ENGAGING PARENTS TO PROMOTE GIRLS' TRANSITION TO SECONDARY EDUCATION: A PILOT PROJECT

FINDINGS FROM THE ENDLINE ASSESSMENT

Chapter 1

Introduction

In India, attention has increasingly been drawn towards enabling adolescents' transition to and successful completion of secondary education. For example, the Rashtriya Madhyamik Shiksha Abhiyan (a scheme for the universalization of secondary education), launched in 2009, seeks to provide universal access to secondary education by 2017, enhance and universalize retention by 2020 and improve the quality of education imparted at secondary level by making all secondary schools conform to prescribed guidelines (Ministry of Human Resource Development, 2009). Likewise, the recently launched Beti Bachao Beti Padhao (a nation-wide campaign exhorting people to celebrate the girl child and to educate her) has set increasing girls' enrolment in secondary education as one of the targets to monitor the success of the campaign (Ministry of Women and Child Development, 2015). While these initiatives are commendable, it is too early to see their impact. Moreover, with a net enrolment ratio of 46 in classes 9-10 for girls in 2013-14 (National University of Educational Planning and Administration, Ministry of Human Resource Development, 2014), the country has a long way to go to achieve universal secondary education for its girls. Therefore, testing innovative practices to promote secondary education among girls is clearly needed.

With this background, the Population Council, in partnership with CHETNA, MV Foundation, Awaaz.de and Navjeevan Trust, and with the support of the Human Dignity Foundation and the John D. and Catherine T. MacArthur Foundation, initiated an intervention study, project *Sankalp*. It aimed to support adolescent girls' transition to and retention in secondary education and to improve their learning outcomes by building parental and community engagement in and accountability for secondary education. It responds to key gaps in programmes for achieving universal secondary education in the country – the lack of evidence on best and innovative practices to promote secondary education and of effective models for community mobilisation to support adolescent girls' secondary education. This report describes the project *Sankalp* and its implementation and examines the extent to which the project improved adolescent girls' transition to secondary education, their attendance in school and their learning outcomes.

Background and rationale

In India, the most recent official educational statistics indicate a net enrolment ratio (NER) of 73 for girls in classes 6-8 in 2013-14, but a much lower NER in classes 9-10 (46) (National University of Educational Planning and Administration, Ministry of Human Resource Development, 2014). Moreover, 2011 census data on the proportion of young women aged 18-24 who had completed Class 10, the final year of (lower) secondary school, indicate that 42 percent had done so, compared to 49 percent of similarly aged young men (Office of the Registrar General & Census commissioner, India, 2015). These data underscore the sluggish progress in enabling adolescent girls to successfully complete secondary education in India.

Equally concerning is evidence from recent studies in India which highlights the poor learning levels among both girls and boys transitioning to secondary education (ASER Centre, 2015; Educational Initiatives, 2010; National Council of Educational Research and Training, 2012). For example, a nation-wide study of students in rural areas in 2014 shows that 25 percent of Class 8 students could not read Class 2 text in their local language, 66 percent could not correctly do a three digit by one digit division problem, and 53 percent could not read simple sentences in English (ASER Centre, 2015). Yet another pan-India study conducted among students in rural and urban schools across 18 states in 2009 notes that although performance in languages and Mathematics improved as students moved from Class 4 to Class 6 to Class 8, the extent of improvement was often not as large an increase as one would expect, and that most of the students in Class 8 lacked competencies that they should have acquired in lower classes (Educational Initiatives, 2010).

There are many reasons for the low levels of progression to and completion of secondary education as well as poor learning outcomes among adolescents in the country. Gender differences are evident in

some of the reasons. Data from 2005-06 NFHS-3 indicate that, of adolescents aged 14-17 who had discontinued schooling after completing Class 8 in India, 15 percent of girls and 7 percent of boys were withdrawn from school to take care of household responsibilities and 6 percent of girls and 18 percent of boys were withdrawn to work on the family farm or business or to work for pay. Although primary education is free and secondary education is almost free[1] in government and government-aided schools in India, some 18-19 percent of both girls and boys were withdrawn from school because of the inability of their families to afford the cost of schooling. Studies have noted that parental perceptions of the returns to education differ for sons and daughters and may be major drivers behind gender disparities in parental investment in their children's education. A study of parents of youth in six states in India indicates that parents recognised the need for a secondary or college education to enhance their son's earning prospects, but perceived that socio-cultural factors would inhibit their daughters, if equally educated, from enhancing their earning prospects (Santhya and Jejeebhoy, 2012).

The fact that a sizeable proportion of students may be first generation learners compounds their risk of discontinuation. Findings from a study of youth in six states in India show that 25-26% of adolescent girls and boys aged 14-17 were first generation learners and discontinuation after Class 8 was four times as high among girls whose mother and father had never attended school as among those whose parents had attended school (79% versus 21%); the corresponding percentage among boys was 70 and 31 (IIPS and Population Council, 2010). Illiterate parents may not be able to navigate the educational system to enrol their children in secondary schools or to ensure that their children receive quality education once enrolled, and, at the same time, conditions prevailing at home may not instil the importance of regular school attendance or of the need for attentiveness in the classroom.

School- and-curriculum related factors such as lack of interest in studies, unfriendly atmosphere in schools, doubts about the usefulness of schooling, inability to cope with studies, and academic failure are equally important reasons for discontinuation, and such reasons as lack of perceived relevance and lack of interest may also reflect the limited value placed on education in many households. Of adolescents aged 14-17 who had discontinued schooling after completing Class 8 in India, 32 percent and 47 percent of girls and boys, respectively, discontinued schooling due to academic failure, lack of interest in studies and perceived irrelevance of further education. Concerns related to physical access are also found to compromise the transition to secondary school, particularly among girls because only 2 percent of primary school facilities in the country offer post-primary grades. As a result, almost all children have to transfer to a different school facility most likely at a distance from home to attend grades 9-10 (Mehta, 2014).

These findings clearly emphasize the importance of mobilizing communities, especially parents, in encouraging girls to transition to and successfully complete secondary education. Theories of educational change based on research conducted in both developed and developing countries have identified increased access to schools, effective accountability mechanisms, improved learning environment, curricular relevance and creation of enabling conditions, including parental and community engagement as critical in enabling educational transitions and improving academic performance, particularly among girls (Barrera-Osorio et al., 2009; Bruns et al., 2011; Connell and Klem, 2000; Dhaliwal et al., 2011; Haynes et al., 1989a; 1989b; Jensen, 2010; Lloyd and Young, 2009; Nguyen, 2008). For example, a study conducted in the Dominican Republic found that providing Class 8 students with information on differences in earnings by years of schooling led to reduced dropout rates in the subsequent year and increased school completion four years later (Jensen, 2010). Another study in Madagascar found that providing information to Class 4 students and their parents about differences in earnings by educational level increased average attendance and test scores (Nguyen, 2008). Moreover, recent evidence from a comparative cost-effectiveness analysis of eleven programmes to improve school attendance in developing countries found that raising awareness among parents on returns to education was more cost-effective in terms of additional years of student

[1] Students are expected to pay only a negligible amount as school fee; schemes to provide text books and uniforms free of cost are implemented in several states

participation per dollar spent than other interventions such as de-worming, free uniforms, monitoring of teachers' attendance, computer-assisted learning curriculum, remedial tutoring and conditional cash transfers (Dhaliwal et al., 2011). A review of the evidence on intervention strategies supporting the education of adolescent girls in developing countries reports that various demand-side strategies such as school transportation, the provision of boarding facilities, safety policies and training and advocacy and the promotion of community engagement have promise but are unproven[2] (Lloyd and Young, 2009).

Yet, relatively little is known about how existing theoretical frameworks translate into actions that improve the transition to and completion of secondary education, particularly for vulnerable groups. In India, while interventions incorporating one or more of the promising demand-side approaches mentioned above have been implemented to facilitate the completion of primary education, theoretically-grounded interventions focusing on the transition to secondary education are limited. Indeed, the Working Group on Secondary and Vocational Education for the XIIth Five Year Plan in India observed that an underlying issue for the limited progress in enabling adolescents to complete secondary school was the limited evidence on best and innovative practices to promote secondary education (Ministry of Human Resource Development, 2011). Moreover, while a number of intervention models have attempted to engage parents and communities to promote primary education (Banerjee et al., 2010; 2006; Pandey, Goyal and Sundararaman, 2009), efforts to engage parents and communities in enabling adolescent girls to transition to secondary education are lacking in India. Indeed, the Working Group on Secondary and Vocational Education for the XIIth Five Year Plan reported that the lack of adequate community mobilisation activities has been a major impediment to the success of schemes intended to promote girls' secondary education (Ministry of Human Resource Development, 2011).

At the same time, the policy and programme environment is conducive for testing models to promote parental and community engagement and accountability in secondary education for girls. For example, as noted earlier, the Government of India has placed a lot of emphasis on achieving universal secondary education (see the the Rashtriya Madhyamik Shiksha Abhiyan, Beti Bachao Beti Padhao campaign etc.). The Rashtriya Madhyamik Shiksha Abhiyan, moreover, has called for involvement of local self-government bodies, community, teachers, parents and other stakeholders in the management of secondary education, through bodies like school management committees (SMCs) and parent-teacher associations (Ministry of Human Resource Development, 2009). The First Joint Review Mission of the Rashtriya Madhyamik Shiksha Abhiyan also observed that strategies were needed to help students significantly improve their basic skills, especially in Class 9, and these may include additional or remedial classes, specific learning materials, and parental engagement (Ministry of Human Resource Development, 2013). Therefore, it is imperative that evidence is generated about models that can engage parents and communities in girls' secondary education and the extent to which they are effective and feasible.

Objective

The objective of the evaluation was to assess the feasibility and acceptability of the intervention, project *Sankalp*, and its impact on increasing girls' transition to secondary school, improving the regularity of their attendance at school, and enhancing learning outcomes in Mathematics and languages.

Theory of change underpinning project *Sankalp*

Project *Sankalp* targeted primarily girls attending Classes 8 and 9, their parents, members of the school management committees and the community members in general and teachers in primary and secondary schools in the study villages in a limited way. A number of strategies were adopted to reach out to these groups. The main channels through which the project sought to engage parents and communities in promoting girls' secondary education comprised: (1) revitalization of School Management Committees (SMCs) by organising training workshops for SMC members as well as by

[2] Scholarships and stipends have been proven successful (Lloyd and Young, 2009).

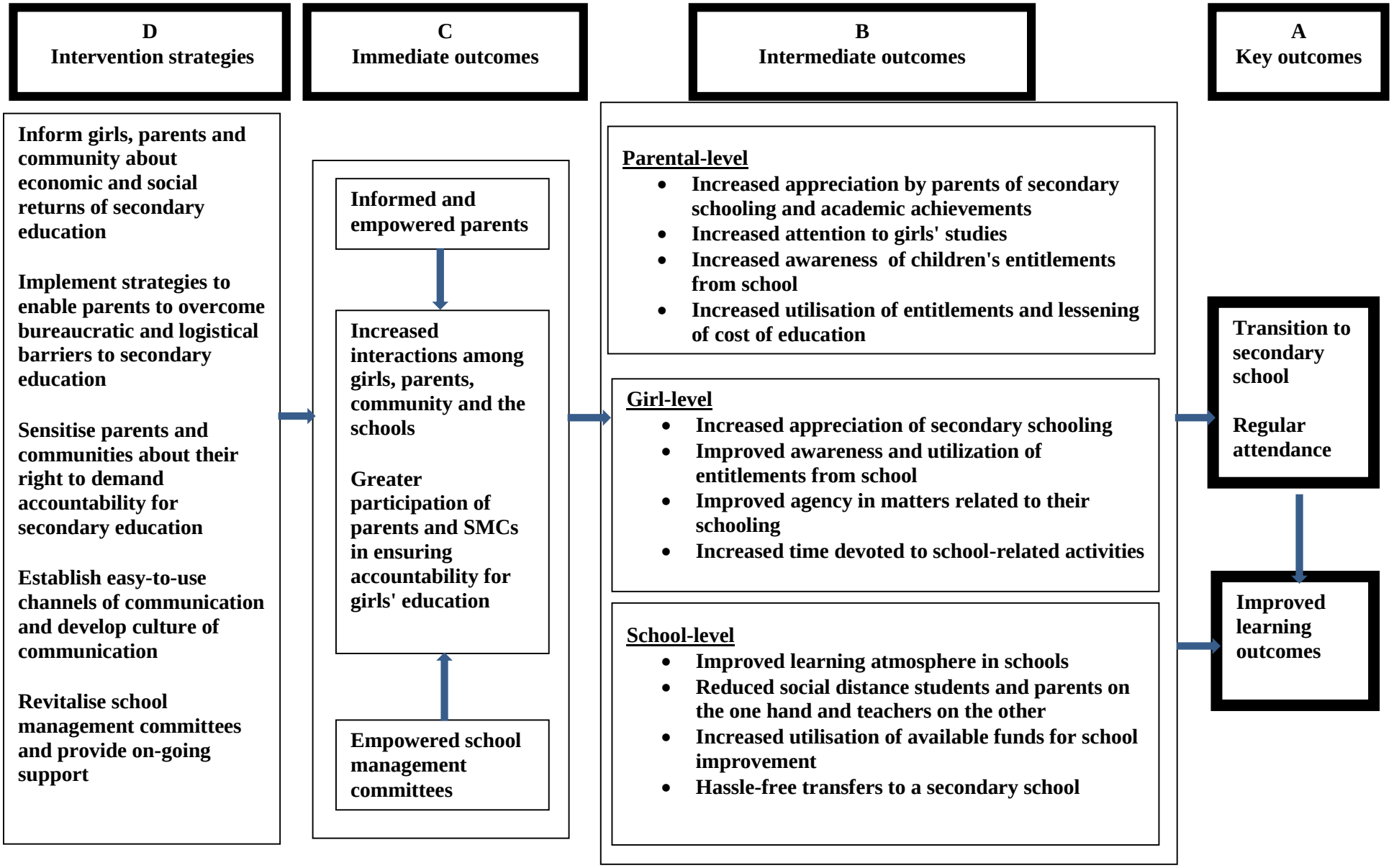
project staff meeting them on a monthly basis, and supporting them to take up community-wide campaigns; (2) formation of adolescent girls' groups in each intervention village, training them to act as change agents by organising training workshops for them as well as project staff meeting them on a fortnightly to monthly basis, and supporting them to undertake girl-to-girl campaigns, girl-to-parents campaigns and community-wide campaigns; (3) launching an interactive voice response system through which messages related to the importance of secondary education for girls were relayed and which gave parents, other community members and teachers to voice their concerns related to girls' education; (4) dissemination of informational materials related to girls' education; and (5) opportunistic individual interactions between project staff and target groups and community-wide campaigns organised twice over the course of the project.

Figure 1.1 describes the theory of change underpinning project *Sankalp*. It describes the ways in which the strategies adopted in the project (Block D) were envisaged to lead to the key outcomes that the project sought to achieve, namely, increased transition of adolescent girls to secondary school, regular attendance of girls in secondary schools and improved learning outcomes among them (Block A). We hypothesise that the strategies will lead to informed and empowered parents, empowered school management committees and community in general, increased interactions among girls, parents, school management committee members and community and the schools, and greater participation of parents and school management committee members in ensuring accountability for girls' education (Block C).

These processes will contribute to the critical success factors, described in Block B, for achieving the key outcomes (Block A). Specifically, we hypothesize that change in educational outcomes for girls (transition, attendance, academic performance) requires changes at three levels - at the individual girl level, parent-level and school-level. At the individual girl level, the factors that will lead to the key outcomes may include increased appreciation of secondary schooling, improved awareness of entitlements from school, increased sense of agency in matters related to schooling and increased time devoted to school-related activities. At the parental level, these factors may include increased appreciation of secondary schooling and academic achievements, increased attention to girls' studies, increased awareness of children's entitlements from school and their utilisation, and thereby, lessening of cost of education. Finally, at the school level, the success factors may include improved learning atmosphere in schools, reduced social distance between parents and students on the one hand and teachers on the other, increased utilisation of available funds for school improvement and hassle-free transfers to a secondary school.

We hypothesize that the intervention can make an impact on improving learning outcomes among girls through several pathways. First, we hypothesize that increased appreciation of secondary school by girls as a result of project activities will lead to regular attendance and increased efforts on the part of girls to perform well, which in turn will improve learning outcomes. Second, empowered parents may create an improved atmosphere for learning at home, including encouraging their children to do their homework, freeing them from household chores to engage in schoolwork, and demonstrating to children that the family values schooling and academic achievement, which can also contribute to improved learning outcomes. Third, greater parental and community engagement in school activities may lead to responses at the school level, including an improved atmosphere for learning in the school, reduced teacher absenteeism, better classroom dynamics and greater interaction between teachers and adolescent girls, which again can contribute to improved learning outcomes. We note that the intervention model implemented is a demand-side model and we recognise that supply-side factors will also affect the outcomes.

Figure 1.1: Theoretical framework underpinning project *Sankalp*



Study setting

The study was conducted in the rural areas of Surendranagar district in Gujarat. Gujarat, the tenth largest among the 30 states of India, has a population of 60 million of which 20 percent are adolescents aged 10-19 years (Office of the Registrar General and Census Commissioner, India, 2013; 2014). Its population continues to be characterised by population and child sex ratios unfavourable to females (overall sex ratio of 919 and child sex ratio of 890 in 2011, Office of the Registrar General and Census Commissioner, India, 2013). A substantial proportion of households in the state belong to socially excluded castes, namely, scheduled castes and tribes (22%; Office of the Registrar General and Census Commissioner, India, 2013). Gujarat is among the most economically progressive states in the country. It ranked fifth among the states of India in terms of gross state domestic product and in 2012-13, it accounted for five percent of the national GDP (Planning Commission, 2014); even so, 17 percent of its population was estimated to live below the poverty line in 2011-12 (Planning Commission, 2013). In 2011, the overall literacy rate was 78 percent in Gujarat, compared to 73 percent nationally (Office of the Registrar General and Census Commissioner, India, 2013); gender differences were, however, considerable: 86 percent of males, compared to 70 percent of females, were literate. Two-thirds (69%) of the state's households had access to a mobile or landline phone (Office of the Registrar General and Census Commissioner, India, 2012).

Access to primary education (Classes 1-8) is more or less universal and most children aged 6-14 years are enrolled in school in Gujarat as elsewhere in India. A 2014 survey reports that only three percent of girls and boys aged 6-14 years were not enrolled in school in rural Gujarat (ASER Centre, 2015). However, a substantial proportion of adolescents, considerably more girls than boys, do not progress to secondary school: 65 percent and 53 percent of adolescent boys and girls, respectively, were enrolled in secondary school (Classes 9-10) in 2011-12 (Ministry of Human Resource Development, 2014). The state has a gender parity index of 0.82 in Classes 9-10, compared to 0.93 nationally.

Surendrangar is among the districts of Gujarat that are characterised by high levels of school discontinuation among girls who complete their primary education. Data from a District Level Household Survey conducted in 2007-08 show that the transition rate from Class 8 to Class 9 among girls aged 14-17 years was only 59 percent (International Institute for Population Sciences, 2010). Sizeable proportions of the district's rural population are poor, educationally disadvantaged and socially excluded: in 2007-08, 18 percent of households were economically poor and 24 percent did not have a single literate adult member (International Institute for Population Sciences, 2010); moreover, in 2011, 11 percent belonged to socially disadvantaged caste groups (Office of the Registrar General and Census Commissioner, 2011a). At the same time, district data show that 69 percent of rural households had access to a mobile (67%) or landline phone (2%) in 2011 (Office of the Registrar General and Census Commissioner, 2012). A few key indicators of the study district and state are presented in Table 1.1.

