have increased their knowledge on life skills and rights, such as family planning and menstruation, and perceive the road to school to be safer, thus have improved access to school. In particular, the project has had a positive impact on the life skills and rights knowledge of girls who were married before their 18th birthday. This was the project's core target group for increasing life skills and rights knowledge. Norms favouring marriage before the age of 18 seem to have become less prevalent, and community members are increasingly opposing child marriage. However, household members were not found to be taking more action against child marriage in specific situations of arranged marriages. Girls are becoming more empowered, and perceive themselves to be better able to advocate regarding decisions about their life; however, challenges remain for girls to be involved in decision-making processes on their marriage, education or economic opportunities. Girls are not more active in terms of educational and economic opportunities, and there is a mixed picture regarding girls' perceptions on women's mobility. Given the Covid-19 pandemic, which is increasing poverty levels and causing more and more girls to drop out of school and take up additional unpaid care work, there is a fear that in the long term more girls will be forced into early marriage.

5 RECOMMENDATIONS

Based on the insights, experiences and results presented in this report, the following recommendations have been formulated. These recommendations specifically apply to the assessed districts Sindh and Punjab, but could also be relevant for other districts in Pakistan and for civil society sector and future programmes working on child marriage, life skills and rights, youth empowerment and enabling environment:

- Contextualized LSBE can be important for girls' life skills and rights: The roll-out of Life Skills Based Education (LSBE) according to the contextual realities can prove vital in strengthening girls' understanding of their life skills and rights. In Sindh, there was more openness to including LSBE in the existing school curricula. In Punjab, this proved more difficult, and peer-learning groups of young people out of school was the right entry point.
- **Target boys and men:** The MNCP project underscores the importance of taking a dual approach in a restrictive, patriarchal environment. It is not enough to focus solely on working with girls and women. As it is often boys and men who hold power in the household and community, it is crucial to influence their attitudes and their knowledge, for example on the adverse effects of child marriage or the importance of equal rights for girls and boys. Specifically targeting and men in the activities increases the decision-making space for women and girls.
- **Contextualize and explore change**: Influencing the attitudes and knowledge of girls, parents and community members involves a social and long-term change. There is a need to better understand the dynamics the project seeks to change and to define what 'success' looks like in a particular situation. For example, being able to talk openly about a sensitive topic could in itself indicate a strong positive change in a conservative community, or exploring what consultation and decision-making mean within the context.
- Invest in creating an enabling environment from the start: Although social norms change usually occurs over a long time, distinct initial shifts in norms had occurred by the end of the MNCP project. We have seen positive changes at the personal and collective level on the topics of child marriage and gender equality. The edutainment activities have created a more enabling environment among parents and community members for girls to raise their voices. Despite these positive changes, a reflection workshop with implementing partners highlighted the need to start these influencing activities at an earlier stage in the project. It takes time to influence key stakeholders, and doing so can act as a strong catalyst for other changes.
- Combine individual and collective empowerment activities: To increase girls' and young people's empowerment, combining focused, individual trainings such as GALS with setting up peer youth groups proved effective. Discussing personal goals and challenges with young people, alongside creating a peer network of girls who support each other, has increased girls' confidence and voice, and made them feel safer and more empowered to take action in their communities.
- Explore sustained interventions and donor commitments to respond to sudden crises and shocks: Finally, we have already seen short-term effects of the Covid-19 pandemic on girls and women, and there are many predictions about the heavier, longer-term impacts. We therefore urge donors and practitioners to keep investing in girls and young women, often already vulnerable groups, who will be at increased risk in the aftermath of the pandemic.

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6.1 STATISTICAL ANNEX

ASSESSING THE IMPACT OF THE MNCP-PROJECT: A COUNTERFACTUAL APPROACH

To assess the project's effects on outcomes 1, 2, 3, 5 and 6, we investigate to what extent outcome indicators of interest have changed over time. We compare the values on the outcomes at the baseline (2016, the start of the project) and at the midline (2018, halfway through the project), with those at the endline (2020, the end of the project).

Assessing change in an outcome indicator over time for those who participated in the project is not a robust method to assess the impact of a certain project, as we are only looking at those who actually participated. The outcomes can be affected by a myriad of factors which are not in the project's or program's sphere of influence. In that case, it would thus be inaccurate and 'unfair' to claim all changes that occurred between the baseline and endline as evidence of the impact of the project.

A more reasonable and accurate method would be to ask ourselves the question "*What would have happened in the absence of the project?*", in addition to describing what has happened to the project participants. In order to arrive at a reasonable estimate of the effects of the project on an outcome indicator, one would thus need to compare the change over time among a group of people that participated in the project's activities with the change over time in a situation where the project was not implemented. Both groups operate in the same context but the only difference between them is whether they participated in the project's activities. This is a so-called counterfactual approach; comparing changes over time among a group of people who participated in the project with changes over time in a similar group of people who have not participated in the project.

To create this counterfactual for the target group we incorporated a comparison group in our design. In addition to the list of 80 communities targeted by the MNCP project, another list was created by programme partners. This list consisted of 80 communities that resembled the targeted communities in terms of their size, ethnicity religion, distance to schools, etc, but were not targeted by the MNCP-project. From both lists, 40 target communities (out of the 80 in which the project was implemented) and 40 comparison communities were randomly sampled, equally divided over the provinces Sindh and Punjab.

We then compare the changes over time in an outcome indicator in the target group with the change over time on the same outcome indicator in the comparison group. We can then assess the project's impact as we have a decent understanding of what would have happened in case the project was not implemented.

ESTIMATING ATTRIBUTABLE IMPACT: ANALYSING DIFFERENCES OVER TIME

Subsequently, our analyses estimate the values of each outcome indicator, for instance, girls knowledge on birth control methods (measured through a set of survey questions). The average knowledge of birth control methods is then estimated at the baseline, midline, and the endline, for both the comparison and target groups. We can determine the trend or change over time for the target and the comparison group in these six estimates. We can then see whether girls' knowledge on birth control methods increased, or decreased over time for the target group. Similarly, for the comparison group we can see how girls' knowledge on birth control methods has developed over time, without any project activities being implemented.

In this case, the expectation is that girls' knowledge of birth control methods would improve over the project duration for the target group. The supposed increase in knowledge, or 'growth', for the target group is calculated by taking the baseline values on this indicator (the point of departure for girls' knowledge on birth control methods) and subtracting these from the endline values. This is called the first-order difference.

