

Meta-synthesis and meta-analysis of evidence on **child marriage** in South Asia



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Annex A: Extended methodology and full results

1. Data collection

1.1. Reasons for study exclusion

The reasons for study exclusion, alongside the number of studies excluded for each reason are as follows:

- baseline study only (1);
- midline study where a later endline study was available (2);¹
- contextual study (i.e. not an evaluation of a specific intervention) (3);
- secondary analysis / duplicate data (5);
- evidence review (4);
- child marriage as an exposure variable as opposed to outcome variable (1);
- attitudes towards marriage is the outcome, with no behaviour measure (15);
- no clear child marriage outcome measure (62);
- not in South Asia (1);
- pre-2010 (3);
- programme terminated before endline (2);
- study protocol (10);
- time period < 1 year (3);
- clear ethical harm (1);
- policy brief (1);
- no research methodology (2).

2. Data extraction

2.1 Effect size and standard error

For the studies identified as eligible for the meta-analysis, data extraction was carried out to ascertain key outcome measures such as type of child marriage outcome, effect size, standard error and confidence intervals. Following a data extraction of effect sizes from all studies, effect measures were recorded as (or converted to) a percentage point risk difference² in child marriage rates between intervention and control groups, as it was the most commonly reported measure across the interventions and easily interpretable. Where pre-intervention baseline measures were available, effect sizes were adjusted for baseline differences. Alongside the effect sizes, standard errors were extracted (or converted from confidence intervals) and recorded. Where studies did not report a standard error or confidence interval, but included data on baseline/endline and intervention/control sample sizes, the standard error was estimated using a conservative probability of $p=0.5$ to maximise the variance of the data given an unknown underlying probability of the outcome of interest. For studies that reported on more than one intervention arm or included separate outcome measures for multiple distinct sample groups, multiple effect size measures and their corresponding standard errors were extracted from an individual study. Where studies reported more than one follow-up (e.g. a midline and an endline assessment), the effect sizes and standard errors from the endline measurements were used in order to provide a stronger test of the robustness of the intervention. A negative effect size for child marriage outcome indicates that there was a reduction in child marriage in the intervention group participants relative to the control group participants.

2.2 Assessing heterogeneity

Prior to the analysis of effect sizes, several tests were carried out in order to assess the level of heterogeneity between studies and inform the choice of meta-analysis model (random or fixed effects). Results from the tests carried out are in Section 3, and the interpretations of the tests are as follows:

Tau-squared

Overview: Tau-squared is an estimate of the between-study variance in a random effects meta-analysis. It represents the amount of true heterogeneity between study effect sizes.

Interpretation: A larger Tau-squared indicates greater variability between study effect sizes, suggesting higher heterogeneity in the data.

I-squared

Overview: I-squared is a measure of the proportion of total variability in effect estimates that is due to heterogeneity rather than sampling error. It is expressed as a percentage.

Interpretation: Higher values of I-squared indicate greater heterogeneity between studies. Typically, I-squared values of 25%, 50%, and 75% are considered low, moderate, and high heterogeneity, respectively.

H-squared

Overview: H-squared is an alternative representation of the extent of heterogeneity in a meta-analysis. It is the ratio of the total variability (including within-study and between-study variability) to the within-study variability.

Interpretation: H-squared values greater than 1 indicate significant heterogeneity, meaning that the observed variability between studies is larger than expected by chance alone.

Q statistic

Overview: The Q statistic tests the null hypothesis that the observed variability between study effect sizes is due to chance alone. It is calculated as the weighted sum of squared differences between individual study effect sizes and the overall effect size estimate.

Interpretation: A significant Q statistic (i.e., a p-value below a specified significance level, such as 0.05) suggests that there is significant heterogeneity between study effect sizes, indicating that the assumption of homogeneity is violated. Conversely, a non-significant Q statistic suggests that the observed variability may be due to sampling error rather than true heterogeneity.

2.3 Random effects modelling

In meta-analysis, there is the option to employ a fixed-effects model or a random-effects model. Whilst fixed-effects models assume that the studies share a common effect, random-effects models are able to account for variance between studies and account for unexplained heterogeneity between studies. Therefore, if the studies were found to be heterogeneous, a random-effects model would be the only appropriate option. The specific random-effects model of choice may be determined by sample size variation and expected distribution of effect sizes. Potential options for this include:

Paule-Mandel model

- Improved estimation in small sample sizes
- Robust to extreme values
- Can be influenced by biases when dealing with extreme heterogeneity

DerSimonian and Laird (DL) model

- Widely accepted and straightforward to implement
- Stable estimate of heterogeneity between studies
- Suitable for meta-analyses that include a variety of effect size types
- May overestimate heterogeneity

HKSJ model

- Improved small sample performance
- Robust to heterogeneity
- Less widely used
- Computationally intensive

Although we anticipated that homogeneity is highly unlikely, if tests demonstrated homogeneity, the following **fixed-effects model** could be utilised:

Inverse variance model

- Suitable for both dichotomous and continuous data
- The choice of weights minimises the uncertainty of the pooled effect estimate
- Relies on the assumption that all effect estimates are estimating the same underlying intervention effect

Following the confirmation that the studies were highly heterogenous, a **random effects meta-analysis model** was employed through the use of R software. The default choice of the **DerSimonian and Laird** meta-analysis model was used due to its wide acceptance, ease of implementation, and suitability for studies with heterogenous underlying populations. To undertake a random-effects meta-analysis, the standard errors of the study-specific estimates are adjusted to incorporate a measure of the extent of variation, or heterogeneity, among the intervention effects observed in different studies. The amount of variation, and hence the adjustment, can be estimated from the intervention effects and standard errors of the studies included in the meta-analysis.³ A univariate version of this model was implemented, supplemented by a sensitivity and subgroup analysis to assess the robustness and reliability of the meta-analysis results.

3. Meta-analysis results

In this section, the full results of the meta-analyses are provided. For each typology, a forest plot is presented corresponding to the meta-analysis run with all effect sizes extracted for each typology, alongside a summary table of all subgroup analysis for different typology combinations.

3.1 Empowerment

The pooled effect size of all interventions with an empowerment component based on 25 effect sizes extracted from 12 studies was -0.0270 (95% CI = -0.0393 to -0.0148 and $p < 0.0001$), meaning that there was a statistically significant reduction in child marriage outcomes between participants that had been exposed to the intervention and those in the control group. The forest plot in Figure 1 provides a visualisation of the pooled effect size and each distinct effect measure extracted from the empowerment studies alongside their corresponding confidence intervals, with the weighted contribution to the pooled effect size indicated by the size of the central marker. All extracted individual effect sizes demonstrated a reduction in child marriage outcomes for the intervention groups with the exception of Buchmann et al. (empowerment + incentive arm) and Koster et al. (Nepal), which had a slight positive effect size reflecting an increase in child marriage amongst intervention participants.

Figure 1: Forest plot of all interventions with an empowerment component. The weighted contribution of each effect size to the pooled estimate is indicated by the size of the central marker, and the confidence intervals are indicated by the horizontal bars. The pooled effect size estimate from the random effects (RE) model is plotted on the observed outcome axis.