Table 1.1: Selected characteristics of the study district and state

Characteristics	**Gujarat**		**Surendranagar**	
	Total	Rural	Total	Rural
Total population[a]	60,439,692	34,694,609	1,756,268	1,259,352
% rural population[a]	57.4	---	71.7	---
% population in the adolescent age group (10-19 years)[b]	19.9	20.7	21.5	22.1
Child sex ratio (females/1,000 males)[a]	890	914	896	906
Female literacy rate (population aged 7+ years) [a]	69.7	61.4	61.5	56.1
% population belonging to socially disadvantged castes or tribes[a]	21.5	29.7	11.4	11.7
% population engaged in non-agricultural activities[a]	23.7	12.8	17.6	10.6

Sources: [a] Office of the Registrar General and Census Commissioner, n.d. a. [b] Office of the Registrar General and Census Commissioner, n.d. b.

The four blocks in the district (out of 10) that were selected for the project *Sankalp* reflected socio-demographic indicators (namely, female literacy rate, proportion of population belonging to socially disadvantaged groups (that is, scheduled castes and tribes) and proportion of population engaged in non-agricultural activities) that were similar to corresponding district averages.

Study design

We used a cluster randomised trial (CRT) to evaluate project *Sankalp*. We used this design because the intervention was a community-wide intervention, targeting adolescent girls attending the last year of primary school (Class 8) and the first year of secondary school (Class 9),[3] their parents, members of the school management committees and other influential adults in the community, and to lesser extent, teachers in primary and secondary schools. As such, the chances of contamination were likely to be less with a cluster randomised trial than an individually randomised trial. Moreover, we were interested in measuring the effects of the intervention on the transition to secondary schools among all girls at the community level.

We created geographical clusters, using maps of the four blocks selected for locating the study and data collected during the preparatory phase of this study on location of secondary schools in these blocks. Each cluster contained five geographically contiguous villages and at least one secondary school. [4] We excluded villages that shared a common boundary with any of the clusters to minimise contamination between intervention and control arms. Thus, we created 18 clusters, consisting of 90 villages, within the four blocks.[5] We randomised these 18 clusters into intervention and control arms, with nine clusters in each arm, using a restricted randomisation scheme. Restricted randomisation scheme involves selecting randomly from a small set of allocations fulfilling certain pre-determined criteria, using baseline or pre-existing data on each cluster. It thus seeks to ensure an acceptable level of overall balance between treatment arms and overcomes the limitation of not achieving adequate balance when a simple unrestricted randomisation scheme is used in CRTs involving a relatively small number of clusters (Hayes and Moulton, 2009). Specifically, we used pre-existing data for each cluster on the population belonging to socially disadvantaged castes or tribes, female literacy rate, student-teacher ratio in secondary school and the distance to a secondary school to achieve overall balance between treatment arms. Data on the first two indicators were drawn from 2001 census and the remaining two indicators were drawn from data collected from schools during the preparatory phase of this study. We used the following pre-determined criteria:

- the difference between intervention and control arms should not exceed 5 percentage point in respect of the percentage of the population belonging to scheduled castes or tribes;
- the difference between intervention and control arms should not exceed 5 percentage point in respect of female literacy rate;
- the difference between intervention and control arms should not exceed 10 in respect of the number of students per teacher (student-teacher ratio) in secondary schools; and
- the difference between intervention and control arms should not exceed 5 kilometers in respect of the average distance to a secondary school

A computer program was used to assess each of the 48,620 ways of allocating the 18 clusters to the two treatment arms,[6] against these criteria. We excluded 32,232 combinations that did not meet the above mentioned criteria. From the remaining 16,388 combinations, we then selected one using a random number. We checked the validity of the design and found that none of the pairs of clusters were allocated always to a different or same treatment group, confirming the acceptability of the randomisation scheme. As seen in Annex 1, the clusters in the intervention and control arms were

[3] We note that although the intervention primarily focused on girls attending Classes 8 and 9 and their parents, the project staff had focused on girls attending Class 7 as well

[4] Of the 18 clusters created, 15 clusters contained one secondary school each, and the remaining three clusters contained two secondary schools each

[5] Each of the four blocks contained 4-5 clusters

[6] The number of allocations that were available to select using simple unrestricted randomization scheme

similar in terms of such contextual factors as the number of primary and secondary schools, average distance between a primary and secondary school in the clusters, percentage of households with a landline or mobile phone and percentage of households containing adolescent girls who were first generation learners. Moreover, as seen in Chapter 2, the randomization scheme that we used was able to achieve good overall balance between treatment arms in terms of socio-demographic covariates and in outcomes of interest to our study. Of the two arms of the selected combination, we randomly assigned one to serve as the intervention arm and the other to serve as the control arm.

Given that the steepest decline in school completion occurs between Classes 8 (last year of the primary education) and 9 (the first year of secondary education) among girls, and given our objective of increasing transition to secondary education, our intervention focused on adolescent girls who were in Classes 8 and 9 and their parents and the wider community, notably school management committee members, and to a lesser extent, teachers in primary and secondary schools and (Please see Chapter 3 for more details of the intervention design and its implementation). Correspondingly, our evaluation focused on girls who were attending Classes 8 and 9 at the time of rolling out the intervention.

We based our calculation of number of clusters per treatment arm on the following assumptions. First, we assumed that the intervention would generate at least a 15% increase (absolute terms) in the transition rate from Class 8 to Class 9, one of the main outcomes that the intervention sought to influence, by the end of the intervention. Second, transition rate from Class 8 to Class 9 was assumed to be 59% at baseline, drawing data from the District Level Household Survey in 2007-08. Third, we assumed an intra-cluster correlation of 1.8 percent (required to calculate the value of between-cluster coefficient of variation, k) and an average cluster size of 55 adolescent girls attending Class 8. Based on these assumptions, the number of clusters per arm was calculated using the following formula:

$$c = 1 + (z_{\alpha/2} + z_{\beta})^2 \frac{\pi_0(1-\pi_0)/m + \pi_1(1-\pi_1)/m + k^2(\pi_0^2 + \pi_1^2)}{(\pi_0 - \pi_1)^2}$$

where 'c' is the required number of clusters per arm; 'π_0' and 'π_1' are the level of outcome, transition rate from Class 8 to Class 9, before and after the intervention, respectively; m is the average cluster size and 'k' is the between-cluster coefficient of variation. We, thus, estimated that we would require a minimum of nine clusters and a sample of 546 girls studying in Class 8 in each treatment arm. We note that we did not calculate the required sample of girls studying in Class 9 separately because the transition rate, the outcome indicator that we used for sample size calculation, from class 9 to class 10 was higher than transition rate from class 8 to class 9 and we based our sample size calculation on the group that experienced lower transition rate.

Following the randomisation of clusters, we conducted a baseline assessment, comprising a household census and a survey of all the girls attending Class 8 and Class 9, in the 90 villages comprising the 18 clusters. We completed the baseline assessment in August-September 2013, which corresponded with 2nd and 3rd months of the academic year (2013-14).

In the household census, the field team enumerated all households in the study villages. They first enquired about girls aged 10 to 18 years residing in the household from an adult member of the household. For each of these girls thus listed, the team collected information about her name, age, marital status, highest class successfully completed, the year in which she completed the last class successfully, whether she was currently studying and, if yes, the class she was currently attending, the name of the school she was attending and the name of the village in which the school is located. A total of 26,868 households were enumerated. We used data obtained through the household census to calculate the transition rate to Class 9 and Class 10, respectively, at baseline as well as to identify eligible respondents for the survey of girls at baseline. Data on transition rate obtained through the household census were cross-checked against records maintained in primary and secondary schools located within the study villages. We note that although we had assumed an average cluster size of about 60 girls attending Class 8 in our sample size calculation, we invited all girls who were studying

in Class 8 and Class 9 identified through the household census to participate in the baseline survey as the cluster size was likely to vary. Thus, 1,568 girls – 492 and 516 Class 8 girls in intervention and control arm, respectively, and 251 and 309 Class 9 girls in intervention and control arm, respectively – were identified. We note that the number of girls identified was smaller than estimated, for example, 1008 Class 8 girls instead of 1092 estimated. A range of reasons have been suggested for the smaller than estimated number of girls found in these villages – largely seasonal migration of the families, but also girls residing in hostels outside the study blocks/district, and even deliberate withholding of information by parents about girls who have been withdrawn from school.

We made special efforts to track all baseline respondents in the period between the baseline and endline surveys. During June 2014, three research assistants who were part of the baseline survey team visited all households with baseline respondents, and recorded whether they were attending school at the time of the tracking exercise, and if yes, the name of the school in which they were studying. If the baseline respondents had migrated out of the village, their address was sought and recorded. In this way, we successfully obtained new addresses for the majority of girls who had moved away from the village.

We conducted the endline assessment, comprising a household census and a follow-up survey of girls who participated in the baseline survey, one-two months following the completion of the 15-months intervention activities. We note that the intervention activities were completed over the course of two academic years; intervention activities were rolled out in the 4th month of the academic year 2013-14 and completed in the 6th month of the academic year 2014-15. As at the baseline, the field team enumerated all households in the study villages, and collected details, identical to those gathered at the baseline, of girls aged 10 to 18 years residing in the household from an adult member of the household. A total of 26,868 households were enumerated. We used data thus obtained to calculate the transition rate to Class 9 and Class 10, respectively, at endline and cross-checked these data against records maintained in primary and secondary schools located within the study villages.

An endline survey of girls who participated in the baseline survey and who consented to be re-interviewed was conducted in December 2014- March 2015 which corresponded with the 6th-9th month of the academic year 2014-15. During the endline survey, research assistants visited each household containing a baseline respondent. They used addresses collected at the time of baseline survey and tracking exercise to contact baseline respondent. All efforts were made to interview baseline respondents irrespective of whether they were living in the project site or elsewhere, including outside the study district.

Statistical analyses of the intervention effect were performed using Stata 11. Effect estimates were computed as the difference in cluster level proportions or means, as appropriate. Analysis was by intention to treat. We compared unadjusted cluster level summary measures across arms using an unpaired *t-test* for the main outcomes. For outcomes that showed evidence of an intervention effect, we applied a *t-test* with unequal variances to check whether precision improved (see Chapter 6 for more details).

Study instruments

Three instruments were developed – a household listing form, a questionnaire to collect socio-economic characteristics of households in which eligible girls were interviewed, and a questionnaire to elicit information from eligible girls. Responses to the household listing form were gathered from a responsible adult member of all households enumerated in the study villages. Responses to the household questionnaire were obtained from a responsible adult member of the household to which the eligible girl belonged. The household questionnaire collected information about the basic socio-demographic characteristics of the household and access to various amenities.

At baseline, the girl's questionnaire sought information on her educational aspirations and expectations; her agency, gender role attitudes and time use; her experiences at school, including attendance as also her perceptions about teacher attitudes, practices and attendance; facilities and

environment in the school; her awareness of and utilisation of entitlements from school; her access to safe transportation to commute to school; and her perceptions of her parents' aspirations about and support for her education, and of community engagement in the education of girls. The questionnaires were translated into Gujarati, pre-tested and revised in light of the insights obtained during pre-testing.

At endline, we used an identical questionnaire, except for an additional module to capture girls' exposure to the intervention activities. The module contained questions on the respondents' experiences and perceptions about the acceptability and quality of the programme and the extent to which their participation in the programme had influenced their educational aspirations and experiences at school.

We also administered competency tests in the English and Gujarati languages, and in Mathematics to assess the academic performance of the girls. Identical tests were administered at baseline and endline.

Recruitment, training and fieldwork

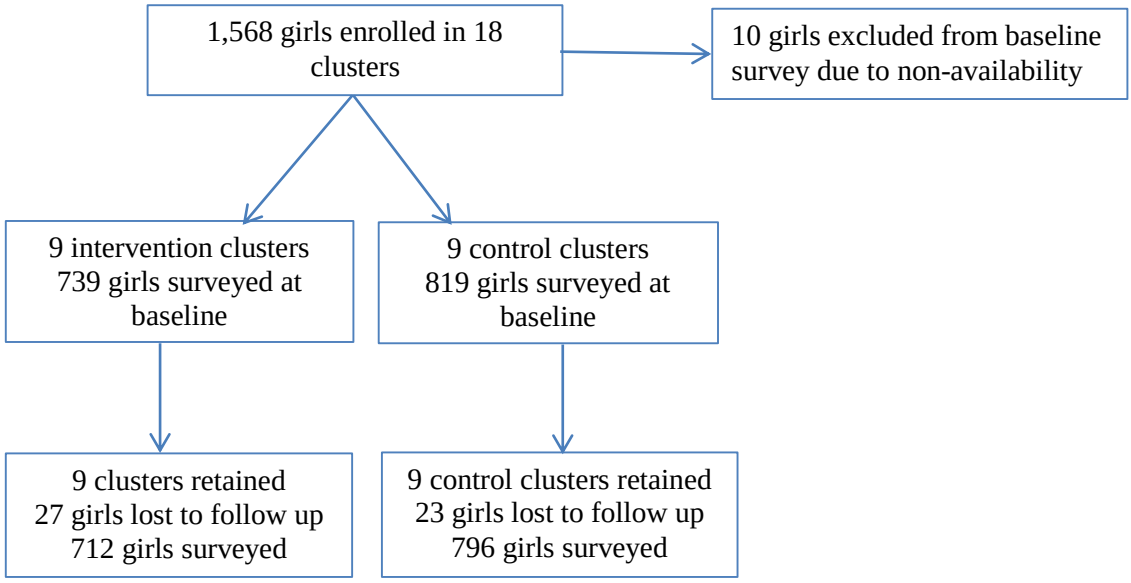
A total of 22 young women and men underwent training for undertaking the household census and 29 young women for administering the survey instrument to the girls at baseline and, from the same pool, 7 young women for the household census and 14 for the follow-up survey of girls at endline. These research assistants are graduates in science or social science streams, are proficient in Gujarati and have 3-4 years of experience in conducting field-based studies. The training team monitored each trainee's progress on a regular basis and selected as interviewers only those trainees who demonstrated a full understanding of the questionnaire as well as the ability to ask questions appropriately and record responses accurately. Thus, 18 young women and men were selected for the household census and 12 young women for the girls' survey at baseline and 7 young women for the household census and 11 for the follow-up survey of girls at endline.

The training of interviewers was conducted by Population Council staff in partnership with CHETNA staff both at baseline and endline. The training duration for the household census and the girls' survey was two days and one week, respectively, at baseline and one week for the follow-up survey at endline. Moreover, to ensure data quality and adherence to ethical principles, Council staff provided on-going supervision and support to the interviewers.

Response rates

A total of 1,568 girls were identified and invited for interview at baseline, and 99 percent of these girls were successfully interviewed (see Figure 1.2). The remaining girls could not be interviewed as they were not available in the village even after making three visits. We note that the number of girls studying in Classes 8 and 9 in each cluster varied in both arms, ranging from 39 to 150 girls, at baseline.

Figure 1.2: Flow diagram showing the number eligible girls, number of girls assigned to treatment arms and number of girls lost to follow-up



At the endline, 97 percent of baseline respondents were successfully interviewed. The loss to follow-up was due to non-availability of the baseline respondent at home or in the hostel even after making three visits, refusal by the baseline respondent or her parents or hostel wardens (in case of girls who were staying in hostels at the time of the endline survey) and non-availability of the baseline respondent because of family migration outside the study district or state (Table 1.3)

Table 1.3: Follow-up rate at endline and reasons for loss to follow-up by treatment arm

	Intervention	**Control**
Girls interviewed at baseline	739	819
Girls interviewed at endline	712	796
Response rate at endline (%)	96.3	97.2
Reasons for loss to follow-up at endline		
Not at home/hostel	5	2
Respondent refused	2	4
Respondent's parents refused	2	7
Warden of the hostel in which respondent was staying at the time of the endline survey refused	0	3
Family migrated outside the study district/ state	17	7
Incapacitated	1	0
Total non-responses	**27**	**23**

Structure of the report

The report is divided into seven chapters, including this introductory chapter. Chapter 2 describes the school experiences of the surveyed adolescent girls, including their transition to secondary schools, attendance in school and academic performance at baseline. It also presents evidence on girls' aspirations, agency, awareness and utilization of entitlements from school and time use patterns related to their schooling, as well as the extent to which the school, family and community environment has been supportive of their schooling at baseline. Chapter 3 briefly describes the objectives and the design of the intervention, the key components of the intervention and the extent to

which various stakeholders had participated in the intervention activities, and the challenges faced in implementing the intervention. Drawing on endline survey data, Chapter 4 discusses girls' awareness and experiences of the intervention activities as well as their perceptions of changes observed in their parents and teachers during the inter-survey period. Chapter 5 presents findings with regard to the effects of the intervention in improving girls' aspirations and agency in matters related to their schooling and creating an enabling environment at the school, family, and community level for girls to pursue secondary education. Chapter 6 describes findings pertaining to the effects of the intervention on school experiences of girls, namely, transition to secondary education, school attendance and academic competency. The final chapter summarises the main findings of the study, and highlights lessons learnt for future programme and research implementation.

Chapter 2

Profile of girls' school experiences at baseline

This chapter briefly profiles and compares the schooling experiences of adolescent girls in Classes 8 and 9 in intervention and control arms prior to the start of project *Sankalp*. We start with the background characteristics of the adolescent girls surveyed at baseline and the transition rates to Classes 9 and 10 at the community level. Our survey of schooling experiences also includes data on class attendance, academic performance and future aspirations with regard to their education, agency, awareness and utilization of their entitlements and time devoted for school activities. Finally, we describe girls' perceptions of teacher, parental, and community support for their education.

Background characteristics of respondents and their parents

Table 2.1 presents baseline data on the background characteristics of girls and their parents. Findings show that background characteristics of girls enrolled in intervention and control arms were similar, with the exception of a moderate difference in the proportion of Muslim girls.

Girls were aged, on average, 13 years, suggesting that most girls had enrolled in school at the right age and had not repeated any class. Over 90 percent of the girls were Hindus; a slightly larger proportion of girls in intervention arm were Muslims, compared to their counterparts in control arm (8% versus 3%). Distribution by caste shows that the majority of girls (63-66%) were from other backward castes. Participation in economic activities, paid or unpaid, was quite common among study participants: some 30-32 percent of girls had been engaged in either paid or unpaid work in the week prior to the interview.

Table 2.1: Selected background characteristics of surveyed girls by treatment arms, baseline survey, 2014

Characteristics	Intervention	Control
Age		
Mean age (years)	12.8	12.8
Religion		
% belonging to Hindu religion	91.9	97.3
% belonging to Muslim	8.1	2.7
Caste		
% belonging to scheduled castes or tribes	20.1	18.1
% belonging to other backward castes	63.1	66.4
% belonging to general castes[1]	16.8	15.5
Engagement in economic activities		
% engaged in paid or unpaid work in the week prior to the interview	30.4	31.9
Household standard of living		
Mean score, household wealth index (range 0-52)	23.5	24.2
Parents' educational level		
% of girls whose father had never attended school	20.2	18.1
% of girls whose mother had never attended school	51.7	47.6
Mean years of schooling completed by father	6.1	6.1
Mean years of schooling completed by mother	3.0	3.2
Number of respondents	**739**	**819**

Note: [1]Includes those who do not belong to scheduled castes, scheduled tribes or other backward castes.

The economic status of the household was measured using an index, composed of household asset data on ownership of selected durable goods, including means of transportation as well as access to a number of amenities. The wealth index was constructed by allocating scores to a household's reported assets or amenities, with a possible minimum value of zero and a maximum value of 52 (for details of

the scores, see Annex 2). The majority of the girls came from households with low or average economic status (mean score of 24 on a scale that ranged in value from 0 to 52). Parental educational level of girls shows that fathers were better educated than mothers (six years of schooling among fathers versus three years among mothers, on average). Moreover, about one-fifth of girls reported that their father had never attended school and about half reported that their mother had never attended school.