Similarly, we assess the change among non-participants. Indeed, there might have been changes in knowledge on birth control methods, unrelated to the project. Suppose we would also find an increase in knowledge on birth control methods in this comparison group. Should that be the case, such changes cannot be attributed to the project itself as there have not been any project activities with girls in the comparison group.

For an accurate judgement of the projects impact we thus compare the change over time in the comparison group, with the change over time in the target group. In case the change over time in the target group, is bigger than the change over time in the comparison group, the project has had attributable impact. So in this example, if the supposed increase in girls' knowledge on birth control methods in the target group is bigger than the increase in knowledge observed in the comparison group, one may speak of positive, attributable impact. This technique is called a difference-in-difference estimation (Athey and Imbens, 2017; Snow, 1956). An important assumption of difference-in-difference is the so-called parallel trends assumption.

MATCHING: ENSURING THE COMPARABILITY OF THE TARGET AND COMPARISON GROUP

By incorporating a comparison group in our design and using a difference-in-difference technique, we are not there yet. We know that it is likely that the target and comparison groups are not directly comparable. They may differ systematically on a range of characteristics at the baseline. For instance, the targeted communities might be more impoverished, or lower educated than those in the comparison group as projects choose to implement their activities among marginalized groups. Thus, it is likely that some socio-demographic characteristics influence whether the project targets a household or community.

Moreover, socio-demographic characteristics, such as levels of education, might also influence our outcome indicators. We know that girls whose parents have a relatively high level of education are less likely to be married before they are 18 years old compared to girls whose parents have a lower level of education.

In econometric terms, this means that both the probability of participating in the project's activities and the outcomes may be affected by pre-existing differences between the target and comparison group. The probability of participating in the project activities is called the propensity score. This probability is not equal for all girls and households (and unknown)¹⁸.

We use this propensity score to reduce incomparability between the target and comparison group in two stages. This technique is called propensity score matching. In the first stage, we calculate the propensity score to select or match a comparison group similar to the target group based on a set of (mostly) demographic determinants. In the second stage, we estimate our impacts using this matched target and comparison group.

¹⁸ Compare this to a situation where participation in the project would be determined by a coin toss (a randomized experiment). In this case, participation in the project would be solely determined by chance, not by any pre-exisiting characteristics of the people that (intend to) participate in the project. In this case the propensity score (the probability of being the in the target group) would be known and equal to 0.5

CALUCATING PROPENSITY SCORES

We have considered a wide range of characteristics to include in this matching. This was an iterative process. We have included those characteristics that correlated with both programme participation and a set of relevant outcomes,¹⁹ at baseline. We assessed characteristics of girls, and attributes of households. Notably, we did not find many differences between the target and comparison groups regarding girls' characteristics. The composition of the target and comparison group in terms of their age and level of education is similar.²⁰

We did find differences between the target and comparison group at baseline based on characteristics of the household. The results of this first step of the analysis, that is, the characteristics we have used to estimate the propensity score, is presented in Table 5. For the unmatched groups, we see that there are more female-headed households in the comparison group. Households are smaller in the comparison group. And the dependency ratio in the target group is significantly higher than in the comparison group. Moreover, the target group tends to be a bit poorer, as proxied by the Progress out of Poverty Index (PPI). However, this difference is not statistically significant at p<0.05. Additionally, note the large differences between the districts (and provinces). The outcomes also vary substantially between districts and province (not shown here, but the analyses provide estimates disaggregated by province).

The propensity score matching model²¹ reduces these pre-existing differences. Looking at the matched results, we see no statistically significant differences between the target and comparison group left after implementing this matching procedure.

Characteristic	Ν	t-test (difference target and comparison)		
		Target	Comparison	t
Male headed household:		Ref.	Ref.	
Female headed household:	Unmatched	0.04	0.09	-2.03*
	Matched	0.05	0.06	-0.64
Literacy rate of household	Unmatched	0.43	0.45	-0.72
(% of household members aged 16 or older who are able to read and write)	Matched	0.42	0.41	0.62

 Table 5 Propensity score matching: 1st stage: estimating propensity scores: Balance tests Matched and unmatched averages on key household characteristics

¹⁹ We did not assess this for all outcome indicators, as these were more than 50. We have selected a mix of attitudinal and behavioral outcomes, to assess the correlations between the indicator in the matching algorithm and the outcome. The outcomes assessed were: % of girls married before 18 years old, % of girls who are consulted on the marriage, % of girls who can name at least three adverse effects of marriage before the legal minimum age of marriage, Girls' basic financial literacy level, and the equity for girls scale (sum of four statements regarding girls' attitudes towards women and work).

²⁰ Such characteristics as age or education do indeed correlate with the outcome indicators, but this is captured in the sections of the report where the relationships between such determinants and the outcomes is assessed in more detail.

²¹ We have chosen for a kernel matching estimator. As a robustness check, we have considered various matching methods (radius, nearest-neighbour and k-nearest neighbour). Although, the results of these various matching methods do not qualitatively differ, the kernel matching methods has the added benefit that the counterfactual is constructed using a weighted average of all comparison group cases, and thereby retains a substantially larger number of respondents in the analyses. We have applied a 5% trim in the regions were the propensity scores for the non-treated cases are sparse (in this case particularly on the high-end (>0.8 of the propensity scores), as suggested by Gou and Fraser (2014). This resulted in 6 cases (out of 583 baseline respondents) that were off common support in the treatment group.

	-		
Unmatched	6.99	5.92	4.38**
Matched	6.76	6.63	0.55
Unmatched	0.85	0.73	2.05*
Matched	0.85	0.82	0.41
Unmatched	35.70	32.86	1.38
Matched	36.32	35.81	0.24
	Ref.	Ref.	
Unmatched	0.10	0.29	-5.72**
Matched	0.10	0.08	0.86
Unmatched	0.32	0.16	4.71**
Matched	0.32	0.33	-0.18
Unmatched	0.20	0.37	-4.5**
Matched	0.21	0.23	-0.68
	Matched Unmatched Matched Unmatched Matched Unmatched Matched Unmatched Matched	Matched6.76Unmatched0.85Matched0.85Unmatched35.70Matched36.32Unmatched0.10Matched0.10Matched0.32Unmatched0.32Unmatched0.20	Matched 6.76 6.63 Unmatched 0.85 0.73 Matched 0.85 0.82 Unmatched 35.70 32.86 Matched 36.32 35.81 Matched 0.10 0.29 Matched 0.32 0.16 Matched 0.32 0.33 Unmatched 0.20 0.37

n= 583 (baseline only)

Pseudo $R^2 = 0.1127$

**p* < 0.05, ** *p* < 0.01.

MATCHED DIFFERENCES OVER TIME

In the analyses we have combined the propensity score matching with the difference-differenceapproach as outlined in the previous section. At each point in time, (baseline, midline, and endline), we match treatment to comparison group respondents to make sure these groups are comparable and construct a solid counterfactual upon which each analysis rests.