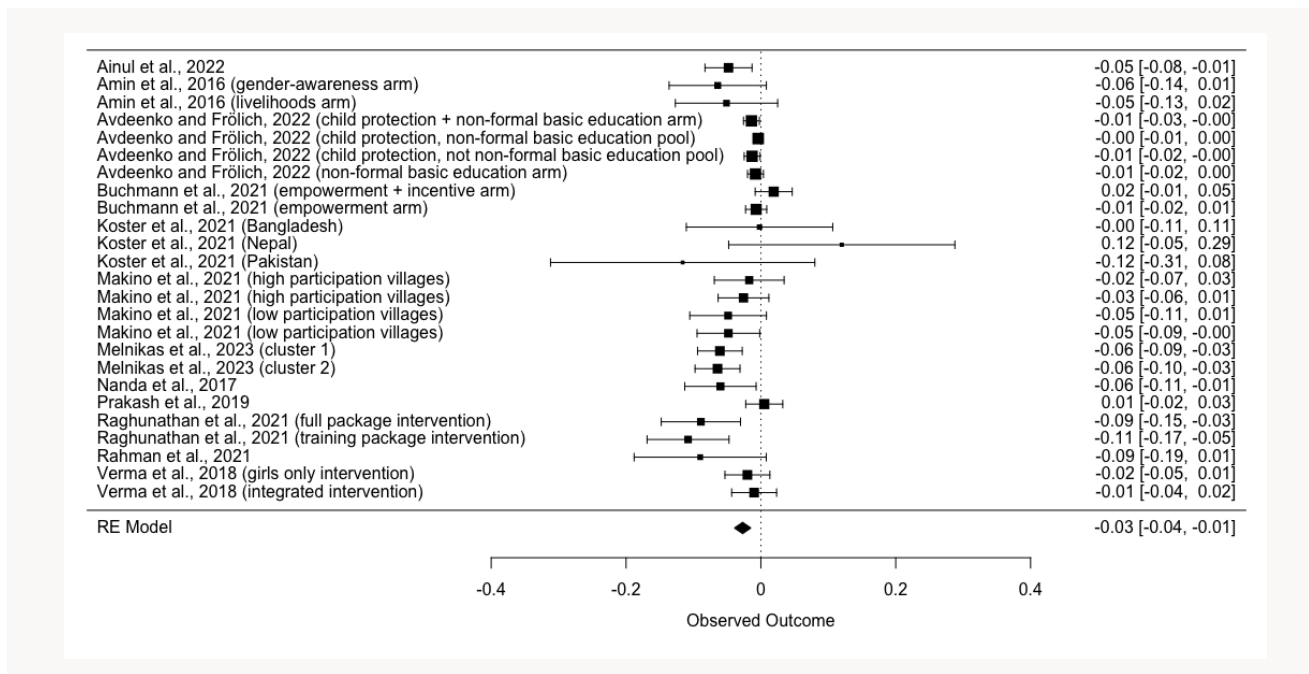


Table 1 provides a breakdown of subgroup analyses. The results show that standalone empowerment interventions had a moderately significant effect size of -0.0274 (95% CI = -0.0529 to -0.0018 and $p=0.0356$), suggesting that the implementation of an intervention that focuses on empowerment alone had a significant impact on child marriage outcomes. In the grouped typology combinations, all pooled effect sizes demonstrated a statistically significant reduction in child marriage outcomes. *Empowerment + SRH + any other typology component(s) interventions showed the largest and highly significant pooled reduction of 4.06 percentage points, whilst empowerment + education + any other typology component(s) yielded the smallest yet still statistically significant pooled reduction of 1.14 percentage points. For specific typology combinations, interventions with the specific combinations of empowerment + social norms and the combination of empowerment + social norms + SRH had significant reductions of 3.19 percentage points and 6.45 percentage points, respectively.*

Table 1: Summary of effect size analysis, all interventions with an empowerment component.⁴

Intervention combination	n	n (studies)	Effect size estimate	SE	z-value	p-value	95% CI
All empowerment	25	12	-0.0270***	0.0063	-4.3151	<.0001	[-0.0393, -0.0148]
Distinct typology							
Empowerment (standalone)	5	4	-0.0274*	0.0130	-2.1009	0.0356	[-0.0529, -0.0018]
Grouped typology combinations							
Empowerment + any other typology component(s)	20	11	-0.0273***	0.0074	-3.6796	0.0002	[-0.0418, -0.0127]
Empowerment + education + any other typology component(s)	7	4	-0.0114**	0.0042	-2.7530	0.0059	[-0.0196, -0.0033]

Intervention combination	n	n (studies)	Effect size estimate	SE	z-value	p-value	95% CI
Empowerment + social norms + any other typology component(s)	12	6	-0.0301**	0.0112	-2.6839	0.0073	[-0.0520, -0.0081]
Empowerment + SRH + any other typology component(s)	11	6	-0.0406***	0.0104	-3.9109	<.0001	[-0.0609, -0.0202]
Specific typology combinations							
Empowerment + social norms	4	2	-0.0319*	0.0156	-2.0465	0.0407	[-0.0624, -0.0013]
Empowerment + social norms + SRH	3	2	-0.0645*	0.0318	-2.0279	0.0426	[-0.1269, -0.0022]

3.2 SRH

The pooled effect size of all interventions with an SRH component based on 17 effect sizes from seven studies was -0.0273 (95% CI = -0.0512 to -0.0034 and p=0.0250), meaning that there was a moderately statistically significant reduction in child marriage outcomes between participants that had been exposed to the intervention and those in the control group. The forest plot in Figure 2 provides a visualisation of the pooled effect size and each distinct effect measure extracted from the SRH studies alongside their corresponding confidence intervals, with the weighted contribution to the pooled effect size indicated by the size of the central marker. All extracted individual effect sizes demonstrated a reduction in child marriage outcomes for the intervention groups with the exception of Pandely et al. (combined and comprehensive intervention districts) and Koster et al (Nepal sample), which had a positive effect size reflecting an increase in child marriage amongst intervention participants.

Figure 1: Forest plot of all interventions with an SRH component. The weighted contribution of each effect size to the pooled estimate is indicated by the size of the central marker, and the confidence intervals are indicated by the horizontal bars. The pooled effect size estimate from the random effects (RE) model is plotted on the observed outcome axis.

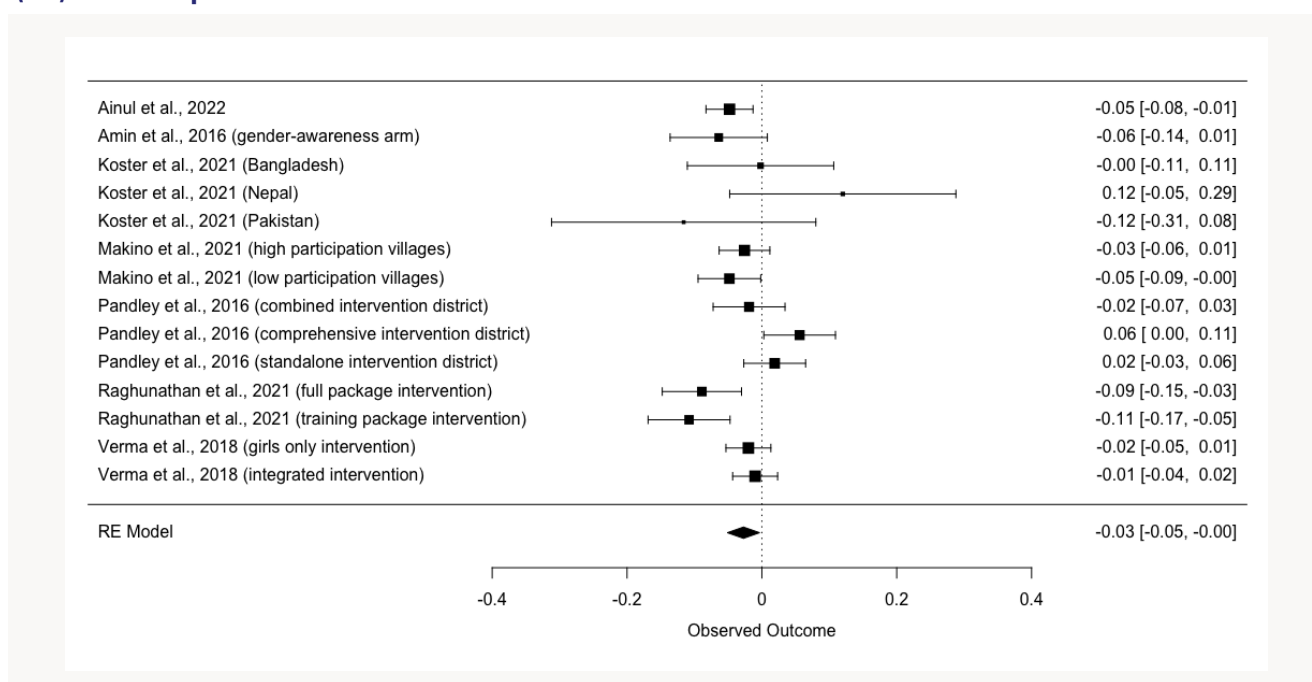


Table 2 provides a breakdown of subgroup analyses. In the different typology combinations, *SRH + empowerment + social norms* interventions demonstrated the largest and statistically significant reduction of 6.45 percentage points and *SRH + education + any other typology component(s)* had the smallest and statistically insignificant pooled reduction of 2.76 percentage points. The pooled effect sizes for the subgroup *SRH + empowerment + any other typology component(s)* yielded a highly significant reduction of 4.06 percentage points.

Table 2: Summary of effect size analysis, all interventions with an SRH component.⁵

Intervention combination	n	N (studies)	Effect size estimate	SE	z-value	p-value	95% CI
All SRH	14	7	-0.0273*	0.0122	-2.2412	0.0250	[-0.0512, -0.0034]
Grouped typology combinations							
SRH + empowerment + any other typology component(s)	11	6	-0.0406***	0.0104	-3.9109	<.0001	[-0.0609, -0.0202]
SRH + education + any other typology component(s)	4	2	-0.0276	0.0283	-0.9769	0.3286	[-0.0830, 0.0278]
Specific typology combinations							
SRH + empowerment + social norms	3	2	-0.0645*	0.0318	-2.0279	0.0426	[-0.1269, -0.0022]

3.3 Social norms

The pooled effect size of all interventions with a social norms component based on 17 effect sizes from seven studies was -0.0335 (95% CI = -0.0492 to -0.0178 and $p < 0.0001$), meaning that there was a highly statistically significant reduction in child marriage outcomes between participants that had been exposed to the intervention and those in the control group. The forest plot in Figure 3 provides a visualisation of the pooled effect size and each distinct effect measure extracted from the social norms studies alongside their corresponding confidence intervals, with the weighted contribution to the pooled effect size indicated by the size of the central marker. All extracted individual effect sizes demonstrated a reduction in child marriage outcomes for the intervention groups with the exception of Prakash et al. and Koster et al. (Nepal sample), which had a positive effect size reflecting an increase in child marriage amongst intervention participants.