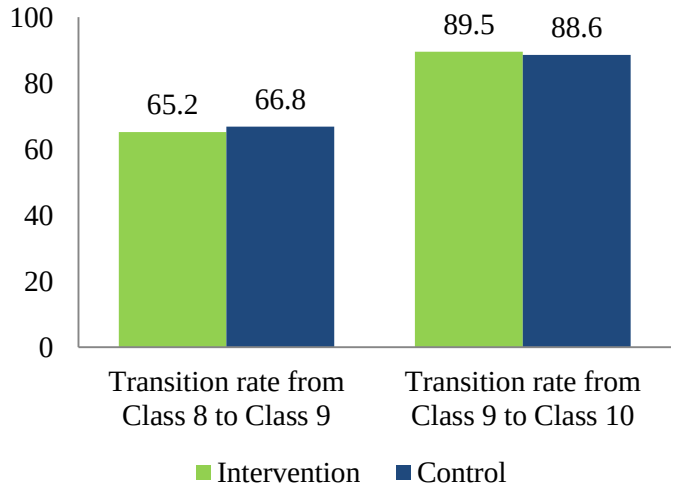
School experiences of girls

The main outcomes that the intervention sought to influence were the percent of girls in the community making the transition to secondary education, their attendance rates at school, and academic performance as measured by various test scores. Findings related to these main outcomes at baseline are described in sub-sections below. They suggest that girls' school experiences were compromised in many ways. Findings also show that girls' schooling experiences were similar between intervention and control arms, suggesting that the randomization scheme was able to achieve good balance between treatment arms.

Transition rates

We measured girls' transition to secondary education by transition rates to Class 9 and Class 10, drawing on data from the household census that we carried out in the intervention and control arms. Specifically, we defined transition rate to Class 9 in terms of the number of girls enrolled in class 9 in the academic year in which the baseline survey was conducted, expressed as a percentage of the number of girls enrolled in Class 8 in the previous academic year. Transition rate to Class 10 was similarly defined. We found that sizeable proportion of girls discontinued schooling after completing primary education (Figure 2.1). Just two-thirds of Class 8 girls had transitioned to Class 9 at baseline. Findings also show that once enrolled in secondary education, a large proportion of girls continue to study; for example, the transition rate to Class 10 was nearly 90 percent.

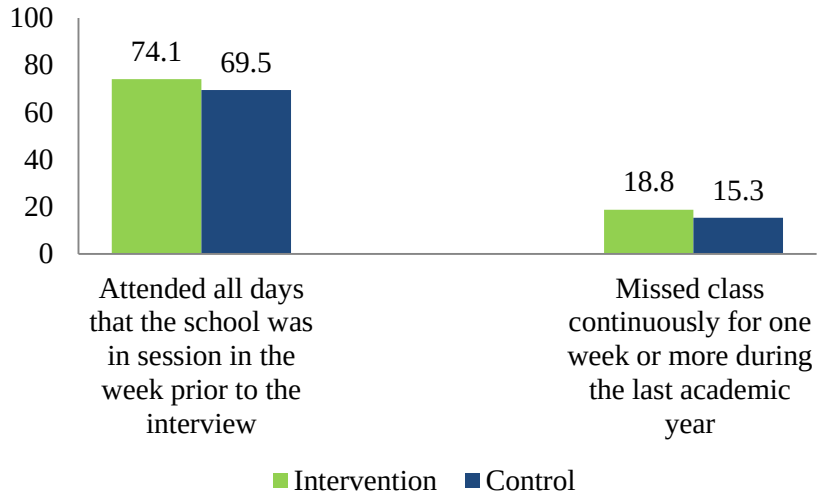
Figure 2.1: Transition rates to Class 9 and Class 10 by treatment arms, baseline survey, 2014



School attendance

We measured attendance rates, as reported by the girls themselves, in two ways. First, we measured the percent reporting having attended school all days during the week prior to the interview and second, we asked the girls whether they had missed attending school continuously for one week or more in the last academic year. Class attendance was far from regular for sizeable proportions of girls (Figure 2.2). Although the majority of the girls in our study attended school regularly, it is notable that one-quarter or more of girls had missed one or more school days in the week prior to the interview and one in seven to one in eight girls had missed school continuously for one week or more during the last academic year.

Figure 2.2: Girls' attendance in school by treatment arms, baseline survey, 2014

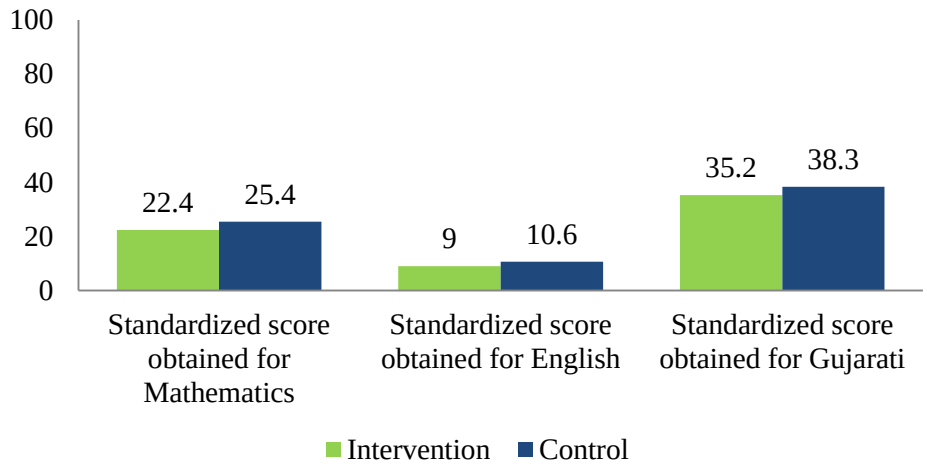


Test scores

We assessed academic performance of the girls who participated in the survey by administering competency tests. We included three measures of academic performance – English language competency, Gujarati language competency and Mathematics competency. In order to assess language competency, Class 8 girls were given one paragraph each in English and Gujarati, respectively, drawn from the Class 7 curriculum approved by the state education department, and were asked to answer five questions relating to each paragraph. Class 9 girls were given one additional paragraph each in both these languages, drawn from the Class 8 curriculum approved by the state education department, and were asked to answer five questions relating to each paragraph. The responses of the girls were assessed in terms of comprehension and sentence construction. They were given a score of 0 for no comprehension, 1 for partial comprehension and 2 for full comprehension; likewise, they were given a score of 0 for incorrect sentence construction, 1 for partially correct sentence construction and 2 for fully correct sentence construction. One summary index each for the English and Gujarati languages was constructed by adding the scores for comprehension and sentence construction. The value of the index ranged from 0 to 20 for Class 8 girls and 0 to 40 for Class 9 girls. In order to test Mathematics competency, Class 8 girls were asked to solve 14 problems drawn from the Class 7 curriculum, and Class 9 girls were asked to solve four additional problems drawn from the Class 8 curriculum. These questions ranged from simple addition, subtraction, multiplication and division to those related to algebra and geometry. The composite indicator of Mathematics competency comprised the number of problems correctly solved, and ranged from 0 to 14 for Class 8 girls and 0 to 18 for Class 9 girls. Given that the maximum scores that Class 8 and Class 9 girls could attain differed, the scores were standardised by converting them into percentage marks in relation to the maximum score.

Findings underscore the extremely poor academic performance of the survey participants. Girls scored, on average, 22-26 percentage marks in solving Mathematics problems they were expected to have learned to solve in previous classes. In English comprehension and sentence construction too, girls performed very poorly. For example, girls scored, on average, just 9-11 percentage marks. Finally, although girls performed better in the Gujarati than in the English language competency test, their performance in Gujarati was also far from satisfactory: on average, girls scored 35-38 percentage marks.

Figure 2.3: Standardized scores obtained in competency tests by treatment arms, baseline survey, 2014



Girls' future aspirations, agency, awareness and utilization of entitlements and time use in relation to studies

We assessed survey respondents' future aspirations with regard to their education, agency in matters related to schooling, awareness and utilization of entitlements from school and time devoted for school activities in order to better understand their ability to pursue their studies. Findings, described below, suggest that although most girls aspired to complete at least secondary education, their agency to realise their educational aspirations was somewhat limited. Findings also indicate that girls in treatment and control arms did not differ in terms of their educational aspirations and agency in matters related to their schooling.

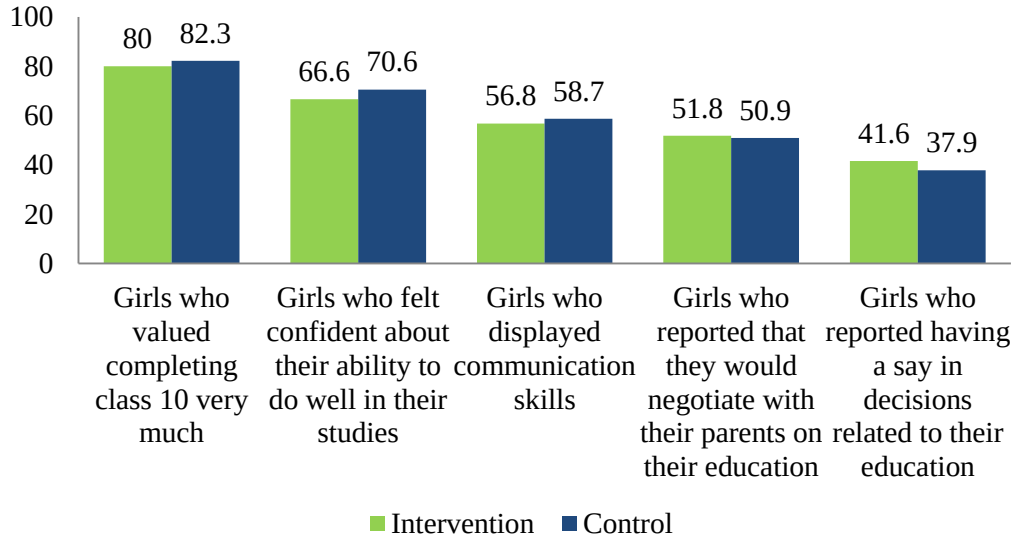
Girl's educational aspirations and agency

We measured girls' educational aspirations by probing them about the extent to which they valued the successful completion of secondary education. We used a number of indicators to capture girls' agency in matters related to schooling: (1) their confidence about their ability to attend school regularly and perform well, (2) communication skills, (3) ability to negotiate with parents on schooling, and (4) decision-making say with regard to the level of schooling that the girl should have. We assessed girls' confidence about their ability to perform well in school from their responses to three questions. Specifically, they were asked whether they agreed or disagreed with three statements: "I will not be able to attend school regularly"; "The school lessons are difficult for me to learn"; and "I will not be able to get good marks in my examinations." Girls who disagreed with all these three statements were considered to have high confidence about their ability to attend school regularly and perform well. We measured their communication skills using their responses to three questions that assessed whether they found it difficult to express their opinion to elders in their family, or to confront classmates who hurt their feelings, and whether they felt comfortable speaking in front of a group. Girls who replied that they never found it difficult to express their opinion to family elders or to confront classmates who hurt their feelings, or always felt comfortable speaking in front of a group were considered to have good communication skills. We captured girls' perceived negotiation skills using a question that assessed whether, if girls' parents' preferences about their education differed from their own, they would be able to convince their parents either on their own or with the help of others, or they would go against their parents' preference. Finally, we measured girls' decision-making say from their response to a question on who would decide how much schooling they should have, and all those who responded that they would decide on their own or jointly with others were considered to have a decision-making say.

According to the baseline survey, the vast majority of the girls who took the survey aspired to complete at least a secondary education. When questioned about the value they attached to

successfully completing a secondary education, most girls (80%) responded that they valued it very much.

Figure 2.4: Girls' educational aspirations and agency in matters related to their schooling by treatment arms, baseline survey, 2014



Findings underscore that some 67-71 percent of girls were fully confident of their ability to attend classes and perform well, that is, they felt that they would be able to attend school regularly, that the school lessons were easy for them to learn, and that they would be able to get good marks in their examinations. Some 57-59 percent of girls displayed confidence in their ability to communicate their opinion without any discomfort, and 51-52 percent of girls said that if their parents' opinion regarding their schooling differed from their own, they would convince their parents or go against their parents' wishes. Findings also show that the final decision about girls' education rested with their parents: just 38-42 percent of girls reported that they would have a say in decisions related to the level of schooling that they should have.

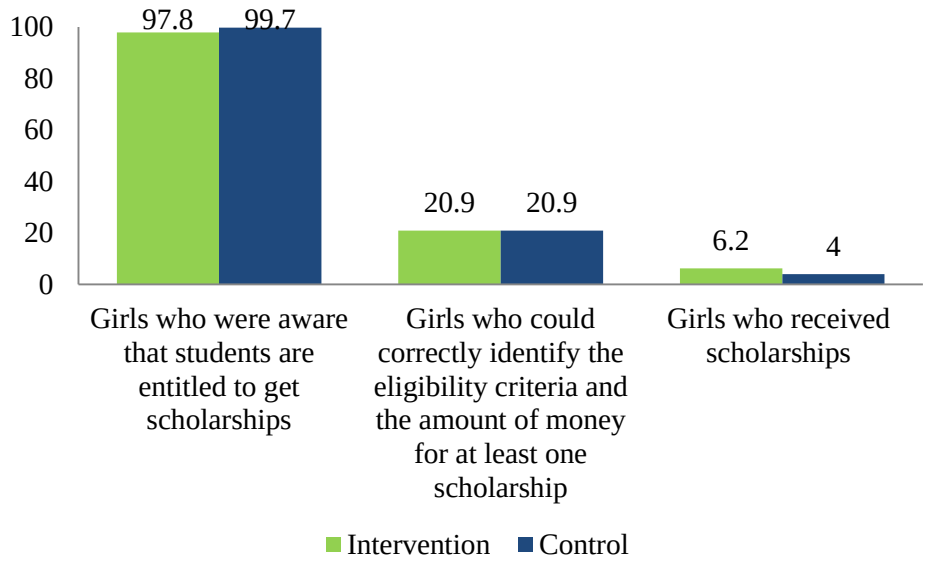
Awareness and utilization of entitlements from school

Many schemes have been implemented in Gujarat to improve economic access to schooling such as the provision of scholarships and stipends, free uniforms and free textbooks. We assessed the efforts made by schools to make girls aware of and utilise these entitlements by probing the girls participating in our study about their awareness and utilisation of these schemes.

The baseline survey suggests that although the majority of girls were aware of entitlements from school, their awareness was superficial and utilisation of entitlements was limited. Almost all girls reported awareness of such entitlements as scholarships. However, in-depth awareness was limited: just one-fifth were able to correctly identify the eligibility criteria and the amount of money awarded for at least one scholarship. Findings also show that very few girls had benefitted from these entitlements: 4-6 percent of girls had obtained scholarships during the current academic year.[7]

[7] We note that eligibility criteria for various scholarships differed and we did not collect the details of the scholarship that the girls received and the eligibility criteria for receiving benefits from the scholarships that the girls received; as such, we were not able to specify whether all girls who were eligible received a scholarship or not

Figure 2.5: Awareness and utilization of entitlements from school by treatment arms, baseline survey, 2014

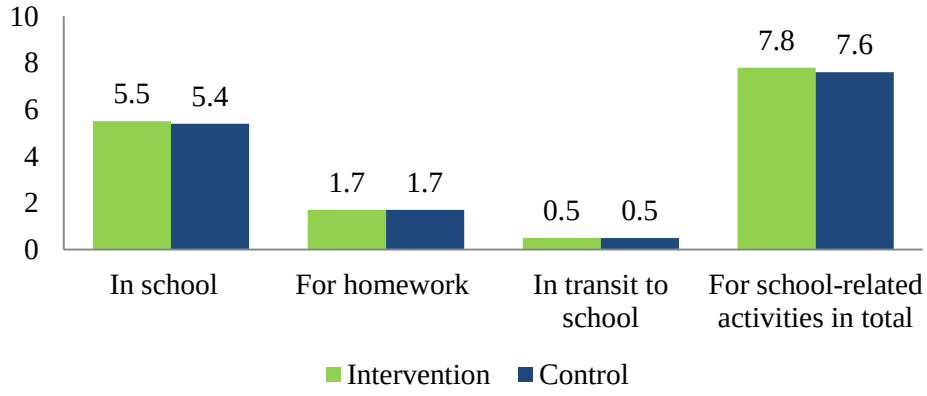


Time devoted for school-related activities

We measured time devoted for school activities by collecting time use data from all the girls who took the survey, asking them to recall their activities in half-hour increments for the 24-hour period of the last school day they attended; assuming at least four hours of sleep, they were asked to record activities for a total of 20 hours. The interviewer recorded their responses according to appropriate categories. Time devoted to school activities included time spent in school, in doing homework and commuting between school and home.

The baseline findings show that on the last school day, girls spent, on average, 7.6-7.8 hours dedicated to school-related activities, most of which included time spent in school. Time devoted for homework and commuting between school and home was limited.

Figure 2.6: Average amount of time of spent on school-related activities (in hours) on the last school day by treatment arms, baseline survey, 2014



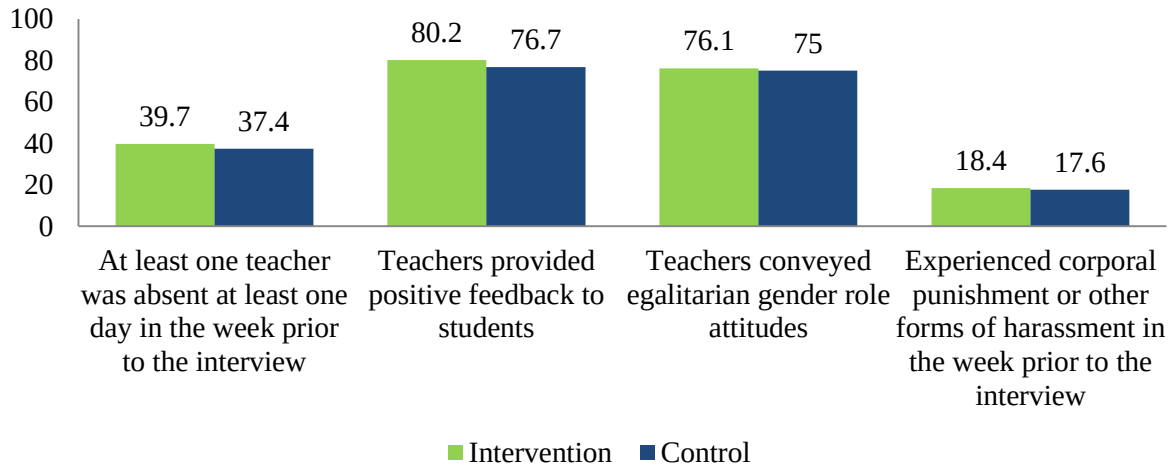
School environment

We also assessed the extent to which the school environment was conducive for girls in our study for pursuing and performing well in their studies at baseline. Specifically, we assessed teachers' attendance in class and classroom dynamics, as reported by girls. To measure teacher attendance, we probed the surveyed girls about their teachers' presence on each of the six days the school was in session in the week preceding the day of the interview.