Note that we have two different basis of comparison. First, we have a long-term comparison where we compare the baseline with the endline, and second a short-term comparison, where we compare the midline with the endline.²²

We have used the statistical software STATA to conduct the data cleaning. We have employed STATA's PSMATCH2 package to assess the estimation of propensity scores (Leuven and Sianesi, 2003) and STATA's DIFF package (Villa, 2009) to estimate these propensity-score-matched-difference-indifference analyses. We have used various Python packages to visualize these parameters. The scripts (STATA and Python) for data cleaning, a brief data documentation and the code used to perform these analyses can be found at https://github.com/riklinssen/MTBA.

²² The statistical analyses packages used only allowed for comparisons at two points in time. In case that there is data at three points available, the visualization present the estimates from the long-term comparison at baseline and endline. The midline estimates are included in these visualizations for reference, these stem from the short-term comparisons.

EFFECT SIZE ESTIMATES

To capture the impacts of the projects we have additionally calculated effect sizes for the estimates for girls empowerment (as presented in Table 3) and on the household level regarded the enabling environment (as presented in Table 4).

These estimates allow us to determine the magnitude of the effects of the MNCP project on each indicator. Here, we move from the interpretation in Table 3 and Table 4 based on 'sign' - that is; a positive, negative or no effect of the programme at all- towards estimating the actual magnitude or size of the projects' impacts For the indicators presented in Table 3 (Girls empowerment and Table 4 (Enabling enviorment) we have calculated Cohen's D as a measure of effect size

Cohen's D (also called the Standardized Mean Difference, SMD) expesses the impacts of the project (the observed changes over time) in terms of standard deviations of the outcome of interest. (at baseline). Cohen's D is therefore a unit independent measure. This means we can compare the impacts of the projects across indicators irrespective of the orginal 'scale' of that indicator (e.g. percentages, or answers to statements ranging from completely agree-completely disagree). A commonly used interpretation of Cohen's D is that the sizes of an effect is small if D = 0.2, medium (if D=0.5), or if large D=0.8.

There is some unclarity in the literature about calculating Cohen's D for propensity score-matched difference-difference-estimations. We have implemented the approach as suggested by Morris (2007) for calculating the standardized mean difference presented below.

$$SMD = \frac{(Y_{t1} - Y_{t0}) - (Y_{c1} - Y_{c0})}{SD_{pooled \ t0 \ ,c0}}$$

Where:

SMD=Standardized mean difference

 Y_{t1} = the value of the outcome at endline in the target group

 Y_{t0} = the value of the outcome at baseline in the target group

 $Y_{\mbox{\scriptsize c1}}\mbox{=}$ the value of the outcome at endline in the comparison group

 $Y_{\text{c0}}\text{=}$ the value of the outcome at baseline in the comparison group

SD $_{poloed t0,x0}$ = the pooled standard deviation (target and comparison group) of the outcome at baseline.

The pooled SD is then caluculated as follows:

$$SD*_{pooled} = \sqrt{\frac{(n_1 - 1)SD_1^2 + (n_2 - 1)SD_2^2}{n_1 + n_2 - 2}}$$

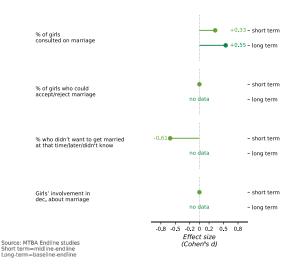
After calculating the (abslute) difference-in-difference, that is the difference between the target and the comparison group at endline, minus the difference between the target and comparison group at baseline, we divided this value by the pooled standard deviation (target and comparison group) of the indicator at baseline. The pooled standard deviation then takes in to account the differences in sample size between the target and comparison groups.

GIRLS EMPOWERMENT: EFFECT SIZES

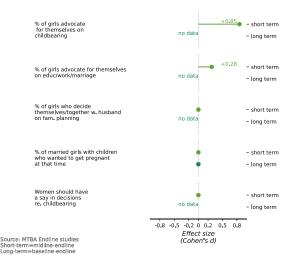
The effect sizes for the estimates regarding Girls empowerment are visualised in Figure 45 for the outcomes referring to decision making on marriage, decision making on family planning, and attitudes towards gender equality. Note that these refer to the indicators in Table 3. We plot Cohen's D on the horizontal axis that show whether there size of the effect can be considered small(D < 0.2), medium (D=0.5), or if large (D>0.8). In case the impact of the project on a certain outcome is not statistically significant, Cohen's D is plotted as zero.

Figure 45 Effect size estimates (Cohen's D) for girls empowerment: Decision making on marriage and family planning, and attitudes to gender equality.

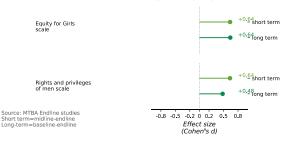
Effect sizes: Decision-making on marriage



Effect sizes: Decision-making on family planning





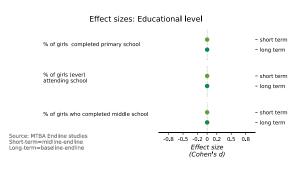


We find that the project is a medium sized effect on the percentages of girls that were consulted on who to marry on the long term. The short term effect is rather modes (D=0.33). The project does not have an impact on whether girls could accept or reject their marriage nor does the project affect girls' involvement in decisions about marriage.

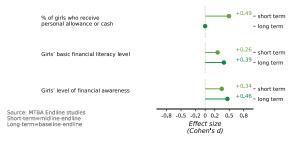
We do find a medium sized negative effect, for the percentage of girls who did not want to get married (at that time). This would mean that the percentage of girls who did not want to get married decreases. However, these estimates refer to the total population of girls sampled and the question was asked to all married women. A large share of the marriages girls refer to when answering these questions have thus occurred prior to the implementation of the project.

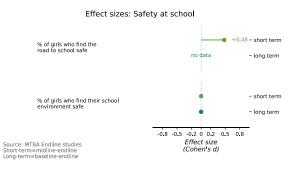
We do find strong effects (in the short term) for the girls ability to advocate for themselves when it comes to decisions about childbearing. Surprisingly, the project does not effect attitudinal indicators related to this (see 'Women should have a say in decisions regarding child-bearing', where we do not find an impact of the project). There are small positive effects of the project on the proportion of girls that can advocate for themselves on intra-household decision making around education, work, and marriage more generally.