Figure 2: Forest plot of all interventions with a social norms change component. The weighted contribution of each effect size to the pooled estimate is indicated by the size of the central marker, and the confidence intervals are indicated by the horizontal bars. The pooled effect size estimate from the random effects (RE) model is plotted on the observed outcome axis.

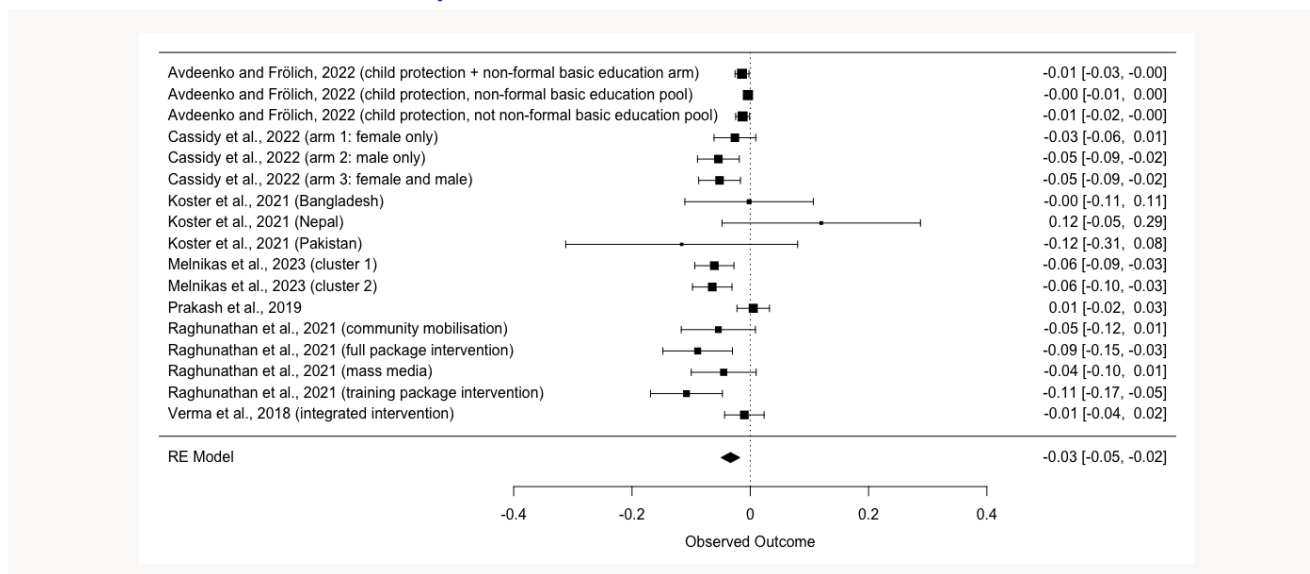


Table 3 provides a breakdown of subgroup analyses. The results show that standalone SRH interventions had a highly statistically significant effect size of -0.0450 (95% CI = -0.0632 to 0.0267 and $p < 0.0001$), suggesting that the implementation of an intervention that focuses on social norms alone demonstrates a meaningful impact on child marriage outcomes. In the grouped typology combinations, *social norms + any other typology component(s)* interventions demonstrated a statistically significant reduction of 3.01 percentage points, which was slightly lower and less significant than the effect size for standalone social norms interventions. When looking at specific typology interventions, the pooled effect sizes for the subgroup *social norms + empowerment + SRH* yielded a significant reduction of 6.45 percentage points, whilst *empowerment + social norms* had a smaller statistically significant reduction of 3.19 percentage points.

Table 3: Summary of effect size analysis, all interventions with a social norms component.⁶

Intervention combination	n	N (studies)	Effect size estimate	SE	z-value	p-value	95% CI
All social norms	17	7	-0.0335***	0.0080	-4.1799	<.0001	[-0.0492, -0.0178]
Distinct typology							
Social norms (standalone)	5	2	-0.0450***	0.0093	-4.8237	<.0001	[-0.0632, -0.0267]
Grouped typology combinations							
Social norms + any other typology component(s)	12	6	-0.0301**	0.0112	-2.6839	0.0073	[-0.0520, -0.0081]
Specific typology combinations							
Empowerment + social norms	4	2	-0.0319*	0.0156	-2.0465	0.0407	[-0.0624, -0.0013]
SRH + empowerment + social norms	3	2	-0.0645*	0.0318	-2.0279	0.0426	[-0.1269, -0.0022]

3.4 Education

The pooled effect size of all interventions with an education component based on 11 effect sizes from seven studies was -0.0178 (95% CI = -0.0316 to -0.0039 and $p = 0.0118$), meaning that there was a statistically insignificant significant reduction in child marriage outcomes between participants that had been exposed to the intervention and those in the control group. The forest plot in Figure 4 provides a visualisation of the pooled effect size and each distinct effect measure extracted from the education studies alongside their corresponding confidence intervals, with the weighted contribution to the pooled effect size indicated by the size of the central marker. All extracted individual effect sizes demonstrated a reduction in child marriage outcomes for the intervention groups with the exception of Koster et al. (Nepal sample), which had a positive effect size reflecting an increase in child marriage amongst intervention participants.

Figure 3: Forest plot of all interventions with an education component. The weighted contribution of each effect size to the pooled estimate is indicated by the size of the central marker, and the confidence intervals are indicated by the horizontal bars. The pooled effect size estimate from the random effects (RE) model is plotted on the observed outcome axis.

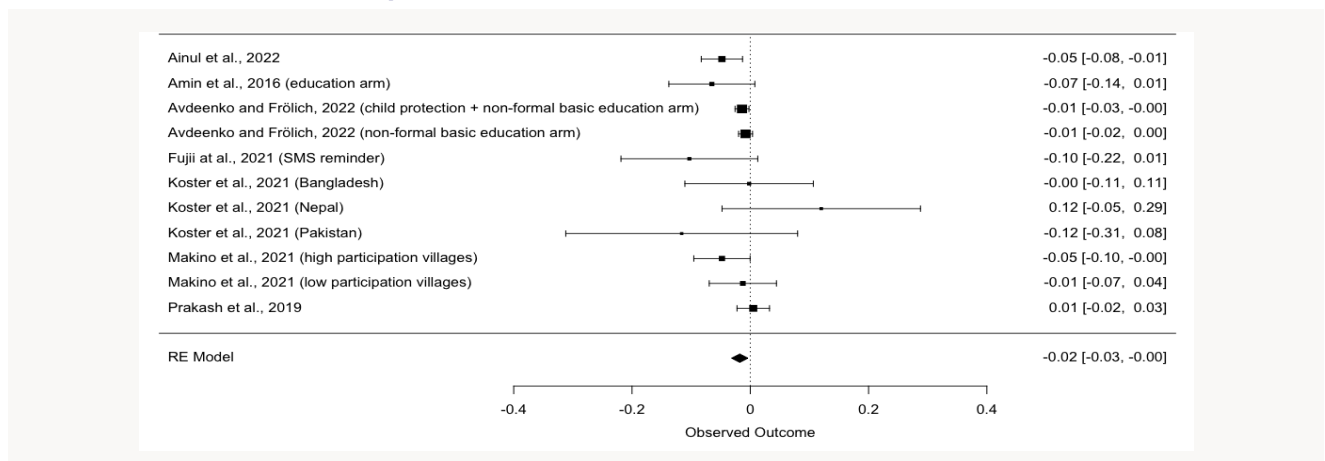


Table 4 provides a breakdown of subgroup analyses. The results show that standalone education interventions had a highly statistically significant effect size of -0.0444 (95% CI = -0.0758 to -0.0130 and $p < 0.0001$), suggesting that the implementation of an intervention that focuses on education alone demonstrates a meaningful impact on child marriage outcomes. In the grouped typology combinations, *education + any other typology component(s)* interventions demonstrated a statistically significant reduction of 1.14 percentage points, whilst when grouped as *education + empowerment + social norms + any other typology component(s)* the result is insignificant.

Table 4: Summary of effect size analysis, all interventions with an education component.⁷

Intervention combination	n	n (studies)	Effect size estimate	SE	z-value	p-value	95% CI
All education	11	7	-0.0178*	0.0071	-2.5169	0.0118	[-0.0316, -0.0039]
Distinct typology							
Education (standalone)	4	3	-0.0444**	0.0160	-2.7701	0.0056	[-0.0758, -0.0130]
Grouped typology combinations							
Education + any other typology component(s)	7	4	-0.0114**	0.0042	-2.7530	0.0059	[-0.0196, -0.0033]
Education + empowerment + social norms + any other typology component(s)	5	3	-0.0081	0.0083	-0.9718	0.3312	[-0.0244, 0.0082]

3.5 Law and Policy

The pooled effect size of all interventions with a law and policy component based on 7 effect sizes from three studies was 0.0077 (95% CI = -0.0461 to 0.0615 and $p = 0.7787$), meaning that there was no statistically observable effect on child marriage outcomes between participants that had been exposed to the intervention and those in the control group. The forest plot in Figure 5 provides a visualisation of the pooled effect size and each distinct effect measure extracted from the education studies alongside their corresponding confidence intervals, with the weighted contribution to the pooled effect size indicated by the size of the central marker. Only two of the extracted individual effect sizes demonstrated a reduction in child marriage outcomes for the intervention groups, whilst the other effect sizes reflected a slight increase in child marriage amongst intervention participants.