Several dimensions of classroom dynamics were also assessed in the study. Three indicators were based on the responses of the surveyed girls reflecting the extent to which the teachers displayed positive, respectful, non-discriminatory and gender egalitarian attitudes and practices in the classroom toward students, in general, in the week prior to the interview. The first indicator assessed whether the teachers provided positive feedback to students in general, that is, whether they had praised students who had done well in class in the pre-interview week. The second indicator measured whether the teachers had conveyed egalitarian gender role attitudes to the students in the week before the interview. The girls in our survey were probed about whether any teacher had ever made comments, in the week preceding the interview, that implied that boys should concentrate on their studies as they would have to take care of family responsibilities or that girls should be helping their mothers instead of wasting their time at school. Girls who reported that their teachers had never made either of these comments were considered to have teachers who displayed egalitarian gender role attitudes. The third indicator captured the surveyed girls' own experience of corporal punishment, and verbal and sexual harassment perpetrated by their teachers. Girls were probed about whether, during the pre-interview week, any of their teachers had sent them out of class, made them stand for prolonged periods of time in the classroom, made them stand in the courtyard or playground, hit them, beat them, teased or mocked them based on their appearance, scolded them when they did not understand their lessons, called them "stupid", looked at them in a 'bad' way, or touched them in a 'bad' way, that is, in a sexual way. Girls who reported that they had experienced any of these acts in the week prior to the interview were considered to have experienced corporal punishment or harassment perpetrated by teachers.

The baseline findings show that absenteeism among teachers was considerable and classroom dynamics was mixed, but we found no differences between intervention and control arms. For example, 37-40 percent of girls reported that at least one of their teachers had been absent at least one day in the week prior to the interview.

Figure 2.7: Teachers' attitudes and practices by treatment arms, baseline survey, 2014



Large proportions of girls (77-80%) reported that their teachers had provided positive feedback to students, that is, praised students when they did well in class in the week prior to the interview. Likewise, the majority of girls (75-76%) reported that their teachers had conveyed egalitarian gender role attitudes. At the same time, almost one-fifth of girls had experienced corporal, sexual or verbal harassment at the hands of their teachers in the week prior to the interview.

Parental engagement in girls' education

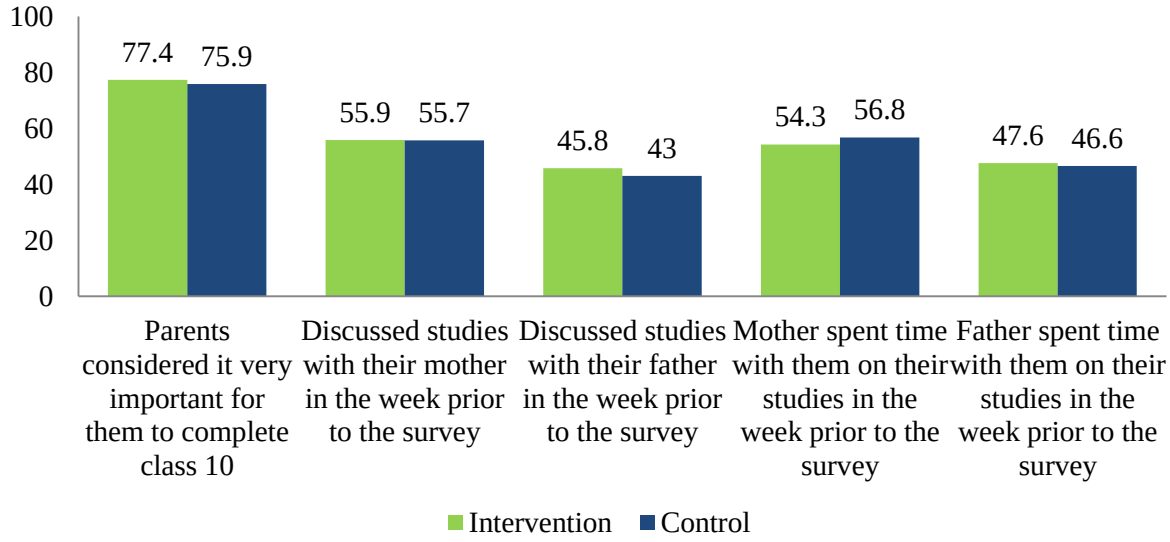
Given the focus of the study on engaging parents to promote girls' secondary education, we sought girls' perspectives of the support that they received from their parents with regard to their studies.

Specifically, we probed perceptions of surveyed girls about the extent to which their parents valued their completing secondary education, parental discussion about and engagement in their studies, and parental interactions with their school authorities.

Parental aspirations about girls' education

In order to assess parental aspirations about surveyed girls' education, we probed the girls about the extent to which they thought their parents considered it important for them to complete Class 10. As shown in Figure 2.8, the majority of girls perceived that their parents considered it very important for them to complete Class 10 (76-77% of girls).

Figure 2.8: Parental aspirations about, discussion on and time spent in support of girls' education by treatment arms, baseline survey, 2014



Parental discussion on girls' studies

We posed a series of questions to the girls who participated in the survey to capture the extent of communication between them and their parents about their education. We asked the girls whether their mother and father had talked to them in the week prior to the interview about such topics as homework, performance in class, study materials, teachers and their behaviour with them, and facilities in their school.

As per the baseline survey, 56 percent of girls reported that their mother had discussed their studies with them in the week prior to the interview; the corresponding percentages for such discussions with fathers were 46 and 43 in intervention and control arms, respectively (Figure 2.8).

Time spent by parents in supporting their daughter's education

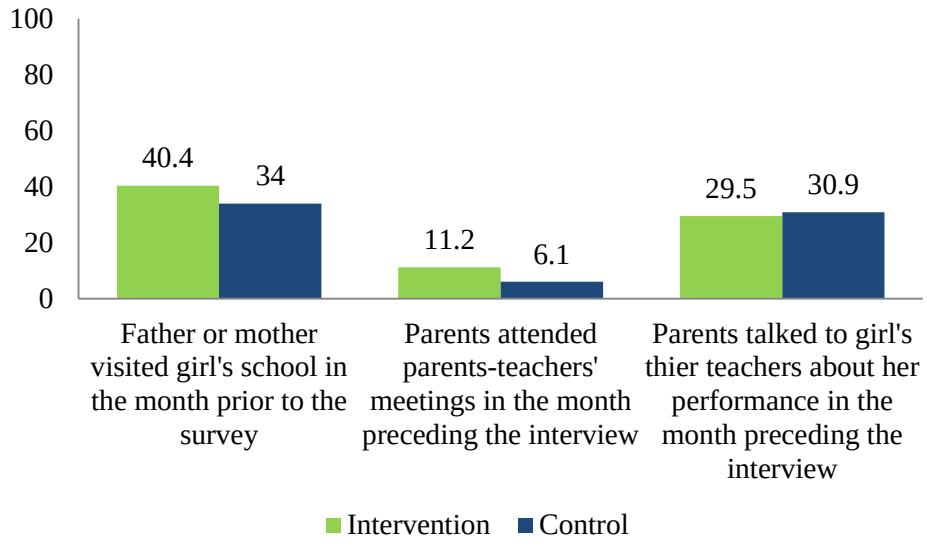
Several indicators were used to measure the extent to which girls reported that their parents spent time in encouraging their educational pursuits. The girls who participated in our survey were asked: (1) how often their parents had spent time with them on their studies in the week prior to the interview, that is, in helping them with their studies, giving them company when they did their homework, or escorting them to school; and (2) the amount of time their parents had spent in providing such support to them. The baseline findings show that mothers of 54-57 percent girls and fathers of 47-48 percent girls had spent time with them on their studies in the week preceding the interview (Figure 2.8). As regards the amount of time spent by parents on these supportive activities during the pre-interview week, girls reported that their mothers spent, on average, 1.6-1.9 hours; they reported that much more time was so spent by their fathers – three hours, on average.

Parental interactions with school authorities

The study also assessed the interactions of parents with the authorities of their daughter's school by probing the girls who participated in the survey about whether, to their knowledge, their parents had visited their school in the month preceding the interview; it also probed their parents' attendance at parent-teacher meetings and parental discussion with teachers about their daughter's performance.

The baseline findings show that parents of 34-40 percent of girls had visited their daughter's school in the month preceding the interview (Figure 2.9). The baseline findings also show that parent-teacher meetings were rarely organised in schools (86% of girls in intervention arm and 92% of girls in control arm reported that parent-teacher meetings were not organized in their school, not shown in figure). Just 6-11 percent of girls reported that their parents had attended a parent-teacher meeting during that month. Moreover, 30-31 percent of girls said that their parents had discussed their performance with their teachers.

Figure 2.9: Parental interactions with school authorities by treatment arms, baseline survey

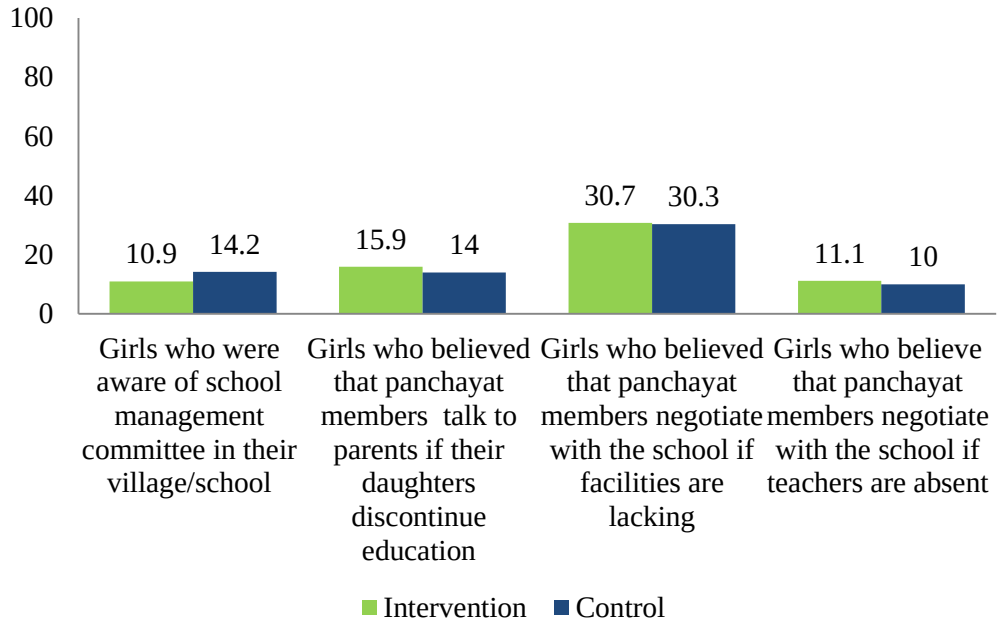


Girls' perceptions about the engagement of school management committees and panchayat members in girls' education

Findings suggest that community engagement in support of girls' education was limited or unknown to girls. Although school management committees, statutory bodies established by the government to promote enrolment, retention and achievement of children in primary schools and to make schools effective, are mandatory under the Right to Education Act, just 11-14 percent of girls reported awareness of such committees (Figure 2.10).

The study also assessed girls' perceptions about the engagement of the members of their village panchayat in promoting girls' education. Girls who participated in the survey were probed about whether the panchayat members in their village took any initiative in promoting girls' education, for example, talking to parents if their daughters discontinued schooling, and negotiating with schools if facilities were lacking in the school and if teachers were absent. As shown in Figure 2.10, only a small proportion of girls reported the engagement of panchayat members in these tasks. Specifically, just 14-16 percent of girls believed that panchayat members talked to parents if their daughter had discontinued schooling. Likewise, just 10-11 percent girls thought that panchayat members would negotiate with the school if teachers were absent, and a slightly larger proportion of girls reported that panchayat members would negotiate with schools if they lacked facilities (30-31% of girls).

Figure 2.10: Girls' awareness of school management committees and perceptions about engagement of panchayat members in promoting girls' education by treatment arm, baseline survey



Summary

In short, study findings underscore substantial discontinuation of schooling following primary education among girls, irregular attendance, poor performance, and limited agency among girls in matters related to their education. Findings also highlight the limited support that girls receive from their parents, their teachers and their communities in overcoming obstacles to schooling and learning. Findings clearly support a focus on enhancing parental and community engagement in girls' schooling, and a need to strengthen ways through which parents and communities may hold school systems and teachers accountable for ensuring more regular teacher and student attendance in school, adequate infrastructure, as well as better quality teaching and improved learning outcomes.

The findings presented in this chapter also show that the intervention and control arms were well balanced in terms of the background characteristics of girls who were enrolled in the study as well as the main and intermediate outcomes that the intervention sought to influence.

Chapter 3

Project *Sankalp*

Recognising the need for identifying feasible and effective intervention strategies to engage parents and communities to promote secondary education for girls, the Population Council, in partnership with CHETNA, MV Foundation, Awaaz.de and Navjeevan Trust, implemented project *Sankalp* in rural areas of Surendranagar district in Gujarat. The Population Council was responsible for designing, monitoring and evaluating the project, while CHETNA and the Navjeevan Trust were responsible for implementing the intervention strategies. MV Foundation and Awaaz.de provided technical support in community mobilization activities and developing and running the interactive voice response system, respectively.

In this chapter, we first describe the design and objectives of *Sankalp* as originally conceived. Drawing on project monitoring data, we then discuss the implementation, including the challenges we faced in adhering to the full multi-faceted design in intervention clusters. We conclude with insights gained in the field and implications for future intervention designs.

Objectives and design of project *Sankalp*

The goal of project *Sankalp* was to improve adolescent girls' transition to and retention in secondary school as well as learning outcomes among them by building parental and community engagement in and accountability for secondary education. Specifically, the objectives of the project were:

- to raise awareness among adolescent girls, their parents and other community members about the economic and social returns to secondary education for girls and strengthen parents' commitment to secondary education for their daughters;
- to provide parents with information and support in overcoming bureaucratic and logistical barriers that prevent many girls from pursuing secondary education; and
- to enhance communication and interaction between girls, their parents and their teachers to enable more accountability for girls' education.

The intervention focused on several categories of stakeholders. Given that the steepest decline in school completion occurs between the last year of primary school (Class 8) and the first year of secondary school (Class 9), and that the project sought to engage parents and communities to promote girls' secondary education, the intervention primarily targeted girls attending these classes, their parents, members of the school management committees and the community members in general. It also targeted teachers in primary and secondary schools in the study villages in a limited way.

The project was located in rural Surendranagar district, Gujarat. The intervention activities were launched in October 2013 (4th month of 2013-14 academic year) and were completed in December 2015 (8th month of 2014-15 academic year).

A number of strategies were originally proposed to reach out to the target groups, as summarised in Table 3.1 and described below:

One of the major mechanism through which project *Sankalp* sought to engage parents and communities was by strengthening the capacity of members of the school management committees and supporting them to reach out to parents, teachers, other influential adults in the community and adolescent girls. The SMCs[8] are statutory bodies established by the government to promote

[8] The SMC typically consists of 12 members, of which nine members are expected to be parents of children attending school.

enrolment, retention and achievement of children in primary schools[9] and to make schools effective. Activities proposed to strengthen the capacity of SMC members included project team meeting SMC members personally and sharing information about the project goals, objectives and activities; organising training workshops for SMC members that sought to orient them about their roles and responsibilities as members of the SMCs, the educational situation of girls in their communities and factors that inhibit girls from continuing schooling, the importance of motivating parents to support girls' education and approaches that they can use to motivate parents, as well as to develop action plans for the SMCs; and meeting SMC members once a month to motivate them to carry out activities to promote girls' secondary education in their communities. We note that the project proposed to train five members each from all SMCs in the intervention village. The SMC members, thus oriented, were proposed to reach out parents, teachers, other influential adults in the community and adolescent girls by way of ensuring regular meetings of the SMC, meeting these stakeholders individually as and when opportunities arose and organizing village-wide campaigns, including public pledges.

A second channel through which the project sought to raise awareness about the importance of girls' secondary education was through formation of adolescent girls' groups in the intervention villages, and supporting these girls to act as change agents in their villages to promote secondary education for girls. The members of AGGs were proposed to be girls who resided in the intervention villages and were attending Classes 7, 8 and 9 at the time of rolling out the intervention activities. Activities planned to help these girls advocate for girls' secondary education included organising a one-day training workshop for them and meeting them once or twice a month to support them to undertake a range of activities at the village level. The training workshop sought to orient them about the current educational scenario, social factors affecting adolescent girls' education, the provisions in the Right to Education (RTE) Act and their entitlements from school. It also sought to help participants develop such life skills as communication skills, negotiation and decision-making skills, and individual action plans to realise their educational aspirations. In the workshop, girls who had completed Class 10 were invited to share their experiences with the members of the AGG. The AGG members, thus enrolled and oriented, were expected to have their group meetings once a month as well as undertake such activities as girl-to-girl campaigns, meeting with parents of other adolescent girls and SMC members, village-wide campaigns, including cycle rallies and street dramas, and distribution of informational materials.

Establishing an easy-to-use interactive voice response system (IVRS) to improve channels of communication between adolescent girls and their parents on the one hand and the schools on the other was another key intervention activity. The IVRS was designed to: (1) relay generic messages related to economic and social returns to girls' secondary education, transfer procedures, girls' entitlements and schedule of examinations in the schools to all parents; (2) receive voice messages from parents, SMC members and teachers related to girls' schooling; and (3) relay feedback messages in response to messages received from parents, SMC members and teachers to the concerned stakeholders, as appropriate.

Another channel through which the project sought to inform communities about girls' educational entitlements and to raise their awareness about the importance of secondary education for girls was by way of preparing and distributing a booklet on schemes sponsored by the education and other departments in Gujarat that are intended to facilitate girls' enrollment and their continuation in school and developing and disseminating 12 key messages related to girls' secondary education through the IVRS and wall posters. The booklet on schemes contained, for each scheme, detailed information about the eligibility criteria, the monetary and non-monetary benefits offered and the documents that girls and their family need to furnish in order to avail of the benefits of the scheme. The 12 messages sought to impress upon parents the social and economic returns to secondary education for their daughters, the importance of sending their daughters to school on time and

[9] Although school management committees are proposed in secondary school under the Rashtriya Madhyamik Shiksha Abhiyan, these committees were not established in secondary schools during the project period.

regularly, parental roles and responsibilities in enabling their daughters to realize their aspirations, including educational aspirations, the importance of completing secondary or higher education before getting married, the importance of parent-child communication and parent-teacher interactions, and so on.

Apart from the above mentioned activities, field-level project staff were required to interact with adolescent girls, their parents, SMC members and teachers by way of individual or group interactions and community-wide campaigns.

Preparatory activities

Prior to the initiation of the intervention activities, the Population Council undertook preparatory activities in the study district to understand the realities on the ground. Specifically, the Council conducted a mapping of all government run or aided primary and secondary schools in the blocks of Surendranagar district selected for locating the study and collected information related to these schools and the villages located close to these schools. A total of 159 villages, 201 primary schools and 41 secondary schools were thus mapped. The Council also conducted focus group discussions with the parents of girls studying in primary and secondary schools to understand obstacles faced by parents in enabling their daughters to progress to secondary school and explore appropriate communications platforms to promote communication between girls, parents, communities and schools. A total of 11 focus group discussions with parents were conducted; insights from these focus group discussions were used to inform the baseline instruments and the intervention design, including the randomisation of clusters into intervention and control arms.

CHETNA undertook several preparatory activities to build community and government acceptance of the programme. CHETNA staff held several meetings with district and state officials of the departments of primary and secondary education to seek their permission for implementing the project. They also collated information about girls' education schemes run by various departments, including education, social welfare and local self-government departments, which was used to prepare a booklet on children's entitlements from school. Similarly, CHETNA and Navjeevan Trust staff visited primary and secondary schools to better understand the status of school management committees, and prepared a list of primary and secondary schools along with the phone numbers of schools, school principals and school management committee members. They met the SMC members individually and informed them about the project. They also made individual household visits to inform parents and girls about the project activities, and prepared a list of girls attending classes 7-9, along with phone numbers of their parents or guardians. Finally, a bi-lingual brochure in Gujarati and English was developed jointly by the Council and CHETNA that sought to introduce the project to the intervention communities, including key stakeholders in the education department.