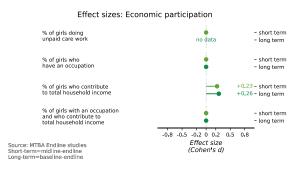
The project does not affect the number of unwanted pregnancies but does have strong effects on girls'attitudes towards gender equality (see equity for girls and rights and priviliges of men). Figure 46 Girls empowerment: effect sizes for education level, financial independence and literacy, safety at school, and economic participation











We visualize the remainder of the effect sizes on girls emowerment in Figure 46. As already mentioned the projects did not not lead to higher levels of education for the girls who participated. We do find that the project affected girls' financial independency and literacy to a certain extent. For literacy and financial awareness we find small to medium sized effects in the longer term. Regarding economic participation we find he small effect that girls contribute more to their household's income. However, neither the share of girls that does unpaid care work nor the percentage of girls that have an occupation changes as consequence of the projects' activities.

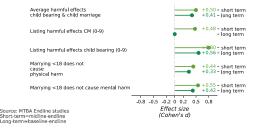
ENABLING ENVIRONMENT: EFFECT SIZES

In Figure 47 we present the effect size estimates for the indicators that refer to the enabling environment, presented in Table 4. These were measured at the household level. Overall we find medium sized effects for the indicators that refer to knowledge about the harmful effects of child marriage and early child bearing. The project thus increased the knowledge of parents on the harmful effects of child marriage and the effects are stronger on the long term. Regarding social norms we find that that man increasing share of people feel that girls should be married if they are 18 years or older. Especially in the long term we find a relatively strong effect of the project on this particular outcome. Similarly we do see that there are some medium sized effects when we ask these parents to refer to the wider community. These items in the questionnaire probed for social norms (e.g. "other community members think marriage before a girls is aged 18 is not good" and "men should not marry girls younger than 18") and we do see strong postive effects on this social norms change. The project did not influence the household members view of negative consequences if girls are not married off at all.

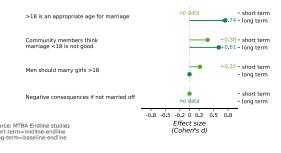
Similar to girls we see medium to strong effects of the project on the attitudes towards gender equality. The projects activities resulted in more gender equal or more gender progressive views regarding girls and men.

Figure 47 Effect sizes: Enabling environment (household level)

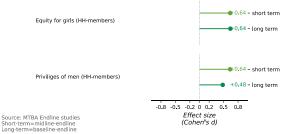
Effect sizes: Knowledge on harmful effects of child marriage and early childbearing



Effect sizes: Social norms on marriage before 18 years old



Effect sizes: Attitudes to gender equality



Finally, the project did not lead an increase in the percentage of household members who reported to take action action child marriage (not visualised).

ANALYSING RELATIONSHIPS BETWEEN GIRLS' LEVEL OF EDUCATION AND CHILD MARRIAGE

In Section 3.4, Figure 26 analyses the relationship between girls' levels of education and child marriage to answer the question whether increased education results in less child marriage.

In answering such a question differences between target and comparison groups are irrelevant. In case higher educated girls would be less likely to be married before they are 18 years old this would occur and be observable in both the target and comparison group. This is a test of the assumptions behind our theories of change instead of a measurement of impact. For this reason we have not distinguished between the target and comparison group and forego the methods of causal inference and impact assessments outlined above. Instead, we investigate a relationship between a determinant (in this case girl's level of education) and whether the girls have been married before they are 18 years old or not.

We investigate these relationships using multivariate (probit) regression. Imagine such a multivariate regression analyses as a giant 'switchboard' where we can flip a switch for a certain determinant, in this case a girls' level of education. We can then isolate the effect that increased levels of education have on child marriage. To accurately isolate the effect of education we have included several controls in this analysis. This is done to avoid that the relationship we find between girls' level of education and being married before they are 18 years old is confounded by other socio-demographics. For instance, we know that girls coming from impoverished household are more likely to be married before reaching the age of 18. Moreover, girls that grew up in poorer households, are less likely to attain higher degrees. We thus include household-level poverty proxies (such as the Progress out of Poverty Index) in our analyses to isolate the effect of a girls' education specifically and to avoid spuriousness of the relationship we estimate with a girl's socio-economic and socio-demographic background.

This model's results are presented in Table 6 Does increased education of girls result in less child marriage? Multivariate regression analyses (probit). Girls level of education regressed on being married before reaching the age of 18. Full model, with controls and district fixed effects. . We included the same control variables in this analysis as we did in our matching model. We see that as a girls' level of education increases the likelihood of marrying before 18 years old decreases. Moreover, we see that girls from households with higher literacy rates are less likely to be married off before 18 years old. Girls from bigger households (see the parameter estimates for the number of household members), are less likely to be married off. In case the dependency ratio within the household is higher, girls are more likely to be married before 18 years old. Poverty also plays a role (PPI), the poorer the household, the more likely a girl is to

marry before reaching the age of 18.

Table 6 Does increased education of girls result in less child marriage? Multivariate regression analyses (probit). Girls level of education regressed on being married before reaching the age of 18. Full model, with controls and district fixed effects.

	В
	(s.e.)
Girls level of education	
No education	Ref.
Primary education	-0.371***
	(0.094)
Middle education	-0.387***
	(0.122)
Matric	-0.571***
	(0.139)
FA/Fsc	-0.913***
	(0.229)
BA/Bsc	-1.345***
	(0.316)
Tertiary/University	-0.815*
	(0.472)
Controls:	
Male headed household:	Ref.
Female headed households	-0.029
	(0.113)
Literacy rate of household	-0.229*

(% of household members aged 16 or older	(0.118)
who are able to read and write)	
Household size	-0.066***
(total number of	(0.015)
household members)	
Household dependency ratio	0.319***
(no of household members not in working age	(0.050)
(<15 years old or > 65 years old) divided by	
no. of household members in the working age (15-65)	
Progress out of poverty index	0.006***
(likelihood of living below \$2-per-day poverty line,	(0.002)
higher scores are poorer households)	
Girls year of birth	-0.151***
	(0.010)
District fixed effects	YES
	(omitted)
Constant	300.646***
	(19.517)
nr of observations (baseline+midline + endline)	2,478
Pseudo R2	0.242
lglikelihood	-867.4
Standard errors in parentheses	

*** p<0.01, ** p<0.05, * p<0.1

In addition to these determinants we have also controlled for a girls' year of birth. This is done to (admittedly, rather crudely) proxy generational differences in the extent to which girls marry before reaching the age of 18. Note that we are measuring whether a girl was married before 18 years old, irrespective of her age. The girls in the sample range from 10 years old, to 34 years old. We are capturing whether girls have been married before 18 years old also for those girls that were 34 years of age at the time of the survey. This marriage might have actually occurred long before the programme was implemented. Moreover, younger girls have been at risk of child marriage for a shorter amount of time compared to older girls in our survey (i.e. if a girl was born in 2011 she has not turned 18 yet). We thus additionally control for the girls' year of birth. We see that those girls from more recent generations (i.e. have "higher" years of birth) are generally less likely to be married before they are 18 years old compared to 'older' or 'earlier' generations.