Figure 4: Forest plot of all interventions with a law and policy component. The weighted contribution of each effect size to the pooled estimate is indicated by the size of the central marker, and the confidence intervals are indicated by the horizontal bars. The pooled effect size estimate from the random effects (RE) model is plotted on the observed outcome axis.

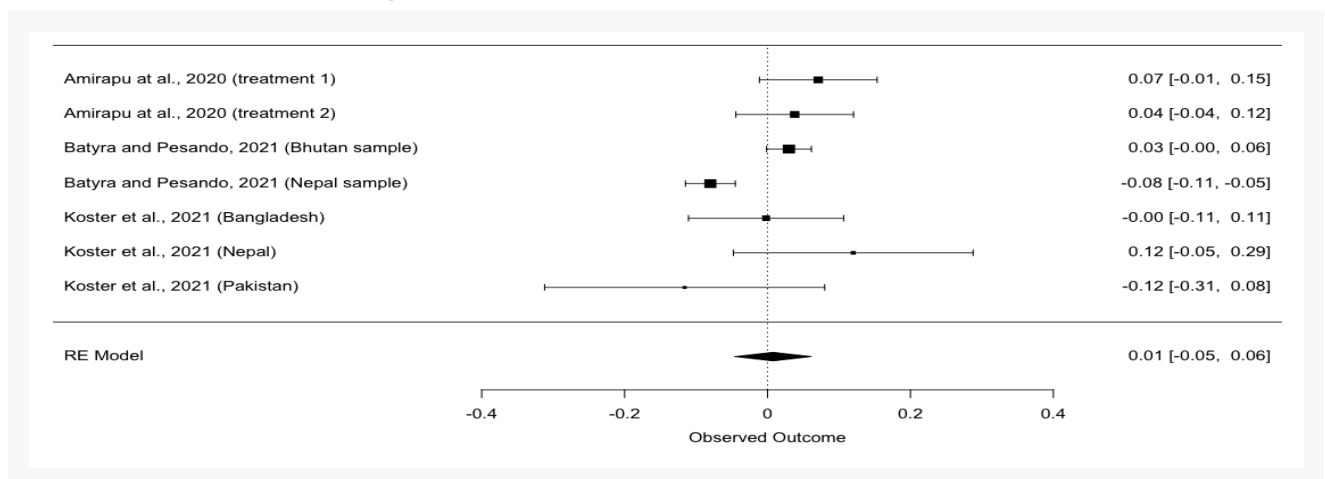


Table 5 provides a breakdown of subgroup analyses. The results show that standalone law and policy interventions had a statistically insignificant effect size of 0.0090 (95% CI = -0.0589 to 0.0769 and $p=0.7950$). However, given that the effect sizes are extracted from only two studies there is likely to be a high level of bias in these results due to the limited evidence base.

Table 5: Summary of effect size analysis, all interventions with a law and policy component.⁸

Intervention combination	n (effect size)	n (studies)	Effect size estimate	SE	z-value	p-value	95% CI
All law and policy	7	3	0.0077	0.0274	0.2810	0.7787	[-0.0461, 0.0615]
Distinct typology							
Law and policy (standalone)	4	2	0.0090	0.0347	0.2598	0.7950	[-0.0589, 0.0769]

3.6 Income and economic strengthening (non-CCT)

The pooled effect size of all interventions with an income and economic strengthening component based on five effect sizes from three studies was 0.0247 (95% CI = 0.0122 to 0.0371 and $p=0.0001$), meaning that there was a statistically significant increase in child marriage outcomes between participants that had been exposed to the intervention and those in the control group. The forest plot in Figure 6 provides a visualisation of the pooled effect size and each distinct effect measure extracted from the income and economic strengthening studies alongside their corresponding confidence intervals, with the weighted contribution to the pooled effect size indicated by the size of the central marker. Only one of the extracted individual effect sizes demonstrated a reduction in child marriage outcomes for the intervention groups, based on a study of the BRAC STAR combined intervention by Rahman et al focusing on both income and economic strengthening and empowerment through theoretical and practical training provision based on local market demand. In contrast, the other four effect sizes extracted showed an increase in child marriage amongst intervention participants and were based on interventions targeting solely income and economic strengthening. Three of these effect sizes correspond to a study by Mathers on a UCT in Nepal, reflecting distinct samples where the household had a UCT eligible male, female or both. The study by Tsaneva and O'Donoghue focuses on the National Rural Employment Guarantee scheme in India, whereby rural household are given the opportunity to gain employment in public works jobs.

Figure 5: Forest plot of all interventions with a non-CCT income and economic strengthening component. The weighted contribution of each effect size to the pooled estimate is indicated by the size of the central marker, and the confidence intervals are indicated by the horizontal bars. The pooled effect size estimate from the random effects (RE) model is plotted on the observed outcome axis.

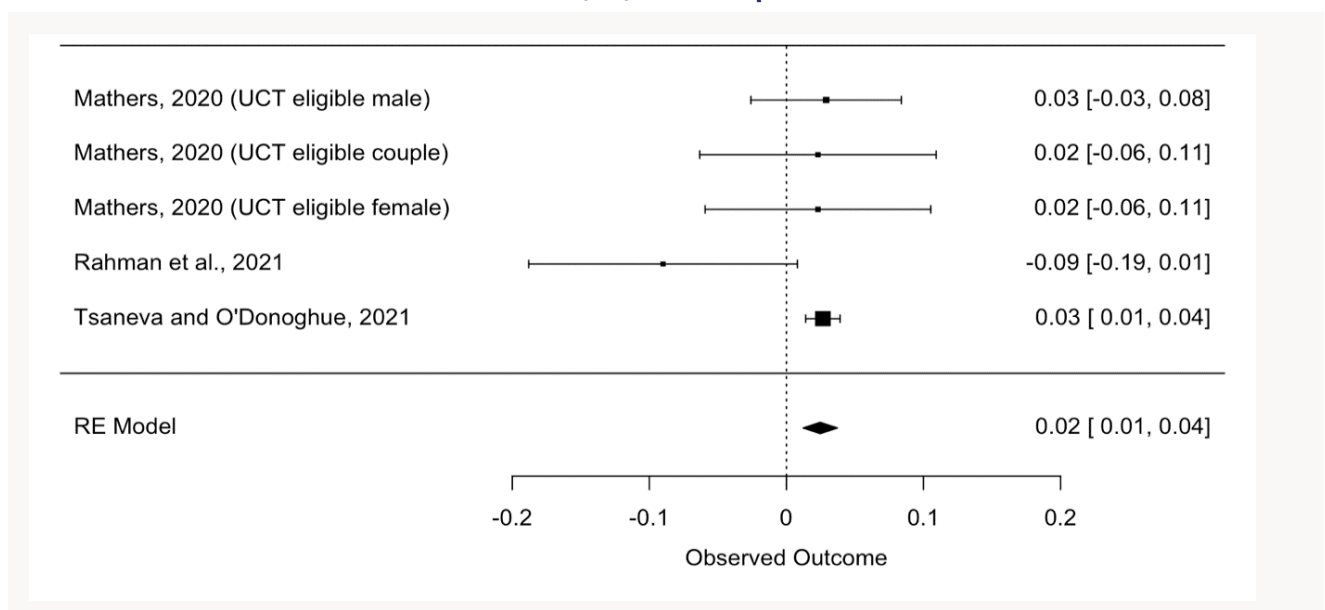


Table 6 provides a comparison of the effect size for all interventions with a non-CCT income and economic component and for interventions with solely a standalone income and economic strengthening component. The results show that standalone income and economic strengthening interventions had a statistically significant reduction of child marriage by 2.66 percentage points based on four effect sizes from two studies.

Table 6: Summary of effect size analysis, all interventions with an income and economic strengthening component.⁹

Intervention combination	n (effect sizes)	n (studies)	Effect size estimate	SE	z-value	p-value	95% CI
All income non-CCT	5	3	0.0247***	0.0064	3.8830	0.0001	[0.0122, 0.0371]
Distinct typology							
Income non-CCT (standalone)	4	2	0.0266**	0.0061	4.3473	<.0001	[0.0146, 0.0385]

3.7 Income and economic strengthening (CCT)

The pooled effect size for CCT interventions based on the 10 **dichotomous effect sizes from eight studies** was -0.0477 (95% CI = -0.051, -0.0103 and $p=0.0123$). The forest plot is presented in Figure 7. Two of the studies, Alam et al. and Buchmann et al. (empowerment + incentive arm), demonstrated slight positive effect sizes which reflected a slight increase in child marriage outcomes. An additional subgroup analysis, summarised in Table 7, was run based on the conditionality of the cash transfer, with four studies only requiring girls' school attendance to be eligible for the transfer, two studies with the requirement to remain unmarried until eighteen, and two studies with both school and marriage conditions. The results demonstrated a statistically insignificant reduction on 3.29 percentage points for CCTs based solely on school attendance, whilst the pooled effect for CCTs that had a marriage condition attached had a statistically significant reduction of 7.30 percentage points.