During the preparatory phase, considerable efforts were made by CHETNA and Navjeevan Trust: (1) to identify educated and articulate young women and men residing in the intervention district who could serve as project staff and (2) to build staff capacity. An initial three-day training programme focused on orienting project staff about the project goal and components, their roles and responsibilities and the monthly monitoring formats, as well as on building their skills, with a focus on communication and negotiation skills and skills for mobilizing parents and communities. During the course of the project, staff from CHETNA and the Population Council made several monitoring visits, interacted with field level staff and gave useful tips for improving the implementation of the project activities. Likewise, Awaaz.de helped CHETNA staff to set up the interactive voice response system and oriented them about how to run the system.

Population Council staff prepared formats for monitoring the implementation of project activities on a monthly basis, and oriented project staff from both CHETNA and Navjeevan Trust in filling up these formats.

Table 3.1: Stakeholders targeted and strategies used to reach out to them

Strategies used	Stakeholders targeted					
	SMC members	**Other community influentials**	**Parents**	**Teachers**	**Members of the adolescent Girls' Groups (AGG)**	**Non-AGG members**
Activities conducted by SMC members			Individual meetings opportunistically	Individual meetings opportunistically	Individual meetings opportunistically	Individual meetings opportunistically
			SMC meetings; exposure depended on membership in the SMC	SMC meetings; exposure depended on membership in the SMC		
		Village-wide campaign	Village-wide campaign	Village-wide campaign; exposure depended on teachers' residence in the village	Village-wide campaign	Village-wide campaign
Activities carried out by AGG members	Individual meetings opportunistically		Individual meetings opportunistically			Individual or group meetings opportunistically
	Village-wide campaign (cycle rally, street drama)	Village-wide campaign (cycle rally, street drama)	Village-wide campaign (cycle rally, street drama)	Village-wide campaign (cycle rally, street drama); exposure depended on teachers' residence in the village		Village-wide campaign (cycle rally, street drama)
	Distribution of informational materials	Distribution of informational materials	Distribution of informational materials	Distribution of informational materials		Distribution of informational materials
Interactive voice response system	Relaying generic messages related to economic and social returns to girls' secondary education		Relaying generic messages related to economic and social returns to girls' secondary education	Relaying generic messages related to economic and social returns to girls' secondary education		

Strategies used	Stakeholders targeted					
	SMC members	**Other community influentials**	**Parents**	**Teachers**	**Members of the adolescent Girls' Groups (AGG)**	**Non-AGG members**
	Relaying feedback messages in response to queries, suggestions and complaints received in the IVRS		Relaying feedback messages in response to queries, suggestions and complaints received in the IVRS	Relaying feedback messages in response to queries, suggestions and complaints received in the IVRS		
Distribution of IEC materials	Booklet on children's entitlements Wall posters on economic and social returns of girls' secondary education	Booklet on children's entitlements Wall posters on economic and social returns of girls' secondary education	Booklet on children's entitlements Wall posters on economic and social returns of girls' secondary education	Booklet on children's entitlements Wall posters on economic and social returns of girls' secondary education	Booklet on children's entitlements Wall posters on economic and social returns of girls' secondary education	Booklet on children's entitlements Wall posters on economic and social returns of girls' secondary education
Direct interaction from project staff	Training workshops				Training workshops	
	Once a month individual interaction		Individual interactions opportunistically during their weekly visit to the intervention villages	Individual interactions opportunistically during their weekly visit to the intervention villages	Once or twice a month group interaction	Individual interactions opportunistically during their fort-nightly or monthly visit to AGG
	Community-wide campaign (video show and road show[10])	Community-wide campaign (video show and road show)	Community-wide campaign (video show and road show)	Community-wide campaign (video show and road show)	Community-wide campaign (video show and road show)	Community-wide campaign (video show and road show)

[10] The project staff used a mobile van which travelled across the 45 intervention villages, with messages related to the importance of girls' secondary education played out, using loud speakers. In every village, the van was parked for couple of hours in a central location in the village where villagers assembled and the project staff who travelled in the van interacted with the vllagers.

Implementation of the pilot

Drawing on project monitoring data, we describe the implementation of the pilot in the sub-sections below.

Activities to strengthen the capacity of SMC members and activities carried out by SMC members

Although all primary schools[11] in the intervention villages had constituted SMCs, many SMCs fell short of their stipulated strength of 12 members. Therefore, the project staff established contacts with some 456 members from 53 SMCs across the 45 intervention villages in the beginning of the project and this amounted to 72 percent of the total number of SMC members expected as per the government guidelines. The percentage of SMC members with whom project staff established contact in the beginning of the project varied across clusters, ranging from 51 percent to 95 percent of the expected number of members (Table 3.2). We note that several of these members were not in fact even aware that they had been nominated as SMC members until the project staff informed them. In the latter part of the project, several of these members were replaced by new members, and therefore, the project staff established contacts with an additional 315 members. In total, the project staff interacted with 771 SMC members over the course of the project.

A total of 20 training workshops were organized over the course of the project for the SMC members; these workshops were organized during the first, second and fourth quarter of the pilot. A total of 343 SMC members, which translated into 44 percent of SMC members with whom the project staff had established contacts, participated in these workshops. The percentage of SMC members who participated in the training workshops organized in the beginning of the project varied across clusters, ranging from 17 percent to 61 percent of the expected number of SMC members. Of those who participated in the training workshops, 91 percent attended the training workshop once and the remaining nine percent attended the training workshops twice. We note that this was the first time that several SMC members had attended any training workshops, and participants assessed the training workshop quite positively, as evident from the excerpt below.

> *My husband initially refused to let me attend the training workshop. He was concerned about losing the Rs.200 that I would earn, had I gone for work instead of attending the training workshop. I convinced him to allow me to attend the workshop by saying that I will get Rs.200 from my parents' house and give him. He finally allowed me to attend the workshop. I am now [after attending the workshop] going to tell him that we lost Rs.200, but I learnt things worth of Rs.1000 in the workshop. [A parent representative in the SMC, project monitoring data]*

Following the training workshops, project staff met, on average, three or more SMC members at least once every month in every intervention village.

Project monitoring data on the activities carried out by the SMC members to reach out to parents, teachers, other influential adults in the village and adolescent girls are summarized in Table 3.2. Findings show that of the nine intervention clusters, SMC meetings were held almost every month (i.e., for 10-11 months out of 11 months for which monitoring data were available) in two clusters following their revitalization by the project staff and less often (i.e., for 7-9 months) in the remaining clusters. Some variations across clusters were observed in the extent to which SMC members carried out such activities as interacting with girls, their parents, teachers and others in the education department, and public campaigns in their villages. SMC members carried out at least one of these activities almost every month (i.e., for 10-11 months) in five clusters and less often (i.e., for 7-9 months) in the remaining clusters. Moreover, the regularity with which SMC members carried out these activities over the course of the project varied depending on the type of activity. SMC members carried out interactions with girls, their parents and their teachers more regularly than organizing community-wide campaigns. For example, interactions with girls were reported consistently throughout the course of the project, i.e., for 10-11 months, in three clusters and for 8-9 months in five

[11] In two primary schools in the intervention villages, SMCs were constituted following the intervention of the project staff

clusters and for 6 months in the remaining cluster. Likewise, interactions with parents of adolescent girls were reported for 10-11 months in two clusters and for 8-9 months in five clusters and for 6-7 months in the remaining two clusters. Interactions with teachers were reported for 8-9 months in six clusters and for 4-7 months in the remaining clusters. In comparison, community-wide campaigns were carried out less frequently – for 3-4 months in four clusters and for 1-2 months or not at all in five clusters, for example.

Table 3.2: Activities carried out to strengthen the capacity of SMC members by project team and to reach out to selected target groups by SMC members, project monitoring data

Activity	Clusters								
	C.1	**C.2**	**C.3**	**C.4**	**C.5**	**C.6**	**C.7**	**C.8**	**C.9**
Activities for strengthening the capacity of SMC members									
SMC members with whom project staff established contact in the beginning of the project (%)[1, 2]	51.4	85.0	95.0	86.7	58.3	51.4	52.8	86.7	76.4
SMC members who were trained in the beginning of the project (%)[1, 2]	61.1	38.3	46.7	46.7	33.3	33.3	16.7	46.7	36.1
Activities carried out by SMC members									
	Total number of months[3] selected activities were carried out in each cluster								
Meeting of the SMC members	9	7	8	8	10	7	8	11	8
Interacted with girls	10	9	10	10	9	8	8	9	6
Interacted with parents of adolescent girls	9	9	9	10	8	7	8	10	6
Interacted with teachers and others in the education department	8	8	9	8	8	4	7	8	5
Organised public campaign, including public pledge	2	0	4	2	1	3	3	4	1
At least one village-level activity[4]	10	9	10	10	10	8	9	10	7

Note: [1] the denominator used for calculating the percentage is the total number of members expected to be in the SMCs, i.e., 12 per SMC; [2] the SMC members with whom project staff established and who were trained in the latter part of the project are not shown in the table; [3]out of 11 months for which project monitoring data were available; [4] included are interactions with girls, parents of adolescent girls and teachers and others in the education department as well as public campaign

Formation of adolescent girls' groups (AGG) and activities carried out by AGG members

A total of 454 girls who resided in the intervention village and were attending primarily Classes 7 and 8 were organised into 45 AGGs, with each group containing a minimum of five girls. We note that a few members were attending Classes 9 and 10. Prior to getting these girls organised into groups, field staff met the girls and their parents individually, and oriented them about the project and the roles expected of them as members of the AGG.

Nine training workshops were organised for AGG members in which 428 girls participated, which implied that 94 percent of AGG members attended the training workshops. The percentage of AGG members who participated in the training workshop varied across clusters, ranging from 28 percent to 53 percent (Table 3.3). In the training workshop, all girls took an oath that they would complete at least secondary education and motivate and convince their parents to enable them to do so. Most of these training workshops were organized during weekends and public holidays to ensure maximum participation of girls, without missing their regular classes. Several girls found their participation in the training workshop an enriching experience, as the excerpts below show:

"Till now, no one in our family has ever asked us what our dreams are or what we want to be in future. Family members have never shown interest in our education. Even we had not thought about how much education we should have or what we should become in the future. Because of the

training, we have started thinking for ourselves." [Adolescent girl attending Class 8, project monitoring data]

"I am studying in class 7; I never wanted to study after class 7 before I attended the AGG's training workshop. When the didi (the facilitator) asked about my dream during the training workshop, I thought I should become a teacher. I drew a picture of a teacher. I pasted my drawing on the wall of my house. When my father saw the drawing, he was surprised and asked me whether I really wanted to be a teacher. On that day, my father promised me that he would provide me all the support to make my dream come true." [Adolescent girl attending Class 7, project monitoring data]

Following the training workshops, project staff met with members of the AGGs once a month in each village in the beginning of the project and twice a month in the latter part of the project. They met, on average, five AGG members a month in each village. Through these interactions, the project staff supported AGG members to develop action plans, including following up with girls who were irregular or did not attend school, interacting with girls who were not members of AGG, supporting girls who were weak in their studies, to the extent possible, and so on.

Project monitoring data on activities carried out by AGG members to reach out to adolescent girls who were not members of the AGG, parents of adolescent girls, SMC members and others in the village more generally are summarized in Table 3.3. Group meetings of AGG members were held at least once a month throughout the project period in eight out of nine clusters.

Table 3.3: Activities carried out to strengthen the capacity of AGG members by project staff and to reach out to selected target groups by AGG members, project monitoring data, project monitoring data

Activity	**Cluster**								
	C.1	**C.2**	**C.3**	**C.4**	**C.5**	**C.6**	**C.7**	**C.8**	**C.9**
Activities for strengthening the capacity of adolescent girls									
Girls who participated in the training workshop (%)[1]	41.3	44.0	52.5	34.2	30.9	38.5	35.7	36.4	27.6
Activities carried out by AGG members									
	Total number of months[2] selected activities were carried out in each cluster								
Monthly meeting of the AGG	11	11	11	11	11	8	10	11	10
Girl-to-girl campaign	10	3	8	8	0	4	6	1	1
Interacted with parents of adolescent girls or SMC members	8	9	9	9	9	8	8	8	4
Organised public campaigns, including cycle rally, street drama	1	1	1	2	1	1	1	1	1
At least one village-level activity[3]	10	9	10	9	9	8	8	8	5

Note: [1] the denominator used for calculating the percentage is the total number of girls attending classes 7, 8 and 9 at the time of the baseline household census; [2] out of 11 months for which project monitoring data were available; [3] included are girl-to-girl campaign, interactions with parents of adolescent girls and SMC members as well as public campaign

AGG members carried out village level activities almost every month (i.e., for 10-11 months) in just two clusters, for 8-9 months in six clusters and for five months in the remaining cluster (Table 3.3). The activity that the AGG members carried out most frequently was interacting with parents of adolescent girls and SMC members, with AGG members interacting with parents of at least some adolescent girls and SMC members for 8-9 months in eight out of nine clusters. Surprisingly, girl-to-girl campaign was less frequently reported, with AGG doing so consistently for eight or more months in just three clusters. The AGG members also conducted community-wide campaigns, including cycle rallies and street dramas once or twice in all the clusters. Finally, they also distributed informational materials related to girls' education to parents and others in the community as well as helped the

project staff in displaying informational materials across the village and orienting parents and others about using the IVRS.

Operationalization of an interactive voice response system (IVRS)

The Council worked with Awaaz.de in managing the technical aspects of running the IVRS, with CHETNA in hosting this channel to promote interactions between parents and teachers, and with CHETNA and Navjeevan Trust in orienting parents and other stakeholders about the IVRS and motivating them to use this channel to address their concerns and to seek information related to girls' secondary education. Staff from Awaaz.de oriented the CHETNA team on the use of the IVRS, helped them develop common prompts which were needed for running the system, and supported the CHETNA team in installing the software and fine-tuning the messages. A unique phone number was assigned for the IVRS through which messages were relayed and received. The IVRS had stored the telephone numbers of parents of girls studying in 7th, 8th and 9th standards, SMC members, teachers and the schools in the intervention villages. The system was administered by a dedicated project staff member housed in CHETNA.

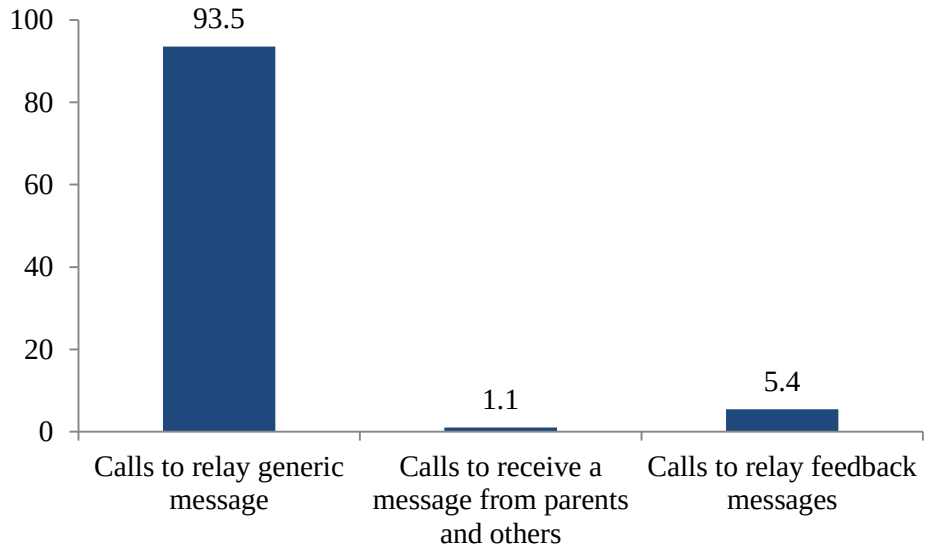
In order to receive the message, the recipient of the call was required to pick up their phone and listen to the message; they were prompted to press a number to indicate whether they had listened to the message fully. An additional two calls were made for each message relayed, in case the recipient did not pick up the call in the first attempt. In order to send a voice message to the system, the callers needed to give a missed call to the system number and the system called them back and prompted them about how to record their message on to the system. This had been done to make sending messages to the system free of cost to parents, SMC members and teachers. Once a message was received, the system administrator at CHETNA prepared an appropriate response message in consultation with other project staff and relayed a feedback message to all/selected stakeholders, as appropriate. The system administer ensured that no breach of confidentiality of information relayed through the system took place. The cost of calling in to the IVRS and relaying the messages was borne by the project.

Prior to making the system operational, project staff personally met the parents, AGG members, SMC members, principals and school teachers in all the intervention villages and oriented them on the use of the IVRS. An information brochure on the IVRS, depicting pictorially how to access the messages relayed through the IVRS and the unique phone number through which parents and other stakeholders can use the IVRS to voice their concerns, was developed and widely distributed. Stickers and labels were also designed that advertised the IVRS phone number and these were posted across the village so that community can access them easily.

The CHETNA team worked with the Council to develop generic messages to be relayed through the IVRS; these audio-messages were recorded by a group of professionals. These messages conveyed the social and economic returns to secondary education for girls, the importance of sending girls to school on time and regularly, parental roles and responsibilities in enabling their daughters to realize their educational aspirations, the importance of completing secondary or higher education before getting married, the importance of parent-child communication and parent-teacher interactions, and so on.

The IVRS became operational in March 2014, i.e., by the end of second quarter of the pilot. Between March 2014 and December 2014, a total of 64,581 calls were made to parents, teachers, SMC members and others (Figure 3.1). The majority of these calls (94%) were initiated by the system to relay generic messages related to girls' secondary education. Calls that were made to receive messages from parents, SMC members, teachers and others, and to relay feedback messages in response to them were few: just one percent and five percent of calls, respectively, fell into these categories.

Figure 3.1: Percentage distribution of calls generated by the IVRS by the type of call, project monitoring data



Note: IVRS data refer to 10 months of the project period

Of the total calls made to relay generic messages, 75 percent were sent to parents, 17 percent to SMC members and seven percent to teachers (Table 3.4). Data on the percentage of calls sent out to relay generic messages that were heard by the recipients suggest that 20 percent of calls were fully heard by the recipients, 32 percent were partially heard, 13 percent were unattended or discontinued immediately on receiving the call and the remaining 36 percent of calls were not delivered to the intended recipient because the cell phone was switched off or out of mobile network coverage area at the time of the call or the number registered with the system was incorrect or changed. The percentage of calls that were fully heard did not differ by the category of recipient, although somewhat fewer calls to teachers were fully heard than calls to parents and SMC members (15% versus 20-22%).

Table 3.4: Percent distribution of calls made to relay generic messages by status on whether the calls were listened by the recipient, project monitoring data

Recipient of the call	Percentage of calls made[3]	Percentage of calls heard[4]				Number of calls
		Fully	Partially	Not at all	Not delivered	
Parents[1]	75.3	20.3	32.3	11.4	36.0	45,466
SMC members[2]	17.3	21.5	30.4	17.7	30.4	10,448
Teachers	6.5	14.8	27.6	12.5	45.2	3,906
Field-based project staff	0.5	36.8	24.6	2.5	36.1	280
Status of the recipient not known	0.5	14.3	26.8	17.7	41.8	287
Total	60,387	12,205	19,083	7,555	21,544	60,387

Note: IVRS data refer to 10 months of the project period; [1]includes 3,003 calls to 95 parents who received the same message in their capacity as a SMC member or a teacher more than once as well; [2]includes 1,154 calls to 63 SMC members who received the same message in their capacity as a teacher more than once as well; [3] percentages shown are column-based; [4] percentages shown are row-based

Of calls received from parents, SMC members or teachers in the IVRS, 30 percent were made by parents, six percent by SMC members and three percent by teachers (Table 3.5). Indeed, more than half of such calls were made from phone numbers that were unregistered with the system. Moreover, a message was indeed recorded in just 29 percent of such calls; instead, the caller just listened to the generic messages stored in the system in more than half of such calls and did nothing in almost one-

fifth of such calls. The responses/queries received in the system were related to concerns about safe transportation for girls, the quality of schooling, opportunities available for further education, schemes supported by the government and so on.