The visualization presented in section 3.4, Figure 26 provides the so-called marginal effects. These are parameter estimates from our probit model that are converted into predicted probabilities. They represent the effect of education while all control characteristics are set to their means. The probability always ranges between 0 and 1. This can be colloquially interpreted as the effect if education for an otherwise average girl. Thus a girl coming from an average-sized household, with an average level of poverty, average literacy rates etc. The visuals thus show that the probability of child marriage for an 'average' girl that has no education is 0.18, on a scale ranging from 0 to 1. The probability of child marriage for a girl with a similar average background, but who has attained a BA or Bsc degree is 0.04. Thus, higher educated girls are less likely to get arried before the age of 18.

6.2 DETAILS OF THE SAMPLE

Table 7: Target group

Provinc	District	Union	Village	Baselin	Midlin	Endlin
е				е	е	е
			Ahmed Khan Lashari	14	48	49
		Ahmed Khan	Allah Dino Seelro	0	1	34
		Lashari	Sajan Hakro	30	32	22
	Lakarna		Unknown	0	0	16
	Lakama	Dokri	Dokri	15	44	42
Sindh		DOKI	Aalmani	15	17	19
Sinun			Jumo Aghum	24	59	54
		Jumo Aghum	Allah Dino Seelro	15	32	0
		Shikarpur (6) city	Khanchanabad	10	31	32
	Shikarpur	Chatto Mangi	Jan Mohammad Makhyani	6	18	19
		Rahim Abad	Talib Channa	14	17	17
		Jaggatpur	Punjh grahni	16	24	23
			Nathey safehay wala	15	16	16
	Muzzfargar		Basti Mubarak pur	16	22	22
	h		Basti Chaman	15	19	18
			Jalala Abad	16	27	27
Punjab		Khannur Bagga	Basti Ghulam Ali	16	16	16
			Danwran 2	15	23	20
		Dawren	Danwran 3	15	19	18
	Lodhran		Mujaldi Wala	14	18	18
		Sumra	Basti Balochan 2	15	18	18
Total	<u>.</u>	·	·	296	501	500

Table 8: Comparison group

Provinc e	District	Union	Village	Baselin e	Midlin e	Endlin e
e		Badrh Joining Dara		25	83	81
	Lakarna	Waris Dino Machi	Waris Dino Machi	15	24	25
		Behman	Behman	15	24	23
		Shikarpur (8) city Miskeen Shah Colony		15	32	32
Sindh		Pir Bux Shujraa	Allah Wadhayo Chachar	15	24	24
	Shikarpur		Peer Chundum	12	25	27
		Madeji	Taraee	15	22	20
			Imam Bux Bohirro	13	19	19
		Waryaso	Varyaso Ghulam Hassan Jalbani		18	18
Duniah	Muzzfargar	Murad Abad	Tohfa Pur	16	20	20
Punjab h		Thatha Qureshi	Gillani Colony	16	20	17

			Basti Arbi	15	18	18
			5 Marla scheem	16	20	21
	Lodhran		Maish Wala	14	27	25
		Daira Jund	Kot laal Shah 1	14	20	20
			Kot laal Shah 2	16	24	23
			Deepay wala 2	16	25	24
		Chak Hinta	Basti Hinta 1	16	22	22
		Jalal		16	35	34
Total				295	502	493

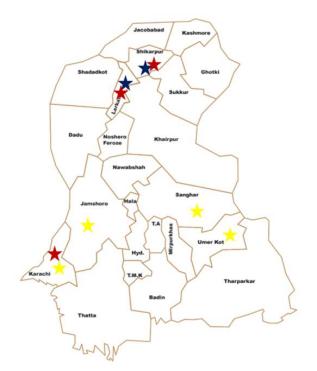


Figure 48 and Figure 49 depict the intervention areas of the MNCP project in Sindh and Punjab. In Sindh, partner Baanh Belli implements the project activities (formerly this was done by IRC). In Punjab, partner Bedari implements the project activities.

The blue and red start depict the intervention areas of the MNCP project. Blue stars are depicting the pilot areas of MNCP in 2015, and with the start of MTBA, these areas have been expanded. This is indicated by the red stars. The yellow stars are existing interventions of Oxfam's other youth and/or gender programmes.

Figure 48 Sindh province

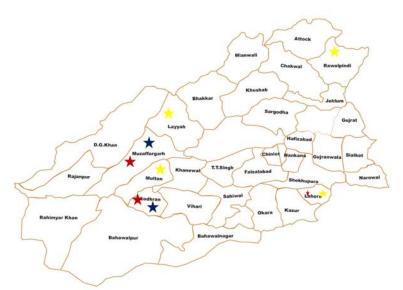


Figure 49 Punjab province

EX-ANTE POWER CALCULATIONS FOR THE MTBA-ENDLINE SURVEY

Based on power calculations parameterised using the MTBA-baseline and MTBA-midline surveys this section provides the rationale of choosing the endline sample size. These power calculations were performed prior to fielding the survey and its objective was to provide advice on the total sample size for this impact assessment.

These power calculations detailed 5 scenarios of possible sample sizes to choose from given the precision of the impact estimates required. Further deliberations on budget and time available for fieldwork and the required precision of the estimate informed the sample size chosen.

We selected three key outcomes to perform our power calculations. The final report will relied on estimates of tens of outcomes. For reasons of brevity we choose two behavioural characteristics (proportions) and one attitudinal characteristic:

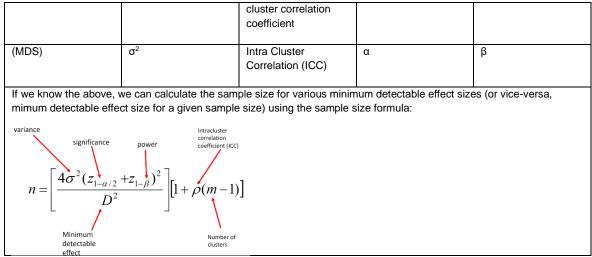
- % of girls married before 18 years old
- % girls attending school or who have attended school (formal)
- Gender-equitable attitudes: Equity For Girls scale battery of likert-scale statement (agreedisagree) (0–16 points scale).