Figure 6: Forest plot of all interventions with a CCT component and a dichotomous effect size measure. The weighted contribution of each effect size to the pooled estimate is indicated by the size of the central marker, and the confidence intervals are indicated by the horizontal bars. The pooled effect size estimate from the random effects (RE) model is plotted on the observed outcome axis.

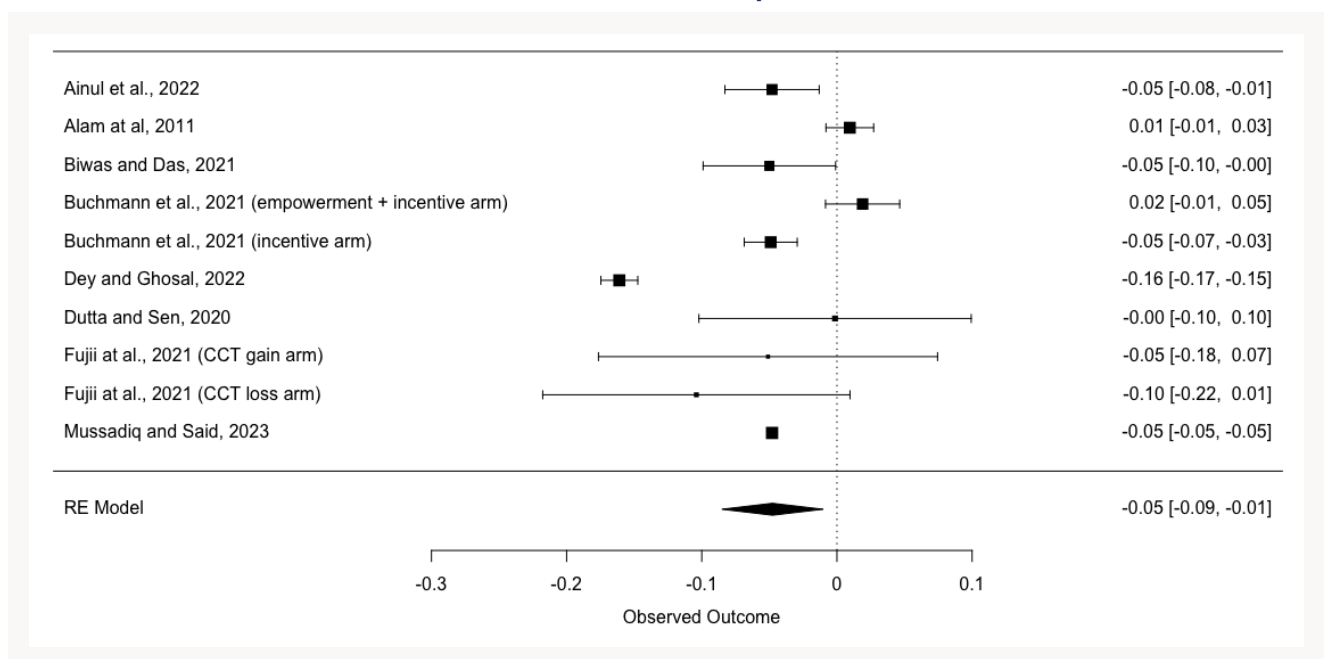


Table 7: Summary of effect size analysis, all interventions with a CCT component with a dichotomous effect size measure.¹⁰

Modality	n (effect sizes)	n (studies)	Effect size estimate	SE	z-value	p-value	95% CI
CCT (dichotomous, all)	10	8	-0.0477*	0.0191	-2.5021	0.0123	[-0.0851, -0.0103]
Specific modality combinations							
CCT (dichotomous, school)	4	3	-0.0329	0.0235	-1.4031	0.1606	[-0.0790, 0.0131]
CCT (dichotomous, school + marriage OR marriage only requirement)	4	4	-0.0730*	0.0344	-2.1218	0.0339	[-0.1405, -0.0056]

The results from the 10 **continuous effect sizes based on six studies indicate that receipt of CCTs increases in age of marriage by 0.7817 years** (95% CI = 0.1742 to 1.3891 and p=0.0117), which is just over 9 months. The forest plot is presented in Figure 8. Of these, one effect size was derived from a school-based CCT, two were marriage-based CCTs and seven were both school and marriage-based CCTs. A subgroup analysis, summarised in Table 8, was also run for the seven effect sizes from CCTs that were conditional on the recipient both attending school and remaining unmarried up until age 18. Results demonstrated significant increase in age of marriage by 1.04** years in the intervention groups, which is higher than the change for all pooled CCTs with continuous outcome measurement.

Figure 7: Forest plot of all interventions with a CCT component and a continuous effect size measure. The weighted contribution of each effect size to the pooled estimate is indicated by the size of the central marker, and the confidence intervals are indicated by the horizontal bars. The pooled effect size estimate from the random effects (RE) model is plotted on the observed outcome axis.

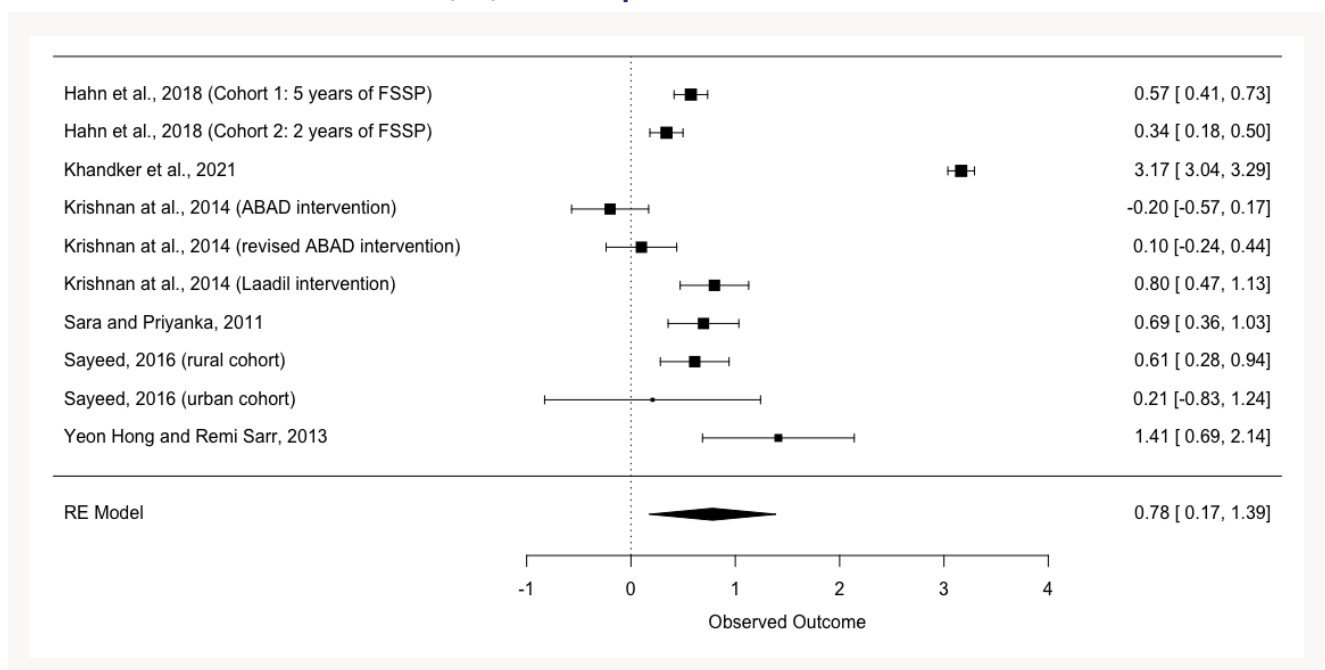


Table 8: Summary of effect size analysis, all interventions with a CCT component with a continuous effect size measure.¹¹

Modality	n (effect sizes)	n (studies)	Effect size estimate	SE	z-value	p-value	95% CI
CCT (continuous, all)	10	6	0.7817*	0.3099	2.5222	0.0117	[0.1742, 1.3891]
Specific modality combinations							
CCT (continuous, school + marriage)	7	5	1.0366**	0.3990	2.5978	0.0094	[0.2545, 1.8187]

4. Heterogeneity and sensitivity

4.1 Heterogeneity results

For all typologies with the exception of non-CCT income and economic strengthening, the results presented in Table 9 indicated that there was significant heterogeneity between the studies. The I-squared test yielded highly heterogenous results up to 98%, suggesting that a high proportion of the total variability in effect estimates was due to heterogeneity rather than sampling error. Moreover, the H-squared test concluded that the total variability between studies varied up to 58 times larger (in continuous CCT studies) than the variability expected due to sampling error alone, which further confirms the presence of significant heterogeneity. The Q-statistic for each typology grouping indicated significant heterogeneity between study effect sizes, suggesting that the observed variability between studies is unlikely to be due to chance alone. For income and economic strengthening the results from the tests employed indicated a low heterogeneity between studies. However, due to the low number of effect sizes included in the income and economic strengthening meta-analysis in comparison to other typologies, the interpretation of the heterogeneity tests is limited as the power of such tests has low power with few studies. Therefore, due to the likely presence of heterogeneity from the underlying populations in the studies, alongside a visual inspection of the forest plot for this typology, it was concluded that a random effects model would also be suitable for income and economic strengthening studies. Overall, the implementation of the four heterogeneity tests resulted in a strong confirmation that the between study effect sizes were highly heterogenous, hence supporting the choice of a random-effects meta-analysis model.