Table 3.5: Percent distribution of calls received from parents, SMC members and teachers by the status of message recorded, project monitoring data

Status of callers	Percentage of calls[1]	% of callers who[2]:			Number of calls
		Recorded a message	Listened to stored generic messages	Did nothing	
Parents	29.7	37.4	39.4	23.3	203
SMC members	6.3	41.9	39.5	18.6	43
Teachers	2.8	*	--	*	19
Field-based project staff	4.8	39.4	51.5	9.1	33
Status of the caller not known	56.4	19.4	63.2	17.4	386
Total	684	199	358	127	684

*Note: IVRS data refer to 10 months of the project period; * % based on just 19 cases; [1]percentages shown are column-based; [2] percentages shown are row-based*

Of the calls made to relay feedback messages in response to messages received in the system, the large majority of calls were again made to parents (65%), followed by SMC members (16%) and teachers (11%; Table 3.6). Only 26 percent of feedback voice messages were fully heard by the recipient. Again, calls to teachers were less likely than calls to parents and SMC members to have been fully heard (12% versus 25-26%).

Table 3.6: Percent distribution of calls made to relay feedback messages by status on whether the calls were listened by the recipient, project monitoring data

Type of calls made	Percentage of calls made[3]	Percentage of calls heard[4]				Number of calls
		Fully	Partially	Not at all	Not delivered	
Parents	64.7	26.0	29.0	27.2	17.8	2,271
SMC members	16.3	25.4	29.2	19.3	26.1	571
Teachers	10.9	12.3	27.0	25.7	34.9	381
Field-based project staff	1.4	30.6	28.6	28.6	12.2	49
Status of the recipient not known	6.8	50.4	19.3	16.4	13.9	238
Total	3,510	917	988	879	726	3,510

Note: IVRS data refer to 10 months of the project period; [1]includes 3,003 calls to 95 parents who received the same message in their capacity as a SMC member or a teacher more than once as well; [2]includes 1,154 calls to 63 SMC members who received the same message in their capacity as a teacher more than once as well; [3] percentages shown are column-based; [4] percentages shown are row-based

Table 3.7 describes the percentages of calls received and sent by the main stakeholders that the IVRS targeted. Findings show that almost all parents, SMC members, and teachers received at least one generic message related to girls' education. Parents were twice as likely as SMC members and three times more likely than teachers to have been reached with generic messages; parents on average were reached with generic messages 23 times over the course of the project, compared to 14 times among SMC members and 7 times among teachers. Findings also show very low levels of receptiveness to these messages among the recipients; the mean number of times that recipients fully heard generic messages ranged from seven times among parents to five times among SMC members and two times among teachers.

Efforts on the part of parents, SMC members and teachers to voice their concerns through the IVRS were also negligible: just 3-4 percent of them ever sent a voice message to the system. As such, fewer parents, SMC members and teachers received at least one feedback message in response to queries and concerns related to girls' education received in the system – 77, 50 and 55 percent, respectively. The number of times these stakeholders received such messages was also few – a maximum of two times as in the case of parents.

Table 3.7: Percentage of parents, SMC members, and teachers who were reached through the IVRS, project monitoring data

Type of voice message	Parents	SMC members	Teachers
Generic messages received			
Received at least one generic message (%)	99.8	99.4	98.6
Mean number of times generic messages were received	22.7	14.4	7.1
Mean number of times generic messages were fully heard	7.2	4.5	1.9
Messages sent			
Sent at least one message to the system (%)	4.5	3.3	4.3
Mean number of times messages were sent to the system	0.1	0.4	6.4
Feedback messages received			
Received at least one feedback message (%)	77.3	50.1	54.5
Mean number of times feedback messages were received	1.5	0.8	0.8
Mean number of times feedback messages were fully heard	0.5	0.3	0.2
Number	**1280**	**505**	**303**

Note: IVRS data refer to 10 months of the project period

Development and dissemination of IEC materials

The booklet on girls' entitlement was distributed to girls, their parents, SMC members and other key stakeholders in the community and teachers. Additionally, the 12 key messages to promote girls' secondary education prepared by the project team were disseminated through the IVRS as well as through wall posters posted across the intervention villages.

Direct interactions from project staff with adolescent girls, parents of adolescent girls, SMC members and teachers

Project monitoring data show that field staff met with an average of five adolescent girls who were members of the AGG, 14 adolescent girls who were not members of the AGG, 18 parents of adolescent girls, three SMC members and four teachers once a month in every village. The project staff also organized two community-wide campaigns – a video show and a road show – across all the villages over the course of the project.

Table 3.8: Average number of adolescent girls, their parents, SMC members, and teachers with whom project staff interacted in a month, project monitoring data

Target groups	Number
Adolescent girls who were members of the AGG	5
Adolescent girls who were not members of the AGG	14
Parents of adolescent girls	18
SMC members	3
Teachers	4

Note: Project monitoring data were available for 11 months only

Challenges faced in conducting the intervention activities

We acknowledge several challenges that the project team faced in carrying out the intervention activities.

First, empowering the SMCs to act as pressure groups that could help parents overcome bureaucratic and logistical barriers to getting their daughters to finish at least secondary education was challenging. We note that several of the SMC members were not, in fact, aware that they had been nominated as SMC members until the project staff informed them and several had never attended any training workshops before they attended the training workshops organised as part of project *Sankalp*. Moreover, several SMC members, especially female members were not proficient in reading and writing. As such, several SMC members expressed inhibitions in actively participating in the training workshops. Also, the project was not able to ensure that all the SMC members in the intervention villages participated in these training workshops. Moreover, although the field workers made considerable efforts to actively engage the SMC members in promoting girls' education in their communities, several SMC members did not display enthusiasm in doing so.

Second, enabling girls in the AGG to internalize the messages conveyed through the project activities also proved to be challenging. During the early days of the project, the interactions between the field staff and the AGG members were limited (i.e., once a month) and the field staff lacked clarity about how to encourage AGG members to act as change agents. To address these challenges, the project increased the interactions between field staff and AGG members to at least twice a month, and in addition to the field workers, the project coordinators also interacted with AGG members and supported them to develop action plans using participatory learning approaches. Even so, we note that girl-to-girl campaigns were limited.

Third, we note that individual interactions between field staff and parents were constrained to a certain extent by the non-availability of parents, either because parents were away working in the field during the day time, or because of livelihood-related seasonal migration of families. Indeed, seasonal migration of the entire household was common in several intervention villages and posed a huge challenge in reaching the targeted project beneficiaries.

Fourth, activities targeting teachers in primary and secondary schools were more limited and opportunistic compared to activities for girls, their parents and SMC members. Moreover, although the project team sought to organize sensitization workshops for teachers to emphasize the importance of promoting positive class room dynamics and paying attention to quality of teaching, we were not able to do so as permission was not granted by the education department. Similarly, although the team had tried to identify and train a designated teacher in each primary and secondary school who would be responsible for sending voice messages to the IVRS, the school authorities did not show any interest in it.

Fifth, as noted earlier, utilization of the IVRS by parents, other community members and teachers to voice their concerns were limited. Likewise, the IVRS was not perceived as a channel to promote parent-teacher interactions in the study communities.

Summary

In summary, the project activities mainly targeted adolescent girls, particularly those studying in Classes 8 and 9, their parents and SMC members, and, in a limited way, teachers in primary and secondary schools. The main channels through which the project sought to engage parents and communities in promoting girls' secondary education comprised revitalization of SMCs and supporting them to take up community-wide campaigns, formation of adolescent girls' groups and supporting them to undertake girl-to-girl campaigns, girl-to-parents campaigns and community-wide campaigns, launching an IVRS through which messages related to the importance of secondary education for girls were relayed and which gave parents, other community members and teachers to voice their concerns related to girls' education, and dissemination of informational materials related to girls' education. In addition, project staff also made effort to reach out to the target groups through opportunistic individual interactions and community-wide campaigns organised twice over the course of the project.

Project monitoring data suggest that project activities had succeeded in revitalising the SMCs to a certain extent, making SMC meetings regular at least in some clusters and promoting interactions between SMC members on the one hand and adolescent girls and their parents on the other. Likewise, the project was successful in creating a cadre of adolescent girls who showed considerable commitment in undertaking activities to promote girls' secondary education. Similarly, through the SMCs, AGGs, IVRS, informational materials and direct interactions from project staff, notable proportions of parents of adolescent girls were reached with messages emphasising the importance of girls' secondary education. However, the reach of the project among teachers was limited, which was not surprising as teachers were only a secondary target group for the project activities. Also, the IVRS launched by the project did not make the anticipated inroads in the intervention communities.

Chapter 4

Girls' awareness and experiences of project *Sankalp*

Drawing on data collected from girls who participated in the endline survey, this chapter describes girls' awareness and experiences of project *Sankalp*. It also presents data on girls' perceptions of changes that they had observed in their parents and teachers during the inter-survey period.

Girls' awareness of project *Sankalp*

We probed all girls who participated in the endline survey in both intervention and control arms to assess their awareness of project *Sankalp*. Findings indicate that almost all girls (97%) in intervention arm were aware of project *Sankalp*. We note that two percent of girls in control arm also reported that they had heard about the project.

Awareness of and experiences with adolescent girls' groups

As described in Chapter 3, one of the major strategies used in the project was the formation of adolescent girls' groups and training of these groups to advocate for girls' secondary education. At the endline, we included a number of questions to capture survey participants' awareness of and experiences with the adolescent girls' groups. Findings show that 80 percent of girls in intervention arm had heard about adolescent girls' groups formed as part of project *Sankalp* (Table 4.1). We note that one percent of girls in control arm also reported awareness of the AGG (not shown in table).

Table 4.1: Girls' participation in adolescent girls' groups formed as part of project *Sankalp*, intervention arm, endline survey

Indicators of participation in AGG	**Percentage**
Heard about AGG formed as part of project *Sankalp*	80.3
Member of the AGG	47.1
Number of respondents in intervention arm	**712**
Attended training workshop conducted for AGG members	84.7
Continued to be a member of the AGG at the time of the endline survey	38.4
Number of respondents who were members of the AGG	**328**
Perceptions of non-AGG members about the activism of AGG members	
AGG members discussed activities/ discussions that took place in the group with them	61.6
AGG members interacted with their parents in the last one year	23.4
Number of respondents who were non-members of the AGG	**245**

Almost half of girls in intervention arm (47%) reported membership in the AGG when they were attending Classes 8 or 9. Of those girls who reported membership in the AGG, over four-fifths had attended the training workshop organised by CHETNA for AGG members. Of those who attended the training workshop, 81 percent described the training workshop as very useful and others somewhat useful (not shown in table). Nearly two-fifths of AGG members reported that they continued to be a member of the AGG at the time of the endline survey.

We also probed girls who were not part of the AGG about their interactions with AGG members. Findings suggest notable interactions between AGG members and non-AGG members (more than what the project monitoring data indicated in Chapter 3). Three-fifths of girls who were not part of the AGG reported that AGG members had discussed activities/ discussions that took place in the group with them. Similarly, a quarter of these girls reported that AGG members had interacted with their parents in the last one year.

Awareness of and experiences with the interactive voice response system

We probed girls about their awareness of and experiences, including their perceptions of their parents' and other family members' experiences with the interactive voice response system run by the project. Over four-fifths of girls in the intervention arm and one percent of girls in the control arm reported awareness of the IVRS (Table 4.2). However, only six percent of girls were able to recall correctly the toll-free number associated with the IVRS. Two-thirds of all surveyed girls in the intervention arm reported that they had received an orientation, including a demonstration about the how the IVRS functions. Several girls (60%) reported that they encouraged family members and others to use the IVRS.

Findings related to the use of IVRS show that parents or others in the family of three-fifths of girls had received at least one voice message from the system. On average, parents of these girls received five voice messages in the six months preceding the interview. The messages received, as recalled spontaneously by girls, largely emphasised the importance of secondary education for girls: 91 percent of girls who reported that their parents received any messages so recalled. Another 42 percent of girls reported that the messages exhorted parents to pay equal attention to educating their sons and daughters. No more than 7 percent of girls whose parents received any message from the IVRS recalled messages related to their entitlements, their performance or attendance in school, or day-to-day matters related to their schooling.

One-sixth of surveyed girls in the intervention arm (more than what the project monitoring data indicated, see Table 3.7) reported that their parents or others in their family contacted the IVRS to enquire about matters related to girls' secondary education. We note that several messages received in the system were from telephone numbers that were not registered with the system (see Table 3.5) and it is possible that some of the messages that were received from unregistered numbers could be from surveyed girls' parents or other family members. Girls who reported that their parents had contacted the IVRS indicated that on average, their parents or others in their family had sent 2.7 voice messages to the system. The messages sent, as recalled spontaneously by girls, were related to queries about quality schools in which to enrol girls in secondary education and beyond, residential schools for girls, and the level of schooling that the girls should have for realising their career aspirations.

Finally, 45 percent of all surveyed girls in the intervention arm reported that they found the system very useful.

Table 4.2: Girls' awareness of and experiences with the interactive voice response system run as part of project *Sankalp*, intervention arm, endline survey

Indicators of awareness of and experiences with the IVRS	Percentage
Girls who heard about the IVRS	82.5
Girls who were able to recall the toll-free number to contact the IVRS	5.5
Girls who received orientation about how the IVRS functions	65.2
Girls who encouraged family members and others to use the IVRS	59.8
Girls whose parents or other family members received any voice message through the IVRS	62.0
Girls whose parents or other family members sent any voice message to the IVRS	15.8
Girls who used IVRS, through their parents or others in the family, to report a problem	12.9
Girls who reported the IVRS very useful	45.0
Number of respondents in intervention arm	**712**
Mean number of voice messages received in the six months preceding the interview[1]	4.5
Content of the voice message received, as recalled spontaneously by girls	
Importance of secondary education for girls	90.9
Paying equal importance to education of sons and daughters	41.9
Entitlements from school	6.9
Special events in school, including PTA meetings	6.8
Information about quality schools and residential schools	2.6
School examination schedules	1.2
Information about school transfer procedures	0.9
Respondents' performance and attendance in school	2.9
Information about safe transportation	0.4
Don't know	3.6
Number of respondents whose parents or others in the family received any voice message through the IVRS	**433**
Mean number of voice message sent by parents or others in the family in the six months preceding the interview	2.7
Content of the voice message sent, as recalled spontaneously by girls	
Information about quality schools to enrol girls in secondary education and beyond, and residential schools	43.4
Information about level of schooling to be completed for realising career aspirations	13.2
Queries related to availing entitlements or complaints about not having received entitlements	9.1
Queries about enrolling girls in secondary schools	7.9
Queries related to how to counsel girls who show lack of interest in studies	6.0
Concerns about lack of transportation facility	5.0
Concerns about teachers' practices, school infrastructure	3.6
Concerns about lack of community support for girls' education	1.4
Query about school examination schedule	1.2
Complaints about the IVRS (i.e., not being able to talk to someone directly)	20.1
Number of respondents whose parents or others in the family sent any voice message to the IVRS	**117**

Note: [1] 99 girls reported that they didn't know the number of voice messages received by their parents or others in the family

Awareness of and participation in girl-to-girl, girl-to-parents, and community-wide campaigns

As described in chapter 3, girls, particularly members of the AGG, were encouraged to undertake a number of activities to promote girls' secondary education, including girl-to-girl campaigns, girl-to-parents campaign and village-wide campaigns, including posting wall posters, cycle rallies, street

dramas and so on. At endline, we probed girls in the intervention arm about their participation in these activities and findings are summarised in Table 4.3.

Findings show that a notable proportion of girls in the intervention arm had participated in such girl-to-girl campaigns and girl-to-parents campaigns as motivating classmates to continue studies or helping them in their studies, identifying girls who dropped out or were irregular in school, and talking to parents of such girls. Specifically, one-third of girls reported that they had motivated classmates to continue studies or helped them in their studies, two-fifths had identified girls who had discontinued schooling or were irregular in school, and one-third had talked to parents of such girls.

Likewise, substantial proportions of girls in the intervention arm reported awareness of and participation in community-wide campaigns. For example, two-thirds of girls reported that public meetings to promote girls' secondary education had taken place in their village in the year preceding the interview. However, somewhat fewer girls reported that they had attended such meetings (46%) and that their parents had attended such meetings (28%). Similarly, half of surveyed girls in the intervention arm reported that public pledging in which parents pledged to educate their daughters at least until secondary education had taken place in their village in the one year preceding the interview and one-fifth of the girls reported that their parents had pledged that they would educate them at least until Class 10.

Table 4.3: Girls' awareness of and participation in girl-to-girl, girl-to-parents and community-wide campaigns to promote girls' secondary education, intervention arm, endline survey

Indicators	**Percentage**
Girls who motivated fellow classmates to continue studies or helped in their studies	32.2
Girls who identified those girls who discontinued or were irregular in school	38.8
Girls who talked to parents of those girls who discontinued or were irregular in school	34.3
Girls who reported public meetings to promote girls' secondary education in their village in the year preceding the interview	69.4
Girls who attended public meetings to promote girls' secondary education in their village in the year preceding the interview	45.9
Girls whose parents attended public meetings to promote girls' secondary education in their village in the year preceding the interview	27.5
Girls who reported public pledging in their village in which parents promised to educate their daughters	52.7
Girls whose parents took public pledge to educate them	21.1
Girls who posted wall posters related to girls' secondary education	56.1
Girls who participated in the *shala pravotsava* (enrolment drive promoted by the education department)	40.7
Girls who participated in street dramas to promote girls' secondary education	36.2
Girls who supported road shows to promote girls' secondary education	36.7
Girls who participated in cycle rally to promote girls' secondary education	17.2
Girls who voiced their concerns to school management committee members	8.8
Number of respondents	**712**

Girls also reported participation in such activities as posting wall posters related to girls' secondary education, the enrolment drive promoted by the education department, street dramas, road shows and cycle rallies. Between one-sixth and more than half of girls reported participation in these activities. Finally, about one-tenth of girls reported that they had voiced their concerns to school management committee members.

Interactions with project staff

In the endline survey, we sought the perceptions of girls in the intervention arm about their interactions as well as their parents' interactions with the staff of project *Sankalp*, and findings are summarised in Table 4.4. Findings show that over four-fifths of girls in the intervention arm met with project staff at least once in the year preceding the interview. On average, girls who had interacted with the project staff met with them four times in the year preceding the interview. Fewer girls (64%) reported an interaction between their parents and the project staff in the year preceding the interview. Girls whose parents had interacted with the project staff reported that on average, the project staff met with their parents three times in the year preceding the interview.

Table 4.4: Girls' perceptions of interactions with staff of project *Sankalp*, intervention arm, endline survey

Indicators of interactions with project staff	**Percentage**
Girls who reported an interaction with project staff in the year prior to the interview	82.3
Girls who reported an interaction between their parents and project staff in the year preceding the interview	63.8
Number of respondents in intervention arm	**712**
Mean number of times project staff interacted with girls in the year prior to the interview	3.9
Number of respondents who reported an interaction with the project staff in the year preceding the interview	**580**
Mean number of times project staff interacted with parents of girls in the year preceding the interview	2.7
Number of respondents who reported an interaction between their parents and the project staff in the year preceding the interview	**440**

Girls' perceptions of changes experienced during the inter-survey period

We posed a few questions to girls in both the intervention and control arms that related to changes that girls may have observed in their parents and teachers during the inter-survey period. Specifically, these questions sought to assess changes in teachers' and parents' practices. Findings show that girls in intervention arm were consistently more likely than girls in the control arm to report positive changes in their teachers' practices. Specifically, a larger proportion of girls in the intervention than the control arm reported that compared to when they were studying in previous class, their teachers came more regularly in the current class (76% versus 64%), their teachers taught better in the current class (79% versus 69%), their teachers treated students in a nicer way in the current class (71% versus 60%) and their teachers were readier to help students with difficulty in the current class (71% versus 61%). We caution that some of this effect may be the result of their shift to a new class; however, the difference between intervention and control arms was notable.