The power calculations presented here were performed based on the MTBA-baseline and MTBAmidline data collected earlier. The baseline and midline values on the relevant parameters (esp. variance and proportions) were (fixed) input to the sample size formula. Based on these values, we calculated the sample size and so-called minimum detectable effect sizes.

SAMPLE SIZE CALCULATIONS: KEY CONCEPTS AND ASSUMPTIONS

Size of the impact a programme wants to detect	Variation in outcome indicators	Clustering	Confidence /significance	Statistical power
Minimum detectable effect size	Variance	Number of clusters/villages in the sample and intra	Type I-error	Type II error

Table 9 Power calculations: sample size formula



Size of the impact a programme wants to detect: Larger impacts are easier to detect than small impacts. We need a sample size that is able to detect the smallest effect size deemed important. The smaller the minimum detectable effect size, the larger the sample. As guiding question for the final choice of sample size.

Variance: More underlying variance (more heterogeneity) on a certain outcome (e.g. attitudes are more dispersed/polarized makes it more difficult to detect an effect. For instance, for peoples' views or attitudes towards child marriage; it is harder to detect effects over time if people hold wildly diverging views because we cannot know whether a change over time is a result of the programme or simply because people's attitudes are varied within the target group and/or comparison group. The larger the variability is, the larger the sample required for a given power. We have calculated the variance for each key indicator, for the relevant groups (target and comparison) using the midline data and as input for our power calculations.

Clustering: One of the most fundamental assumptions behind any inferential statistical technique is that the subjects (girls or households) are independent of each other. This means that the score on an outcome of a single household (or girl) in the sample, is not influenced by the score of another household (or girl) in the sample. This assumption is obviously not met because households who live in the same village/location (or cluster in this case), are likely to be similar to each other; they are likely to live in a similar environment, under similar socio-economic circumstances, where similar social norms play a role, etc. We need to correct for that in our sample size calculations. The larger the intra cluster correlation (ICC) is, the larger the sample for a given power. Yet, we conclude that empirically the ICC, particularly for Gender Equitable attitudes, is very low (ICC=0.005) in the midline sample with 38 clusters/villages, whereas on an attitudinal indicator such as gender equitable attitudes is where you would expect the highest levels of ICC.

Confidence/significance and statistical power: Refers to so-called type I error and type II errors. In estimating the effects of any programme we can make 2 type of mistakes. A type I error and a type II error. A type I error is a false positive. This means that in our analyses we detect an effect when in fact no effect is present. Thus, we would state that the programme's activities have an effect on girls attitudes towards child-marriage when in fact these activities did not change girls' attitudes towards child marriage. The significance level (alpha) is the probability of a type 1 error. The confidence (1-alpha) is the probability that we do not find a statistically significant effect if the treatment effect is in fact 0. The lower our significance level is, the larger the sample size needed for a given power. By convention, the confidence level is set at 95% (or alpha at 5%)

The second type of mistake we can make is a false negative. This means that in our analyses we fail to detect an effect (i.e. we conclude the programme is not responsible for a change in a certain outcome indicator or has no impact) when in fact the programme's activities did change the relevant outcome.

Beta is the likelihood of making a type 2 error and 1-beta is called the statistical power. The larger the power is, the larger the sample size required. By convention, we assume 80% statistical power.

POWER CALCULATIONS

Based on our baseline data, we further detailed scenarios for five different sample sizes, ranging from 810 people to 1610 interviews and provided estimates of the detectable effect size on the aforementioned indicators. These five scenarios, show how accurate our measurements will be. These projections need to be seen in light of the resources available for data collection to come to a final choice of sample size.

The power calculations provide an estimate of the accuracy of the survey, expressed as a minimum detectable difference. The minimum detectable difference can be interpreted as the accuracy of the sample size chosen and is visualized on the vertical-axis in Table 10. On the horizontal axis we provide the sample size. We have detailed different scenarios. This is where the lines meet, meaning that for instance, for the key indicator school enrolment in Table 10 panel 1, with a sample size of 1610 people (divided equally between target and comparison group) we would be able to detect, or have collected enough evidence to be as accurate for finding differences equal or greater than 6.7 % in school enrollment rates (highlight D). Lower sample sizes are less accurate. Thus if we would choose a sample size of 810, we can only detect roughly a 10% difference between the target and comparison group or change in school enrollment rates (highlight A). Changes over time, or differences between the target and comparison group smaller than 10 percentage points cannot be detected using a sample size of 810 people, or smaller.

The difference between the target group and comparison group²³ at midline is presented as well. This is done to show the order of magnitude of the supposed changes in the outcome indicators.

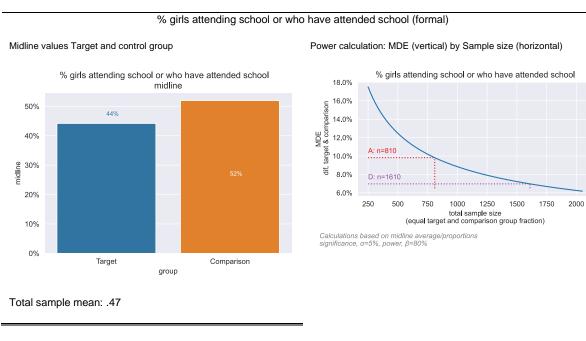
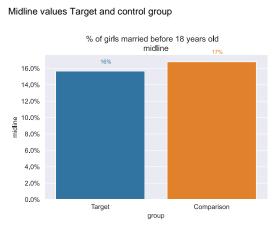


Table 10 Power calculations for selected indicators based on midline data: Midline values in the target and comparison group (left), Minimum Detectable Effect (MDE) by sample size (right).

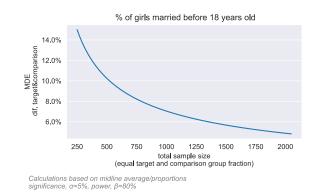
²³ Note that the values for the comparison group are 'raw' values. For reasons of brevity, we have not constructed a comparison-groupcounterfactual and corrected for dissimilarities between the target and comparison group (through e.g. propensity score matching).