Table 9: Results from heterogeneity tests by typology

Test	n (effect sizes)	Tau-squared	I-squared	H-squared	Q-statistic
Empowerment	25	0.0005 (SE = 0.0003)	80.58%	5.15	69.0708, p-val < .0001
SRH	14	0.0012 (SE = 0.0008)	64.19%	2.79	32.7137, p-val = 0.0019
Social norms	17	0.0006 (SE = 0.0004)	82.77%	5.80	60.3101, p-val < .0001
Education	11	0.0001 (SE = 0.0120)	39.48%	1.65	16.1054, p-val = 0.0967
vLaw and policy	7	0.0031 (SE = 0.0029)	75.10%	4.02	30.1538, p-val < .0001
Income non-CCT	5	0.0000 (SE = 0.0004)	0.58%	1.01	5.3767, p-val = 0.2508
Income CCT (dichotomous)	10	0.0029 (SE = 0.0017)	97.05%	33.88	325.8325, p-val < .0001
Income CCT (continuous)	10	0.9079 (SE = 0.4519)	98.28%	58.01	1193.9743, p-val < .0001

4.2 Sensitivity analysis results

A sensitivity analysis was conducted to assess the impact of estimating the standard error using a conservative $p=0.5$ for studies that did not report on this measure, and the results are summarised in Table 10. Upon removing studies where the standard error was estimated with this approach, the pooled effect size exhibited a more substantial reduction across all typologies. However, despite this adjustment, the significance of the results remained largely unchanged. This suggests that while the conservative estimation method may have slightly influenced the magnitude of the effect size, the overall conclusions regarding the effectiveness of the interventions in reducing child marriage remained robust. Thus, the sensitivity analysis underscores the reliability of the meta-analysis findings, reinforcing confidence in the estimated efficacy of the interventions examined in addressing the issue of child marriage. Note that a sensitivity analysis was not possible for income and economic strengthening, where no studies used an estimated standard error, and law and policy, where only two effect sizes remained after removing those with an estimated standard error.

Table 10: Sensitivity analysis

Intervention combination	n (effect sizes)	n (studies)	Effect size estimate	SE	z-value	p-value	95% CI
All empowerment	25	12	-0.0270***	0.0063	-4.3151	<.0001	[-0.0393, -0.0148]
Estimated SE removed	15	6	-0.0290***	0.0083	-3.5026	0.0005	[-0.0453, -0.0128]
All SRH	14	7	-0.0273*	0.0122	-2.2412	0.0250	[-0.0512, -0.0034]
Estimated SE removed	4	2	-0.0622**	0.0189	-3.2904	0.0010	[-0.0993, -0.0252]
All social norms	17	7	-0.0335***	0.0080	-4.1799	<.0001	[-0.0492, -0.0178]
Estimated SE removed	10	4	-0.0370**	0.0113	-3.2745	0.0011	[-0.0592, -0.0149]
All education	11	7	-0.0178*	0.0071	-2.5169	0.0118	[-0.0316, -0.0039]
Estimated SE removed	6	4	-0.0112**	0.0040	-2.7865	0.0053	[-0.0190, -0.0033]
All law and policy	7	3	0.0077	0.0274	0.2810	0.7787	[-0.0461, 0.0615]
Estimated SE removed	NA	NA	NA	NA	NA	NA	NA
All income non-CCT	5	3	0.0247***	0.0064	3.8830	0.0001	[0.0122, 0.0371]
Estimated SE removed	NA	NA	NA	NA	NA	NA	NA
CCT (dichotomous, all)	10	8	-0.0477*	0.0191	-2.5021	0.0123	[-0.0851, -0.0103]
Estimated SE removed	8	6	-0.0516*	0.0229	-2.2561	0.0241	[-0.0965, -0.0068]
CCT (continuous, all)	10	6	0.7817*	0.3099	2.5222	0.0117	[0.1742, 1.3891]
Estimated SE removed	9	5	0.4824**	0.1336	3.1605	0.0003	[0.2205, 0.7443]

4.3 Effect sizes pooled from one study

In order to maintain statistical rigour in the meta-analysis, it was concluded that it was necessary to include effect sizes from more than one study to conduct a robust meta-analysis. For this reason, a standalone SRH typology meta-analysis was not included in the main text, as only one study (Pandley et al., 2016) examined the effects of a standalone SRH intervention of those that were eligible for inclusion in the meta-analysis. However, for reference, the results from this meta-analysis are presented in Table 11 and indicate a non-significant effect of the standalone SRH intervention.

Table 11: Subgroup effect sizes for standalone SRH intervention derived from one study.

Intervention combination	n (effect sizes)	n (studies)	Effect size estimate	SE	z-value	p-value	95% CI
SRH (standalone)	3	1	0.0187	0.0205	0.9116	0.3620	[-0.0215, 0.0590]

5. Limitations

The meta-analysis conducted to evaluate the effectiveness of various interventions in reducing child marriage encountered several limitations. Firstly, the estimation of standard error using a conservative $p=0.5$ may have led to a reduction in the weighting of results where this conversion was applied, potentially influencing the overall findings. Although this limitation was been tested for in the sensitivity analysis and concluded to not have a substantial effect on results, it may be reflective of data from less rigorous studies. Secondly, the heterogeneity in the confounders utilised across different studies introduced complexities in synthesising the results. Thirdly, the inclusion of studies from different time periods may have obscured temporal trends, as some interventions' effectiveness could diminish over time. Moreover, the possibility of girls still being under 18 at the time of follow-up experiencing child marriage remains a concern. Additionally, discrepancies in the definition of child marriage, with some studies considering it as under 19 due to variations in follow-up times, adds further caveats to the analysis and may affect the comparability of results. Furthermore, studies employing risk difference assumed a constant treatment effect over time and a linear relationship between outcome and treatment variables, potentially oversimplifying the dynamics of intervention impact. Lastly, within the same study, participants often experienced varying exposure times to interventions and differing intensities of exposure, introducing variability that may have affected the outcomes. Where possible, we have tried to mitigate and investigate the implications of these limitations, such as through a sensitivity analysis. Given these limitations, the meta-analysis results should be interpret with caution and be triangulated alongside synthesis results in order to conclude the potential effectiveness of interventions.

Annex B: Child marriage interventions included in this review

1. Income and economic strengthening

Programme	Studies	Typologies	Country location	Included in meta-analysis?	Description	Target audience	Duration/dosage	Outcome summary
Adolescent Girls Leadership Initiative (AWLI)	UNICEF Afghanistan, (2021).	Empowerment IES (CCT) Social Norms	Afghanistan (Nangahar, Samangan, Ghor, Herat, Farah)	No	The AWLI program, commenced in 2015 across five provinces in Afghanistan, aimed to empower adolescent girls make informed decisions about their lives, including matters related to health, relationships, and marriage. Under AWLI, there were a total of seven interventions, which included: Community Dialogues; Reflect Circles; Safe Spaces and Formal and Informal Networks; Mini Media Clubs; Community-based Life Skills Training; Unconditional-Cash Grants; and Community-based Livelihood Training.	Within each province, four districts were prioritized, totalling 20 districts, and these districts were in the most-deprived and remote areas, where the prevalence of child marriage was the highest.	The community dialogue activities took place every three months, and the Safe Spaces were open every day, but not 24/7. The community-based livelihoods training had a curriculum lasting 6 months. The UCT component was only partially achieved, as this was suspended in Ghor and did not reach all participants.	Examples provided of instances in which child marriage was prevented.
FSSAP and free tuition policy	Hong, S.Y., & Sarr, L.R. (2012)	IES (CCT) Law and policy	Bangladesh	Yes	Since 1990, a free tuition policy has been in effect, alongside a program offering monthly stipends to girls aged 11 to 15 in grades 6 through 10. This stipend covers various expenses including tuition, uniforms, textbooks, and examination fees.	Both policies have been implemented in rural areas nationwide (all 460 rural upazilas in the country), targeting girls aged 11 to 15.	Stipends were provided on a monthly basis, and annual cost of secondary education was provided to include tuition and other costs such as uniform, textbooks and examination fee.	The free tuition program did not significantly increase the age of marriage, while the stipend program did lead to an increase in the age of marriage by 1.5 years.
Manufacturing growth in the garments industry	Heath and Mobarak (2015)	IES	Bangladesh	No	Increased factory jobs in the Bangladeshi garments industry, which now overwhelmingly hires young women who may otherwise be married, experiencing childbirth, or continuing their education.	The numerous women engaged in employment in the garment industry (20% of female workers are aged 18 or younger.)	The exposure is the effect of cumulative years of exposure to garment factory jobs.	Girls exposed to the garment sector delayed marriage and childbirth. This stems from (a) young girls becoming more likely to be enrolled in school after garment jobs (which reward literacy and numeracy) arrive, and (b) older girls becoming more likely to be employed outside the home in garment-proximate villages.
KK+	Buchmann N., et al. (2018) Buchmann N., et al (2021)	Empowerment IES (CCT)	Bangladesh	Yes	Further to the KK empowerment program discussed above, a conditional incentive initiative was later added. This CCT offered every four months was the transfer of oil to families of unmarried adolescent girls aged 15-17, continuing until marriage or reaching 18. Community Health Volunteers and monitors verified marital status, and Girls collected the oil using their ration cards at distribution points.	Girls aged 15-17 in rural communities in Bangladesh.	For the empowerment component, girls met 5 to 6 days per week for 1-3 hours per day in "Safe Spaces." Participating girls had up to two years of eligibility for regular oil transfers, depending on age at the introduction of scheme.	Intervention saw a reduction on child marriage rates and increase in the average age of marriage – but only incentive participants (i.e. CCTs, but not empowerment, reduced child marriage).