Table 4.5: Girls' perceptions of changes in teachers' and parents' practices by treatment arms, endline survey

Percentage of girls who reported that compared to when they were studying in previous class:	**Intervention**	**Control**
Teachers came more regularly in the current class	75.7	63.7
Teachers taught better in the current class	79.0	69.4
Teachers treated students in a nicer way in the current class	71.4	60.0
Teachers were readier to help students with difficulties in the current class	70.8	61.3
Parents were more attentive to their school work currently	76.7	73.6
Parents were more committed to helping them complete their schooling	64.6	58.5
Number of respondents who were attending school at the time of the endline survey	**513**	**594**

With regard to parents' practices too, girls in the intervention arm were somewhat more likely than those in the control arm to report that compared to earlier, their parents were more attentive to their schoolwork currently (77% versus 74%) and their parents were more committed to helping them complete their schooling (65% versus 59%).

Summary

The findings presented in this chapter indicate that girls in the intervention arm were well aware of the project activities, with almost all girls having heard about the project in general, four-fifths of girls having heard about the adolescent girls' groups and the IVRS, and two-thirds of girls having heard about community-wide campaigns to promote girls' secondary education.

Girls' participation in project activities was also notable. About half of the girls were members of the AGG and of them, almost two-fifths continued to be members at the time of the endline survey. Three-fifths had encouraged their parents and others to use the IVRS and one-eighth had used the IVRS, through their parents or others in the family, to report a problem. Between one-third and two-fifths of the girls had participated in girl-to-girl campaigns and girls-to-parents' campaigns. No less than half of the girls had participated in one community-wide campaign to promote girls' secondary education. A majority of girls recalled their interaction as well as their parents' interactions with the project staff.

Finally, more girls in the intervention than control arm reported positive changes in their parents' and teachers' practices during the inter-survey period.

Chapter 5

Effects of project *Sankalp* on creating an enabling environment for girls to pursue secondary education

The theory of change underpinning project *Sankalp* emphasizes that an enabling environment at community, family, and school level as well as improved aspirations and agency among girls can improve girls' transition to secondary education, their attendance in school and their learning outcomes. As such, the strategies adopted in project *Sankalp* primarily sought to improve community and parental engagement in girls' secondary education and in a limited way, the school environment. It also sought to influence girls' aspirations and agency in matters related to their schooling. This chapter describes the findings on the effect of the project on these intermediate outcomes.

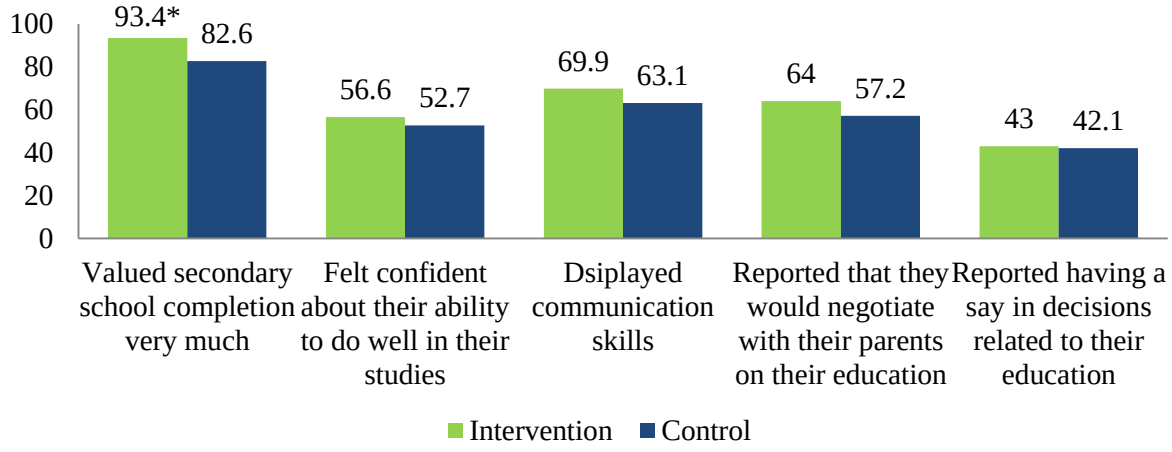
The effect of the intervention on the intermediate outcomes was estimated using cluster summary measures. To address the potential for detecting an effect that is not present when making multiple comparisons on one dataset (Schochet, 2008), we present descriptive proportions of intermediate outcomes and present results of t-tests where the observed difference between intervention and control arms seemed large(i.e., 10 percentage points or more).

Effect on girls' aspirations, agency, awareness and utilization of entitlements and time use in matters related to their schooling

As described in the theory of change underpinning project *Sankalp*, project strategies were expected to improve girls' educational aspirations, their agency in matters related to their schooling, their awareness and utilization of entitlements from school, and the time they devoted to school related activities. Findings presented in this section suggest that, for the most part, the project activities did not contribute to a significant improvement in these intermediate outcomes.

Of the five indicators that we used to measure girls' aspirations and agency in matters related to their schooling, only one indicator, namely, their educational aspirations, showed a positive and significant effect (Figure 5.1). A larger proportion of the girls in the intervention than in the control arm valued completing secondary education at endline (estimated intervention effect of 11 percentage points). All other indicators – girls' confidence in their ability to do well in their studies, communication skills, ability to negotiate with their parents on matters related to their education and decision-making role in their education – did not show any effect large enough to be attributable to the project.

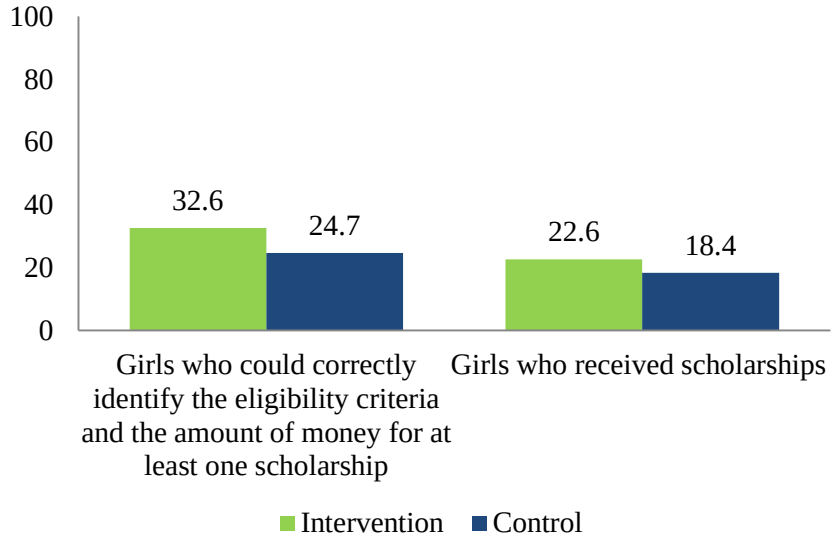
Figure 5.1: Girls' educational aspirations and agency in matters related to schooling by treatment arms, endline survey



*Note: * indicates that difference between intervention and control arm was significant at p<0.05 level in unpaired t-test*

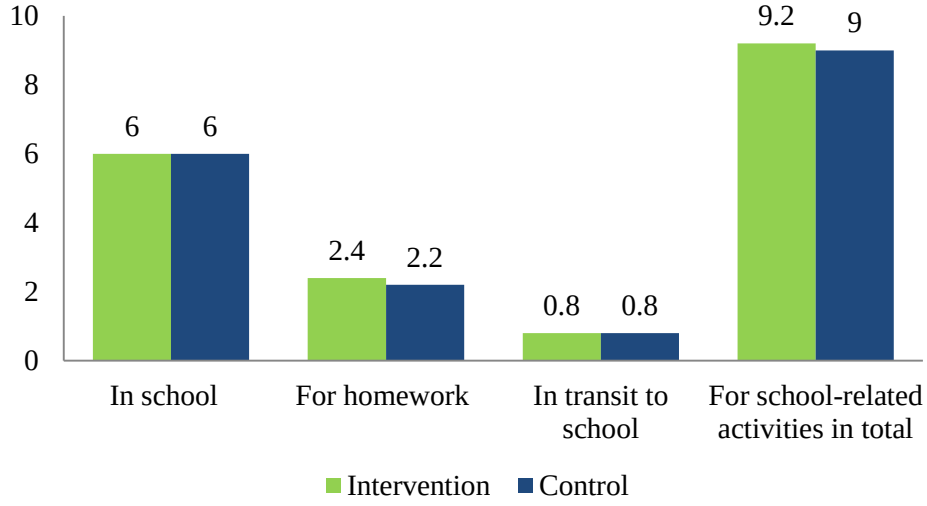
Although the project made considerable efforts to improve girls' and their parents' awareness of girls' entitlements from school, including widely distributing a booklet on entitlements and relaying information about entitlements through the IVRS, endline findings indicate that these activities did not have a significant effect in improving girls' in-depth awareness and utilization of their entitlements (Figure 5.2). Although a larger proportion of girls in the intervention than control arms displayed in-depth awareness of their entitlements, as measured by being able to correctly identify the eligibility criteria and the amount of money for at least one scholarship and having received a scholarship in the current academic year, these differences were not large enough to be attributable to the project.

Figure 5.2: Girls' in-depth awareness and utilization of their entitlements by treatment arms, endline survey



Finally, the endline findings indicate that the project had no effect on the amount of time that girls devoted towards school related activities (Figure 5.3). Girls in the intervention and control arms spent an equal amount of time on school-related activities on the last school day they attended.

Figure 5.3: Time devoted to school related activities (in hours) by treatment arms, endline survey

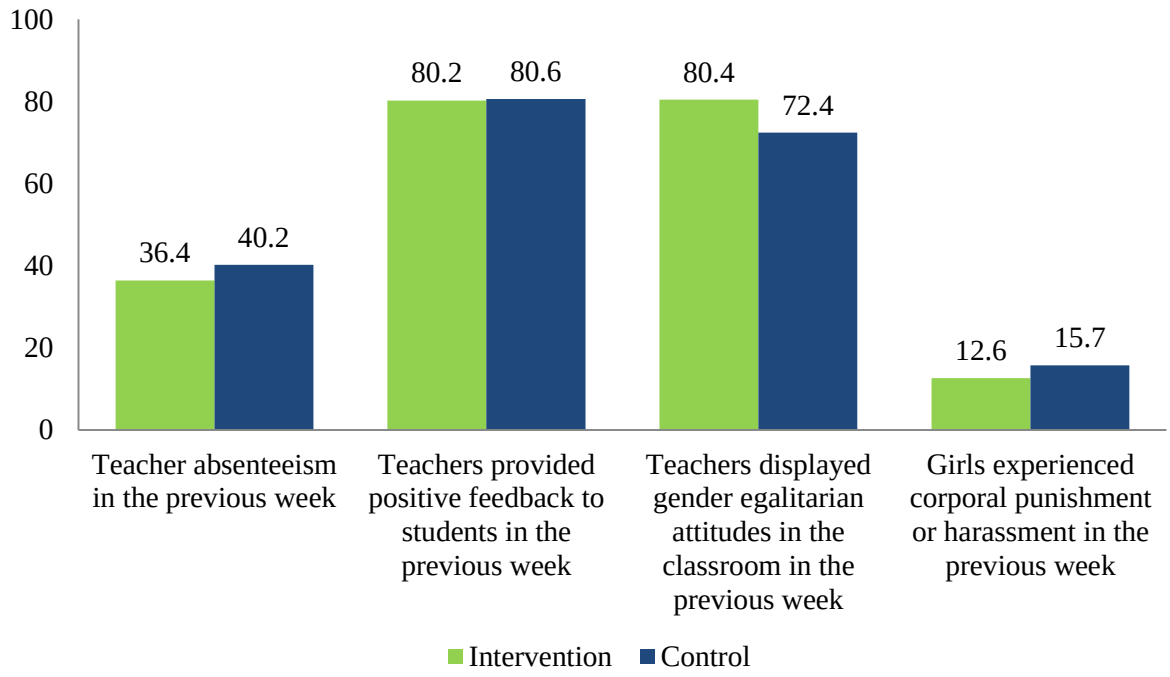


Effect on the school environment

As described in Chapter 3, the project sought to make the school environment more congenial to girls by working with the school authorities in a limited way. Moreover, as mentioned in our theory of change, we hypothesized that improvements in the engagement of parents and school management committees in girls' education can make the school environment more girl-friendly. We measured the effect of the project on the school environment in terms of teachers' attendance in school and classroom dynamics.

Findings show that the project had no effect on improving the school environment for girls (Figure 5.4). No difference between intervention and control arms was observed in teacher absenteeism, as defined by the absence of at least one teacher at least one day in the week preceding the interview. Likewise, an equal proportion of girls in the intervention and control arms reported that their teachers provided positive feedback to students in the week prior to the interview. Moreover, although a larger proportion of girls in the intervention than in the control arm reported that their teachers displayed gender egalitarian attitudes in the classroom in the previous week, the difference was not large enough to be attributable to the project. Finally, no difference was observed between the treatment arms in terms of the proportion of girls who experienced corporal punishment or harassment perpetrated by their teachers in the week preceding the interview.

Figure 5.4: Girls' reports of teachers' attitudes and practices by treatment arms, endline survey



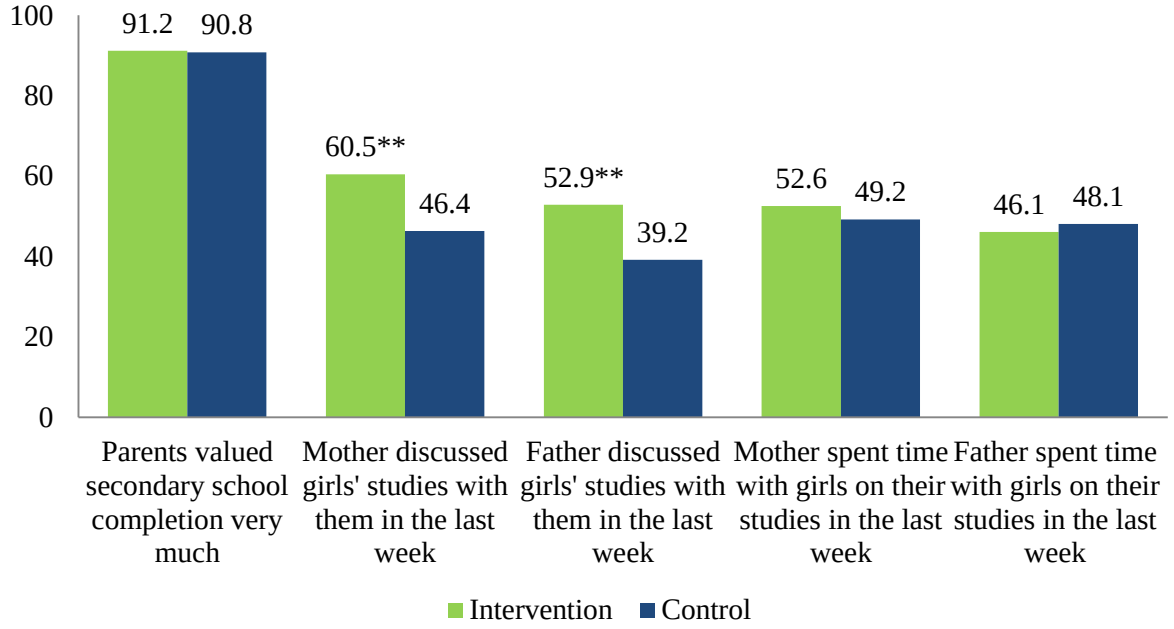
Effect on parental engagement in support of girls' secondary education

We used a number of indictors to measure the effect of the project on parental engagement in support of girls' secondary education, namely, parental appreciation of secondary school completion by girls, parental discussion of girls' studies, parental support to girls' education in the form of time spent and parental interactions with school authorities.

Findings presented in Figure 5.5 suggest mixed effects of the project on parental engagement in support of girls' secondary education. Specifically, the project contributed to improving communication between girls and their parents on their studies; girls in the intervention arm were significantly more likely than girls in the control arm to report that their mother and father had talked to them about their studies in the week preceding the interview (estimated intervention effect of 14 percentage points with respect to communication with mother and father, respectively). However, no effect was observed with regard to the extent to which parents appreciated secondary school

completion by the surveyed girls and the extent to which parents spent time with the girls on their studies in the week preceding the interview.

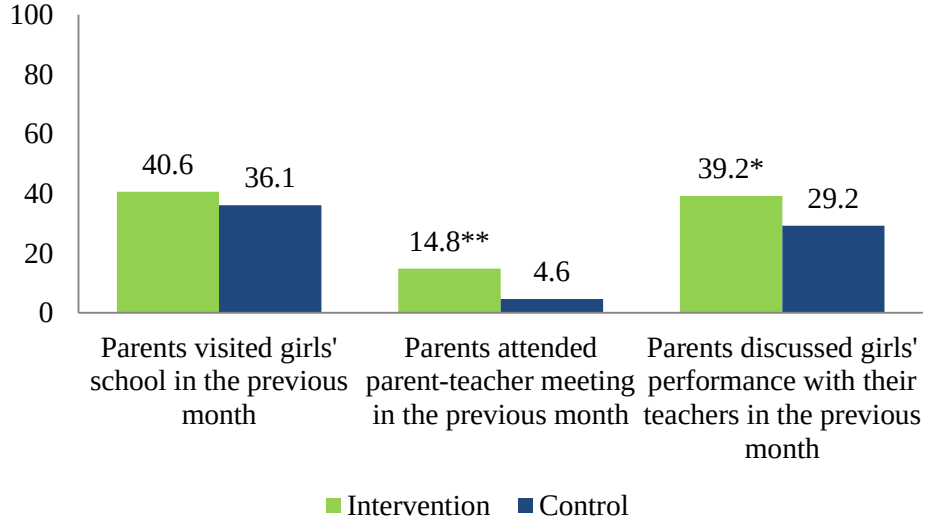
Figure 5.5: Girls' report of parental support in their studies by treatment arms, endline survey



*Note: ** indicates that difference between intervention and control arm was significant at p<0.01 level in unpaired t-test*

Indicators related to parental interactions with school authorities suggest by and large positive effects of the project (Figure 5.6). For example, a larger proportion of girls reported that their parents attended a parent-teacher meeting in the month preceding the interview (estimated intervention effect of 10 percentage points). They were also more likely to report that their parents discussed their performance with their teachers in the month preceding the interview (estimated effect of 10 percentage points).