ICC (19 villages, [95% CI in brackets]): .16 [.08, .25]



% of girls married before 18 years old

Power calculation: MDE (vertical) by sample size (horizontal)

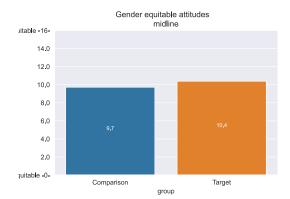


Total sample mean: 16.83

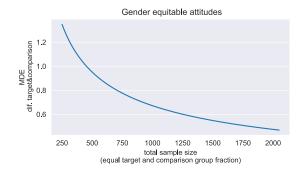
ICC (19 villages, [95% CI in brackets]): .06 [.01,.095]

Gender equitable attitudes

Midline values Target and control group



Power calculation: MDE (vertical) by sample size (horizontal)



Calculations based on midline average/proportions significance, α =5%, power, β =80%

Total sample mean: 10.05136

Comparison group SD: 3.834907

Treatment group SD: 7.315106

ICC (19 villages, [95% CI in brackets]): 0.13 [0.05758, .19538]

Power calculations assume unequal variances in target and comparison group.

Table 11 Detailed scenario's minimum detectable effect size (difference between target and comparison group) by indicator for 5 scenarios (sample size ranging from scenario A 810 till Scenario D 1610)

Scenario A. Sample size = 810	
Minimum detectable effect size (dif target-control)	Indicator
0.078887	% of girls married before 18 years old
0.746617	Gender equitable attitudes
0.098204	% girls attending school or who have attended school (formal)
Scenario B. Sample size= 1010	
Minimum detectable effect size (dif target-control)	Indicator
0,07505	% of girls married before 18 years old
0,668462	Gender equitable attitudes
0,088004	% girls attending school or who have attended school (formal)

Scenario C. Sample size= 1210	
Minimum detectable effect size (dif target-control)	Indicator
0,068242	% of girls married before 18 years old
0,610628	Gender equitable attitudes
0,080436	% girls attending school or who have attended school (formal)
Scenario D. Sample size= 1410	
Minimum detectable effect size (dif target-control)	Indicator
0,062979	% of girls married before 18 years old
0,565601	Gender equitable attitudes
0,074533	% girls attending school or who have attended school (formal)
Scenario E. Sample size= 1610	
Minimum detectable effect size (dif target-control)	Indicator
0,058756	% of girls married before 18 years old
0,529261	Gender equitable attitudes
0,069763	% girls attending school or who have attended school (formal)

Given the data above, scenario C was recommended, with a sample size of 1210 people, equally divided between the target and comparison group. We see that regarding gender equitable attitudes, our statistical power is already enough at very small sample sizes (able to detect a difference of 0.66 on a 16 point scale, given a sample size of 810). The percentage of girls attending school cannot be estimated precisely, even under the largest sample size, and most costly scenario of 1610 respondents. The precision of the estimate for percentage of girls increases most when comparing surveying 1010 respondents versus 1210 respondents. These extra 200 (compared to 1010 respondents) do add the most precision to the estimate on this indicator. The precision of the estimate for girls married before 18 years old only increases marginally for more costly scenarios D and E, which led to the advice to choose for scenario C and sample 1210 respondents. However, budget considerations meant this scenario could not be honoured. Instead, the final sample is closest to scenario B (1010 respondents).

6.3 EVALUATION DESIGN

6.3.1 INTRODUCTION TO THE EVALUATION DESIGN

The project has developed a coherent approach, where MEAL, research and learning go hand in hand. The diagram (Figure 50) below depicts how different components related to knowledge and MEAL feed into each other, and as common structure strengthen Oxfam's and partners' knowledge and capacity to ensure an adaptive ToC and program.

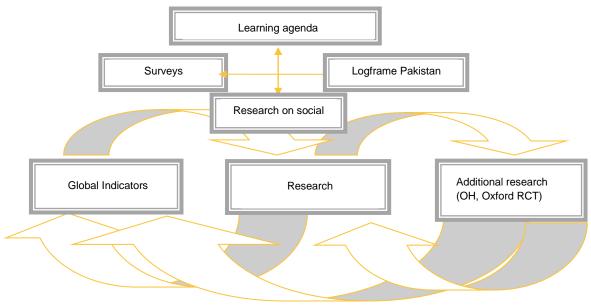


Figure 50 Knowledge and Learning diagram

The project uses a balanced approach of qualitative and quantitative methods, the so-called mixed methods approach. "*Mixed methods research is the type of research in which a researcher or a team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the purposes of breadth and depth of understanding and corroboration*" (Johnson *et al.*, 2007, p. 123). Mixed methods approaches are often implemented as they fit into the complexity of a project and provide a comprehensive picture of the social change processes and influence of the context.

6.3.2 IMPACT, MEAL AND LEARNING

The main objective of the impact evaluation is to explore whether the MTBA programme reduces child marriage among its target groups in Pakistan and has an impact on the lives of the targeted girls and their households. The design of the impact evaluation, and the conceptual framework which constitutes as basis for the design of the impact evaluation, incorporate the *Global Indicators*,²⁴ the logframe indicators on Pakistan level (outcome 1, 2, 3, 5 and 6, with a focus on outcome 1 and 6) and the learning questions from the learning agenda (Figure 51). The results and the reports produced from the baseline, midline and endline surveys will be used to refine the program's activities and will steer future qualitative

²⁴ As the More Than Brides Alliance is a global programme, it has set up an overarching monitoring, evaluation, accountability and learning (MEAL) framework of the MTBA programme, consisting of *Global Indicators*. In each of the five countries, there is also a project country specific MEAL log frame.

research. Each survey, together with the qualitative data, will be used to assess to what extent the outcomes are achieved and to what extent the programme has had impact.

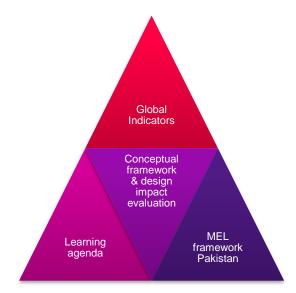


Figure 51 Three components around impact evaluation design

6.3.3 CONCEPTUAL FRAMEWORK

The conceptual framework provides the conceptual basis for creating and conducting the design and surveys of the impact measurement. For impact measurement in the MNCP project we will follow the structure (see Figure 52) with the Theory of Change and the Learning Agenda at the basis, followed by outcomes/impact and indicators as units of measurement. Subsequently, the indicators as defined in the MEL-plan will be organized under concepts, while survey questions will be used to provide information for concepts and indicators.