Programme	Studies	Typologies	Country location	Included in meta-analysis?	Description	Target audience	Duration/dosage	Outcome summary
Bangladesh FSSP	Sayeed Y. (2016) Khandker S., et al. (2021) Sara, R., & Priyanka, S. (2023) Hahn Y., et al. (2018) Hong, S.Y., & Sarr, L.R. (2012)	IES (CCT)	Bangladesh	Yes	Under the programme all girls in programme areas who entered secondary school are eligible for a monthly sum ranging from taka 25 in grade 6 to taka 60 in grade 10 (equivalent to US\$0.37–\$0.88 in July 2006). Girls receive additional payments in grade 9 for new books and in grade 10 for exam fees. Conditions for eligibility include a minimum 75 % attendance rate, a score of at least 45 % in the annual school exams, and remaining unmarried until sitting the Secondary School Certificate or turning 18.	The stipend was based on eligible grades, rather than age, for girls in grades 6-10 residing in rural areas in Bangladesh.	Introduced in 1994, annual stipends included cash stipends to cover expenses by grade level and were available for up to 5 years of schooling. Sara, R., & Priyanka, S. (2023) explored the differential impacts of the programme based on longitudinal data for girls eligible for all 5 years of the program vs those only eligible for 2.	For girls exposed to 5 years of the program, rural girls age at first marriage increased by 0.61 years. There were insignificant effects found for urban girls. Long term effects show that age of marriage increased by 3.2 years.
Kishoree Kontha (KK)	Buchmann N., et al (2016).	Empowerment IES (CCT)	Bangladesh (Daulatkhan, Babuganj, Muladi, Patuakhali Sadar, Bauphal and Bhola Sadar)	Yes	Safe Spaces, accommodating up to 20 girls each, were established, with peer educators trained to deliver the curriculum. The curriculum included education support and social competency training covering life skills, legal rights, reproductive health knowledge, and financial literacy. The program also involved community mobilization to inform and engage parents, teachers, and leaders.	Kishoree Kontha targeted girls aged 10-19 in communities randomly selected in south central Bangladesh, where Save the Children was managing a food security program that provided transfers to pregnant and lactating mothers.	Four six-month cycles of the program ran between December 2007 and August 2010.	Empowerment intervention did not result in a reduction in child marriage, whilst the conditional incentive was found to delay marriage.
Kishori Abhijan	Amin S., et al. (2011) Amin S., et al. (2016)	Empowerment IES	Bangladesh (14 rural districts)	Yes	The program aimed to reduce school dropout rates, increase girls' economic independence, and delay marriage. It provided life skills training to boost self-esteem and leadership skills, along with education on gender roles, health, nutrition, and legal rights, including laws against early marriage. Livelihood training offered specific vocational skills like poultry care and handicrafts.	Adolescent girls aged 12-18 in rural Bangladesh.	The intervention was conducted over three years. Participating girls met weekly to learn life skills and receive livelihoods training.	A delay in marriage amongst participants compared to control group, but not statistically significant. Reduced marriage rates for young girls in poor districts.
BRAC STAR	Rahman, A., et al. (2021)	Empowerment IES	Bangladesh (Dhaka, Chattogram, Sylhet, Rajshahi, and Khulna)	Yes	Skills Training for Advancing Resources classroom training on theory (such as financial literacy, market assessment, and basic communicative English), and soft skills and on-the-job training (apprenticeship). Competency-Based Training and Assessment, was carried out as per the National Skill Development Policy 2011, was followed to conduct theoretical training.	14–18-year-old urban adolescents who had completed class five and had been out of school for at least a year.	During the six-month-long apprentice training period, once a week, STAR staff provided lessons on various issues.	62 per cent reduction in child marriage amongst participants.

Programme	Studies	Typologies	Country location	Included in meta-analysis?	Description	Target audience	Duration/dosage	Outcome summary
SMS CCT	Fujii, T., et al. (2021)	IES (CCT)	Bangladesh (Gaibandha)	Yes	<p>Gain: Households in this treatment arm received conditional cash transfers with gain framing. That is, households receive T taka for each day the student attends school. The balance starts from zero for this treatment group and the parents receive information on attendance and cash balance through SMS on a weekly basis.</p> <p>Loss: Households in this treatment arm receive conditional cash transfers with loss framing. That is, households lose T taka for each day the student is absent from school. The balance starts from the maximum possible transfer amount in a given phase. The parents receive information on the child's attendance and cash balance through SMS on a weekly basis.</p> <p>SMS: Households in this treatment arm receive weekly SMS on the school attendance of their child but no cash transfer.</p>	The intervention focuses on secondary school students in grades 6-9 enrolled in one of three study schools and residing in one of three catchment unions in Gaibandha.	The intervention took place in academic years 2017 and 2018. In each of these two academic years, there are two phases of intervention, each of which has a pre-determined number of intervention days—60 days in Phase 1, 2017, and 50 days in all other phases. Thus, not all school days were part of the intervention days.	The loss treatment reduces incidence of child marriage by 10.4 percentage points for girls, which is marginally significant. This impact is much greater at 31.1 percentage points for girls in grade 9 and above. No significant impact was found for the gain framing arm or its own.
Tipping Point (TPP, TPP+)	CARE and ICDDR,B. (2022). Clark, C. et al (2023)	IES SRH Social Norms Empowerment	Bangladesh (Rangpur)	No	<p>The Tipping Point Initiative was created to address the root causes of child marriage by challenging restrictive social norms and empowering girls. Two comprehensive implementation packages were developed: the Tipping Point Program and Tipping Point Program Plus (TPP+). Both programs aimed to challenge social expectations and promote girl-driven activism, with TPP+ featuring additional emphasized social norms change activities. Sessions covered social norms, improving financial literacy through participation in village savings and SRH education.</p>	Primary recipients were unmarried adolescent girls aged 12-16. Secondary beneficiaries included adolescent boys, parents, religious leaders, local government and other stakeholders.	Implemented over a 17-month period, with a three-month suspension in between due to COVID-19 lockdowns. Adolescent boys and girls received 40 weekly group sessions, and parents received 18 monthly group sessions. Local government, religious leaders and other stakeholders took part in intensive trainings and follow-up meetings.	TPP+ reduced CM only amongst those who received 36-40 sessions. A later study concludes no quantitative impact on CM.
Recruiting services for business process outsourcing industry	Jensen (2012)	IES	India	No	<p>Information and recruiting sessions were carried out and assistance was provided to women only. The intervention consisted of three in-depth sessions and three years of continuous placement support.</p>	The intervention targeted rural districts where awareness of and access to BPO jobs was likely to be low. The recruiters provided assistance to women only with a secondary school degree and preferably some English language ability and experience with computers.	The four to six hours sessions were held. One and two years after the initial treatment (December 2004 to February 2005 and December 2005 to January 2006), "booster shots" were provided with the recruiters again visiting the same treatment villages and providing the same session.	900 women were placed in jobs over the three-year period. Women were less likely to get married during the three-year period of the study.