Figure 5.6: Girls' reports of parental interactions with school authorities by treatment arms, endline survey

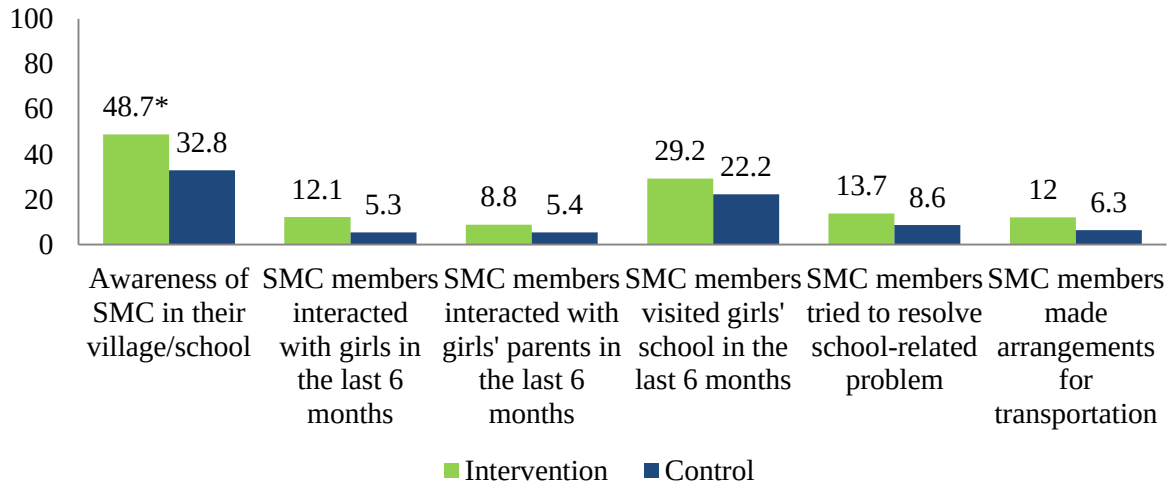


*Note: * and ** indicate that difference between intervention and control arm was significant at p<0.05 and p<0.01 level in unpaired t-test*

Effect on community engagement in support of girls' secondary education

We measured the effect of project *Sankalp* on community engagement in support of girls' secondary education in terms of girls' awareness of school management committees, SMC members' interaction with girls, their parents and their schools, support provided by SMC in resolving issues related to girls' secondary education, including issues related to facilities for commuting between home and school and their perception about how involved representatives of panchayats were in matters related to girls' schooling.

Figure 5.7: Girls' awareness of and reports of engagement of school management committees in their schooling by treatment arms, endline survey

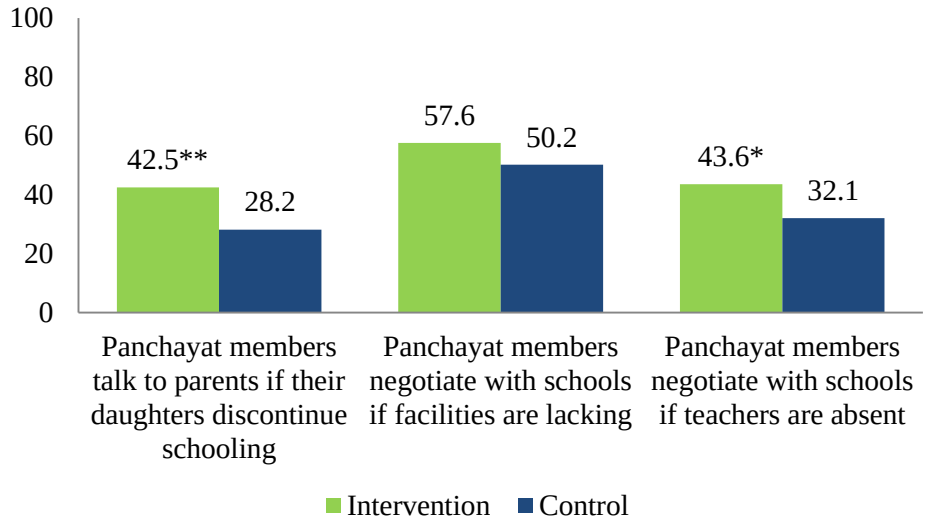


*Note: * indicates that difference between intervention and control arm was significant at p<0.05 level in unpaired t-test*

Findings presented in Figure 5.7 suggest that the project succeeded in raising girls' awareness of SMC: a larger proportion of girls in the intervention than in the control arm reported awareness of SMC in their village/school, with an estimated intervention effect of 16 percentage points. Girls in the intervention arm were more likely than girls in the control arm to report that SMC members had interacted with them in the six months preceding the interview, visited their school in the preceding six months, tried to resolve school-related problem and made arrangements for transportation for commuting between home and school. However, the difference between the study arms was not large enough to attribute the increased support that the girls received from the SMC in the intervention arm to the project when the analysis was based on all girls whom we interviewed at endline regardless of their schooling status at the time of the interview. We note that many of these indicators, for example, SMC members visiting girls' school and making arrangements for transportation for commuting between home and school, showed a large and positive effect when we restricted the analysis to girls who were attending school at the time of the endline analysis (see Annex 3). However, no intervention effect was observed with regard to interaction between SMC members and parents of adolescent girls.

Findings also show that girls' perceptions of how involved panchayat members were in matters related to girls' schooling increased following the implementation of the project (Figure 5.8). Girls in the intervention arm were consistently more likely than their counterparts to report that panchayat members talked to parents if their daughters discontinued schooling (estimated effect of 14 percentage points) and negotiated with schools if teachers were absent (estimated effect of 12 percentage points).

Figure 5.8: Girls' perceptions about how involve panchayat members were in matters related to girls' schooling by treatment arms, endline survey



*Note: * and ** indicate that difference between intervention and control arm was significant at p<0.05 and p<0.01 level in unpaired t-test*

Summary

In summary, findings presented in this chapter on the effects of the project's intermediary outcomes show mixed results. On the positive side, the project had succeeded in raising girls' educational aspirations, improving parental support for girls' secondary education as measured by parental discussion of girls' studies and parental interactions with school authorities, raising girls' awareness of SMCs, increasing SMC members' interactions with school authorities and support in resolving barriers to girls' education (at least among girls who were enrolled in school at the time of the endline survey) and improving girls' perceptions about the involvement of the panchayat in girls' education related matters. However, there was no evidence of an effect on girls' agency in matters related to their schooling, their awareness and utilization of their entitlements from school, time devoted to school-related activities, time spent by parents in supporting their daughter's education, teacher absenteeism and classroom dynamics.

Chapter 6

Effect of project *Sankalp* on girls' transition to secondary education, attendance and competency

The main outcomes that project *Sankalp* sought to influence were girls' transition to secondary education, their attendance in school and their learning outcomes in Mathematics and languages. We present findings on the effect of the project on these outcomes in this chapter. We begin with a discussion of the method used for analyzing the effect on main outcomes, followed by a description of the results of the effect analysis.

Method used for effect analysis

We used data from the girls' survey to analyse the effect of the intervention on such outcomes as girls' attendance in school in the week preceding the interview, their absence from school for one week or more continuously in the last academic year and their competency in Mathematics and languages. We used data from the household census to assess the effect on the transition to secondary education.

Table 6.1: Comparison of cluster summaries with overall means for selected outcome indicators by treatment arm, endline survey

	Intervention			Control			Effect Estimates (difference in means)
Number of clusters		9			9		
Girls enrolled in cohort		739			819		
Girls followed-up after 15 months		712			796		
	N	Proportion/ mean	SD	N	Proportion/ mean	(SD)	
Attendance in school in the week preceding the survey* (%)							
Mean of cluster proportions		85.0	5.7		74.2	16.2	0.11
Overall mean proportion	513	85.6	35.1	594	82.2	38.3	0.03
Absence from school one week or more in the last academic year (%)*							
Mean of cluster proportions		4.9	1.3		8.6	6.3	-0.04
Overall mean proportion	513	5.1	22.0	594	6.4	24.5	-0.02
Mathematics competency*							
Mean of cluster summaries		29.08	7.03		27.48	7.77	1.60
Overall mean score	711	29.90	21.25	795	29.93	20.89	-0.03
English language competency*							
Mean of cluster summaries		18.14	6.28		19.96	5.85	-1.82
Overall mean score	711	19.08	20.35	795	22.03	21.46	-2.95
Gujarati language competency*							
Mean of cluster summaries		61.87	8.10		54.25	9.91	7.62
Overall mean score	711	62.96	25.83	795	57.20	27.09	5.76

*Note: *Of girls enrolled in school at baseline and endline; ** data on two girls were missing*

We note that, as described in Chapter 1, the background characteristics of girls and the main outcomes among them were balanced between intervention and control arms at baseline, thereby ruling out the need for adjusting for co-variates. Using the endline data, we first compared cluster-level summary measures of the main outcomes and overall measures of main outcomes from all the individual values. Table 6.1 presents a comparison of point estimates using cluster summaries and individual values. The two approaches did not yield large differences in estimates, suggesting that cluster size was not associated with the outcomes. Thus, cluster summaries are presented in subsequent results. Moreover, with no reliable estimate of intra-cluster correlation, applying cluster weighting was not appropriate.

Effect estimates were computed as the difference in cluster level proportions or means, as appropriate. We also examined the distribution of outcomes across 18 clusters for normality, and as outcomes were approximately normally distributed, with no marked skewness in cluster summaries, logarithmatic transformation was not applied. With nine clusters in each treatment arm, analysis accounted for clustering through methods based on cluster-level summaries rather than individual-level regression methods (Hayes and Moulton, 2009). We further note that analysis was by intention to treat. We compared unadjusted cluster level summary measures across arms using unpaired *t-test* for the main outcomes. For outcomes that showed evidence of an intervention effect, we applied *t-test* with unequal variances to check whether precision improved.

Effects on transition rates

Findings on transition rates from Class 8 to Class 9 and from Class 9 to Class 10 at endline indicate that a substantial decline in school continuation among girls occurred between Classes 8 and 9 and that girls were likely to continue to study once enrolled in secondary schools. Findings presented in Table 6.2 on the effects of the project on transition rates indicate that although the transition rate from Class 8 to Class 9 was slightly higher in the intervention than in the control arm, the difference was not statistically significant and could not be attributed to the project. Moreover, girls in Class 9 were equally likely to transition to Class 10 in both intervention and control arms.

Table 6.2: Estimated intervention effect on transition rates, endline survey

			Effect Estimates		
Transition rate	**Intervention**	**Control**	**Mean difference**	**95% CI**	**p value**
From class 8 to 9	75.1 (65.8,84.3)	69.6 (59.3,80.0)	5.4	(-7.3,18.2)	0.38
From class 9 to 10	89.9 (83.9,95.8)	86.3 (80.0,92.7)	3.6	(-4.4,11.5)	0.36

Note: values in the parentheses are 95% confidence interval

Effects on attendance in school

Table 6.3 describes the findings on the effect of the project on girls' attendance in school. Of girls who were attending school both at baseline and endline, a larger proportion of girls in the intervention than control arm reported that they had attended school all days that the school was in session in the week prior to the interview, with a mean difference of 11 percentage points; statistical analysis suggests that the evidence of the intervention effect was mildly significant (p=0.08). Findings also show that girls in intervention were less likely to have missed school continuously for one week or more in the last academic year, although the evidence of the intervention effect was mildly significant (p=0.10).

Table 6.3: Estimated intervention effect on attendance in school, endline survey

Indicators of attendance in school	Intervention	Control	Effect estimates		
			Mean difference	95% CI	p value
Attended all days that the school was in session in the week prior to the interview	85.0 (80.6,89.3)	74.2 (61.7,86.6)	10.8	(-1.3,22.9)	0.08
Missed school continuously for one week or more in the last academic year	4.9 (3.9,5.9)	8.6 (3.8,13.5)	-3.7	(-7.8,2.3)	0.10

Note: values in the parentheses are 95% confidence interval; of girls enrolled in school at baseline and endline

Effects on learning outcomes

Findings on learning outcomes in Mathematics and languages at endline underscore the poor academic performance of girls in the project area. Findings presented in Table 6.4 on the effects of the project show no effect of the project on Mathematics and English language competency; average standardized scores obtained for tests in Mathematics and English were similar in the intervention and control arms. Girls in the intervention arm scored higher in the Gujarati test compared to girls in the control arm, with a mean difference of 7.6; statistical analysis, however, suggests that the intervention effect was mildly significant (p=0.09).

Table 6.4: Estimated intervention effect on learning outcomes, endline survey

Indicators of learning outcomes	Intervention	Control	Effect estimates		
			Mean difference	95% CI	p value
Standardized score obtained for Mathematics	29.08 (23.67,34.48)	27.48 (21.51,33.45)	1.60	(-5.81,9.00)	0.65
Standardized score obtained for English	18.14 (13.31,22.97)	19.96 (15.47,24.45)	-1.82	(-7.88,4.24)	0.54
Standardized score obtained for Gujarati	61.87 (55.64,68.09)	54.25 (46.63,61.86)	7.62	(1.42,16.66)	0.09

Note: values in the parentheses are 95% confidence interval;

Summary

In summary, findings of the effect analysis show that the project did not make any positive and significant effect on girls' transition to secondary education and their learning outcomes in Mathematics and English. At the same time, there was evidence of some effect on improving girls' attendance in school and learning outcomes in Gujarati, although the effect was statistically mildly significant.

Chapter 7

Summary and conclusions

This chapter summarises the major findings of project *Sankalp* with regard to its acceptability and effectiveness in creating an enabling environment for girls to pursue secondary education and in helping girls transition to secondary education, attend school regularly and perform well in their studies. The chapter also highlights lessons learnt for programme and research implementation.

Project *Sankalp* was undertaken to assess the acceptability and feasibility of a pilot intervention to engage parents and communities to promote girls' secondary education and its effectiveness in improving girls' transition to secondary education, their attendance in school and learning outcomes in Mathematics and languages. The project was implemented over a period of 15 months among girls attending Classes 8 and 9, their parents, SMC members and teachers in primary and secondary schools in 45 villages in rural Surendranagar district of Gujarat. The major strategies adopted in the project included the revitalization of SMCs and support for SMCs to take up community-wide campaigns; the formation of adolescent girls' groups and support for them to undertake girl-to-girl campaigns; girl-to-parents campaigns and community-wide campaigns; launching an interactive voice response system through which messages related to the importance of secondary education for girls were relayed and which gave parents, other community members and teachers an opportunity to voice their concerns related to girls' education; and dissemination of informational materials related to girls' education. In addition, project staff also made efforts to reach out to the target groups through opportunistic individual interactions throughout the course of the project and community-wide campaigns organised twice over the course of the project.

We used a cluster randomised trial (CRT), with nine clusters each in intervention and control arms to evaluate project *Sankalp.* We conducted a baseline assessment, comprising a household census and a survey of all the girls attending Class 8 and Class 9, in the 90 villages comprising the 18 clusters. At the conclusion of the intervention, we conducted the endline assessment, comprising a household census and a follow-up survey of girls who participated in the baseline survey. A total of 1,588 girls were interviewed at baseline; of these, 97 percent of girls were successfully re-interviewed at endline. Effect estimates were computed as the difference in cluster level proportions or means, as appropriate.

Project monitoring data and girls' reports of their experiences as well as their parents' and other family members' experiences of the project suggest that revitalising the SMCs, making SMC meetings regular and promoting interactions between SMC members on the one hand and adolescent girls and their parents on the other were acceptable and feasible to some extent. Likewise, our experience suggests that adolescent girls could be trained and supported to advocate for increased investments in girls' secondary education even in settings as conservative as the project area. Similarly, through the SMCs, AGGs, IVRS, informational materials and direct interactions from project staff, parents of adolescent girls could be encouraged to take more interest in their daughters' secondary education. At the same time, for girls to pursue and successfully complete secondary education with basic competencies expected of a secondary school graduate, a different set of strategies would appear to be required to create an enabling environment at school level. Also, the IVRS launched by the project did not make anticipated inroads in the intervention communities.

Findings suggest some success in creating an enabling environment at community and family levels for girls to pursue secondary education. At the same time, they suggest that creating an enabling environment at school level requires a different set of strategies that focus more directly on teachers and school infrastructure. Findings also suggest some effect (though not statistically strong) on improving girls' attendance in school and competency in Gujarati, but no effect on transition rates and competency in Mathematics and English.

Some key lessons are evident. Findings suggest the need for a longer term engagement with girls and their parents than was possible in project *Sankalp.* Although the project succeeded in raising girls'

educational aspirations, there was no evidence of an effect on girls' agency in matters related to their schooling, their awareness and utilization of their entitlements from school, and time devoted to school-related activities. Similarly, although the project succeeded in improving parental support for girls' secondary education as measured by parental discussion on girls' studies and parental interactions with school authorities, it had no effect on the time spent by parents in supporting their daughter's education. These findings suggest that longer-term or more intensive efforts that will enable girls to make effective use of the knowledge and skills they gained through project like *Sankalp* and that give parents more time to translate the messages they received from the project into real life practices are required.

Our experience indicates that although the project had some success in creating an enabling environment at community and family levels for girls to pursue secondary education, there was no evidence of an effect on teacher absenteeism and classroom dynamics, factors that are more likely to influence girls' transition to secondary education and learning outcomes. These findings underscore that a demand-side model like *Sankalp* needs to be complemented by supply-side interventions that focus more directly on teachers.

Annex 1: Selected characteristics of clusters in intervention and control arms

Cluster number	Number of villages	Number of primary school in the cluster (girls only or co-educational)	Number of secondary school in the cluster (girls only or co-educational)	Mean distance between primary school and the secondary school	Percent of households with a landline or mobile phone connection	Percent of households with adolescent first generation learners
1	5	6	2	2.8	97.5	**14.5**
2	5	5	2	4.8	94.0	5.8
3	5	5	1	2.6	97.6	13.3
4	5	5	1	4.6	97.6	31.7
5	5	6	1	5.0	99.0	22.6
6	5	7	1	2.8	94.2	28.9
7	5	7	1	5.2	100.0	13.2
8	5	5	1	3.6	93.9	11.4
9	5	5	1	4.4	93.3	7.4
Cluster average	**5.0**	**5.7**	**1.2**	**4.0**	**96.3**	**16.5**
10	5	5	1	5.8	94.4	**12.3**
11	5	5	1	4.4	91.3	16.3
12	5	6	1	6.8	97.8	8.5
13	5	6	1	4.0	99.1	9.5
14	5	5	2	5.0	100.0	13.6
15	5	7	1	5.2	96.5	15.7
16	5	6	1	4.0	98.4	11.4
17	5	4	1	3.2	84.9	24.3
18	5	5	1	2.9	100.0	20.9
Cluster average	**5.0**	**5.4**	**1.1**	**4.6**	**95.8**	**14.7**

Annex 2: Details of the household wealth index

Household economic status was measured using a wealth index composed of household asset data on ownership of selected durable goods, including means of transportation, as well as data on access to a number of amenities. The wealth index was constructed by allocating the following scores to a household's reported assets or amenities:

Type of house: 2 for *pucca;* 1 for semi-*pucca;* 0 for *kachcha*
Agricultural land owned: 4 for more than 10 acres; 3 for 5.1-10.0 acres; 2 for 2.6-5.0 acres; 1 for less than 2.6 acres, or if the household owns some land but does not know how much; 0 for no land
Irrigated land owned: 1 for any irrigated land; 0 for no land
Access to a toilet facility: 4 for own toilet; 2 for shared toilet; 0 for no toilet facility
Cooking fuel used: 2 for liquid petroleum gas, electricity or bio-gas; 1 for kerosene, wood, crop residue, dung cakes, coal or charcoal; 0 for other types of cooking fuel, for example, straw, shrubs or grass
Access to a drinking water facility: 4 for own piped water, hand-pump or covered well; 3 for own open well; 2 for public or shared piped water, hand-pump or covered well; 1 for public or shared open well; 0 for other sources of drinking water, for example, surface water, tanker/truck or rainwater
Access to electricity: 3 for electricity; 0 for no electricity
Ownership of household assets: 4 for car, truck, thresher or tractor; 3 each for motorcycle or scooter, refrigerator, computer/laptop, telephone (landline or mobile), colour television; 2 each for bicycle, electric fan, radio or transistor, black and white television, sewing machine, water pump; 1 for watch or clock; 0 for each of the above items that the household does not possess.

The possible values of the wealth index, so constructed, ranged from 0 to 52.

Annex 3: Indicators of community engagement by treatment arm, endline

Community engagement (%)	Intervention	Control	Effect estimate
SMC members visited girls' school in the six months preceding the interview	41.5	31.3	10.2
SMC members tried to resolve school-related problem in the six months preceding the interview	19.1	11.7	7.4
SMC members made arrangements for transportation for commuting between home and school in the one year preceding the interview	17.6	8.6	9.0

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