For example, the impact level states "Young people are able to decide if and when to marry and pursue their life skills and rights in a supportive environment". This impact level statement in divided into two indicators. One of these indicators is % girls that were married before 15. To measure this indicator, we have to operationalize the indicator into concepts. These concepts are marital status and age when married. In the survey, we then measure these concepts through the two questions: "What is your marital status?" and "How old were you when you got married?".

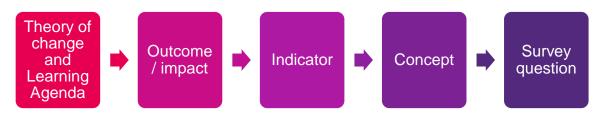


Figure 52 Flow diagram for different layers in impact measurement

6.4 LEARNING AGENDA

Within the MTBA programme, a set of priority learning areas have been identified by a combination of a desk review on child marriage in Pakistan, the Theory of Change and intervention strategies, and the experience of local partners. This learning agenda has prioritized key areas in our impact evaluation design and qualitative research activities, enabling us to understand the degree of impact and to which interventions this is attributable, and to better understand the unknown connections between interventions and transformational change. This learning agenda has been updated after each one of the learning activities, such as the baseline and midline, the formative research on social norms and the qualitative study on positive deviance. This has been done with the MTBA Pakistan team (Oxfam staff in Pakistan and The Netherlands, partner organizations Bedari, IRC and Baanh Belli, and their social mobilizers), during reflection workshops of studies and the programme itself. By doing so, we will ensure the learning agenda to be a living document, owned and used by all programme stakeholders.

The learning agenda, which is co-created by Oxfam staff, both from Pakistan and The Netherlands, and partner organizations Bedari and IRC in 2016, focused on the following themes:

- Education (Outcome 2)
- Economic empowerment (Outcome 3)
- Life skills services (Outcome 5)
- Behavioural change (Outcome 6)
- Implementation gap of laws and policies (Outcome 7)

In these themes, several learning questions have been identified and operationalized. By operationalizing, we identified the means of verification for these learning questions, such as a desk review, surveys, qualitative research or outcome harvesting. Throughout the years, these learning questions have been adapted and adjusted, through reflection workshops with partners and other stakeholders. In these discussions, we questioned whether questions were still relevant, whether we wanted to focus more on one of the questions, whether there was a need to adapt or whether other information was required for them to be answered. Please find the overview of the operationalized and adapted questions below.

OUTCOME	LEARNING QUESTION	WHAT DO NEED TO KNOW	TOOLS	
2	What strategies seem to create best results to on the one hand increase access to education for girls and on the other hand prevent the drop-out of girls in school, including the role of non-formal education?	The impact of the various strategies implemented around access to education in the MTBA programme in Pakistan – can we explicitly note a variation in results of / ascribe impact to a greater extent to one or more activities and why?	 MEL System: connection between outputs and outcomes Baseline, Midline, End line Survey: measuring the increase in access to education and school drop out. Include informal education OPTIONAL: Stories of Change: which strategies appear to have stronger results 	
3	How can economic empowerment effect the perception in Pakistani households	What is the perception of households on the economic role and importance of young women over time? What	Baseline, Midline, End line Survey: changes in perception of the household on the role and economic appreciation of girls; increase of economic participation	

	on the role and appreciation of girls? Changed into → Do households where girls partake in income generating activities have a different view on role and appreciation of girls?	are the changes in young women's possibilities to engage in economic activities without being hindered by norms, values, and care work? Does the participation in financial decision-making of young women changes over time?	 and decision-making of young women. Operationalize 'economic empowerment' OPTIONAL: MEL System: connection between outputs and outcomes + activities of partners
	To what extent can activities of IRC/Bedari influence the economic empowerment of young girls/women, aged 15-24?	We know now that education is of a major importance to economic empowerment of young girls/women. But we would like to find out whether activities of IRC/Bedari are influencing this economic empowerment. Thus; creating education access, giving life skills training, sensitizing communities; does it lead to improved economic empowerment of young girls/women, ages 15-24?	 MEL System: connection between outputs and outcomes + activities of partners Baseline, Midline, End line Survey: increases education level, life skills, social norms communities, economic empowerment girls. Operationalize 'economic empow- erment'
5	Which health care providers are responsive to young people (particularly girls)?	Are there government/NGO services ensuring quality/youth friendly services in targeted areas?	 Mapping done by partners MEL system: which services are there from the partners + how many young people use them Baseline, Midline, End line Survey: possibly include access to health care providers Invite an expert for this, such as
	protection systems play a role in psycho social rehabilitation of girls affected and girls at risk?	traumatized young girls due to forced early marriages. What we would like to know is how the CPS can help the psycho social rehabilitation of girls in order to strengthen our strategies.	 Save the Children is MEL System: connection between outputs and outcomes

6	Looking at positive deviance – comparing Pakistani households in which girls are married at a young age and those that marry at a later stage – how can we use this to strengthen our strategies/activities change (the perception of) social norms in order to achieve behavioral change?	What are the specifics of families in which girls are married at a later age – can we see distinct differences between households with early marriage and those who do not?	~ ~	Baseline, Midline, End line Survey: characteristics of households and age of marriage of girls and young women OPTIONAL: Focus Group Discussions: insight in the place of positive defiance families in society – how are they perceived? Insight in the choice of positive defiance families – which socioeconomic aspects appear to be the strongest influence for them to decide not to marry girls early?
	<u>New question</u> : Which social norms (and from who) of the community affect the level of life skills and rights knowledge of girls and their access to health services covering life skills and rights issues?	We would need to know the level of gender norms of communities, the level of life skills and rights knowledge of girls and whether they have access to health services concerning their life skills and rights issue now and compare it to a later stage.	A A A	MEL System: connection between outputs and outcomes Baseline, Midline, End line Survey: measuring gender norms of communities, level of life skills and rights knowledge of girls, access to health services OPTIONAL: Stories of Change: which strategies appear to have stronger results
7	Can we effectively contribute to preventing early marriage by leveraging the existing favourable policy environment in Sindh in a decentralized system as present in Pakistan, address the existing implementation-gap, and as such create a case for adoption of this system in Punjab?	Do we see change the willingness of duty- bearers in Sindh to adhere to the existing policy framework around early marriage; Do we see actual cases in which early marriage is prevented as a result of duty-bearers acting according to the policy framework?	~ ~	Outcome Harvesting: to systematically harvest the results of lobby and advocacy initiatives – do we see a change in willingness and possibly concrete actions of duty-bearers to prevent early marriage in the existing policy framework in Sindh? Qualitative research with decision- makers in Punjab and Sindh

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