Programme	Studies	Typologies	Country location	Included in meta-analysis?	Description	Target audience	Duration/dosage	Outcome summary
National Rural Employment Guarantee Scheme (NGRES)	Tsaneva and O'Donoghue (2021)	IES	India	Yes	The program provides all rural households the opportunity to be employed in a low-skilled public works project.	Target group is all rural households across all states in India, and women are especially encouraged to participate as the program aimed for one third of all beneficiaries to be women.	Employment entails 100 days a year of paid work.	Increased probability in getting married under 18.
ABAD	Nanda P, et al. (2016) Krishnan, A., et al. (2014) Biswas S. and Das U. (2021)	IES (CCT)	India (Haryana)	Yes	The beneficiaries of ABAD faced a protracted period before they could receive the cash incentive, which was conditioned on delaying marriage until at least age 18. The program offered two points of transfer: 1) a small cash disbursement to mothers (500 Indian Rupees) within 15 days of delivering an eligible girl; and 2) a savings bond of 2,500 Indian Rupees purchased by the government in the name of the girl on enrolment within three months of her birth. The bond was expected to grow to about 25,000 Indian Rupees (approximately \$384 at today's rate) redeemable at age 18, provided the girl was not married.	Households belonging to disadvantaged subgroups in the population (Scheduled Castes and Other Backward Castes) or those living below the poverty line were eligible to enrol in the program if they had a daughter born between 1994 and 1998 among their first three children.	Government bond is purchased at the time of birth and the subsequent five years so that beneficiaries would mature with interest to when the girl became 18 years old. A bonus is awarded for reaching standard 5 and standard 8 education, and also if the girl remains unmarried under 18.	Krishan et al. (2014) find a higher age at marriage amongst recipients. Later studies concluded there was no effect on the probability of marriage before age 18. The proportion of girls marrying during their 18 th year was also found to be higher for beneficiaries of the ABAD, and qualitative data suggests that beneficiary families saw the ABAD as a way to cover marriage and dowry expenses.
ABAD revised	Krishnan, A., et al. (2014)	IES (CCT)	India (Haryana)	Yes	A replica of the ABAD intervention, but this new version introduced a higher maturity rate for girls willing to defer redeeming their securities. Raised to US\$600 for two years, or US\$700 for 4 years. Girls could also receive a credit subsidy for entrepreneurship loans.	Ibid.	Ibid.	Mean educational levels increased among daughters and daughter in laws (outside of Haryana). No significant impact on child marriage outcomes.
LAADLI	Krishnan, A., et al. (2014)	IES (CCT)	India (Haryana)	Yes	Conditional on completion of immunization and schooling and remaining unmarried at 18 years. No restrictions on being disadvantaged, but is only applicable to second girl child.	Resident of Haryana on the birth of a second girl child conditional to completion of immunization and schooling.	\$100 per family per year up to 5 years invested in Government Bonds. Given at the age of the second girl attaining the age of 18.	Mean educational levels and age of marriage increased among daughters and daughter in laws (outside of Haryana).

Programme	Studies	Typologies	Country location	Included in meta-analysis?	Description	Target audience	Duration/dosage	Outcome summary
Samata intervention	Prakash R., et al., (2019) Ramanik et al. (2020)	Education Empowerment IES Social Norms	India (Karnataka)	Yes	The comprehensive Samata program engaged with girls, families, peers, teachers, and community leaders to address the risk of school dropout among low-caste adolescent girls in Bijapur and Bagalkot districts of Northern Karnataka, areas marked by high HIV prevalence among women in devadasi sex work. Implemented from January 2013 for five years, outreach workers were deployed to deliver mentoring, workshops focusing on life skills and leadership, and worked closely with families to promote girls' education, delay marriage, and access government schemes. Community-level interventions included street theatre and discussions to challenge discriminatory gender norms.	Low-caste adolescent girls in Bijapur and Bagalkot districts in northern Karnataka, characterised by high levels of HIV among women involved in devadasi sex work, whose daughters are at high risk of school dropout.	5-year programme, data was based on 3 year follow up.	(Prakash et al.) No overall impact, however, it added value in one of the two implementation districts- increasing secondary school entry and completion. (Ramanik et al.) The intervention programme's effect increased in parallel to the gradient from thin to thicker agency among girls in progressively supportive family contexts. Engagement with the programme was however selective; families adhering to harmful gender norms were not receptive to outreach.
Textile mill employment	Sivasankaran (2014)	IES	India (Tamil Nadu)	No	Textile firm's decision to change fixed-term contracts to daily wage contracts, which led to variation in the duration of employment for workers.	Women eligible to work in the state of Tamil Nadu, which encompasses young, unmarried women aged 17-18 who have discontinued schooling.	Years of working varied within the sample. The exposure to fixed term contracts in a textile mill means that women at its implementation are exposed to more years of working.	The longer women were exposed to fixed term-contracts, the longer they stayed in the labour market, reducing their chance of being married by 21. This also had a spill over effect on families, increasing the age of marriage for younger sisters.
Scheme for Adolescent Girls – Kanyashree Prakalpa (SAG KP)	Banerjee A., et al (2023)	Education Empowerment IES(CCT)	India (West Bengal)	No	The SAG scheme was established in 2011 and aimed to empower out-of-school adolescent girls aged 11-14, while the Kanyashree Prakalpa, initiated in 2013 by the West Bengal government, focused on incentivising girls aged 13-18 to stay in school and delay marriage. These programs merged into the SAG-KP Convergence Program in 2015, expanding across states in 2018. The SAG-KP program employed three strategies: providing nutrition support and health services, offering education and vocational opportunities, and incentivising school retention and completion up to the 12th standard through the use of CCTs.	Both in-school and out-of-school adolescent girls across seven districts in the West Bengal were targeted for SAG-KP in 2015. This was scaled up to other districts and states in 2018.	Available for up to 7 years. The length of exposure to the programme differed depending on the age of the girl at the start of the programme- with eligible girls ranging between 11-18 years old.	448 child marriages prevented between 2019-2021.
SABLA-Landesa	Landesa (2013) Cedar, E. (2018)	IES Empowerment Social Norms	India (West Bengal)	No	A partnership with a Government of India pilot project, the Rajiv Gandhi Scheme for Empowerment of Adolescent Girls (SABLA), delivered a curriculum on land-based livelihoods and land rights in addition to core empowerment and nutrition modules. The programme sensitized the girls on land rights, asset creation, equal inheritance, and trained them on land-based livelihood skills.	Aimed at adolescent girls in rural West Bengal.	The basic sites had weekly girls group meetings, the Light engagement sites added community meetings to this and the Intense engagement sites added Community Conversations, as well as activities for adolescent boys and an additional weekly girls discussion session.	The average female participant marries approximately one and a half years later.

Programme	Studies	Typologies	Country location	Included in meta-analysis?	Description	Target audience	Duration/dosage	Outcome summary
Kanyashree Prakalpa	Saha, M. (2023) Dutta, A., and Sen A., (2020) UNICEF (2014) Dey, S. and Ghosal, T. (2021)	IES (CCT)	India (West Bengal)	Yes	The first intervention was a scholarship paid annually to unmarried girls aged between 13-18. The second is a one-time grant paid to girls reaching their 18 th birthday, provided they are unmarried and engaged in some educational or occupational pursuit. On July 28, 2017, the third component was announced, which provided that girls pursuing a postgraduate degree in any university will be provided with a monthly scholarship, irrespective of the marital status and the annual family income. However, the girls should be already enrolled in the first and second component and should have achieved 45% in the undergraduate degree.	Beneficiaries are girls aged from 13-18 with a family income less than Rs 1.2 lakh per annum. The income ceiling is not applicable to girls with special needs or orphans or those residing in juvenile justice homes.	The stipend comprises of scholarships or annual grants, with an additional grant paid at 18 years old, subject to remaining unmarried and pursuing education or training up until that age.	All studies showed a decrease in child marriage in recipients of the transfer.
Nepal's social pension Old Age Allowance (OAA)	Mathers (2020)	IES	Nepal	Yes	OAA introduced to all people over the age of 75 to aid social security in Nepal. Introduced in 1994/5 and scaled up in 1995/6.	Beneficiaries of the UCT were the older family members of the adolescent girls.	Exposure depended on the years of eligibility since the introduction of the UCT in 1994, and differential effects were measured based on if there was a UCT-eligible male, female, or both in the household.	UCTs may increase the risk of early marriage due to dowry practice, particularly in the UCT-eligible male households.
Punjab Female School Stipend Program (FSSP)	Baez j., et al, (2011) Musaddiq, T., & Said, F., (2023) Alam, A. et al. (2011)	IES (CCT)	Pakistan (Punjab)	Yes	Quarterly subsidy provided contingent on a minimum school attendance of 80 % and enrolment in eligible grades (6 to 8) in public schools. Non-means tested program (not conditional on household resources), and the amount of the cash transfer is small and not an income shock for households.	Girls in grades 6 to 8 were eligible for this stipend in districts with literacy rates of 40 % or less according to the national census in 1998. 15 out of the 36 districts in Punjab qualified on this basis.	Introduced in 2004, effects varied based on years of exposure to the programme.	Medium term (4 years): No impact on probability of marriage. Age of marriage increased 1.2 – 1.5 years later. 5 years: Marriage 1.4 years later. Longer term analysis (5+ years): suggests that each year of the program decreases the probability of marriage by 3.5 percent.
GIRLS inspire	Smith, Kristina. (2019).	Empowerment IES	Bangladesh Pakistan	No	Implemented in Bangladesh, Mozambique, Pakistan and Tanzania, the project provided life skills and vocational training opportunities to women and girls, with a focus on enhancing their decision-making abilities and raising awareness of social norms related to CM. Contextualized training on social rights and various skills, including health, financial literacy, entrepreneurship and leadership, was provided. Community advocacy efforts were geared towards enhancing their decision-making capacities and creating safe and supportive learning environments. Additionally, the project emphasized increasing economic opportunities for women and girls through skills training and employment placements, acknowledging the importance of a holistic approach to achieving sustainable livelihoods.	The intervention targeted women and girls, family and community members in rural communities of the participating countries. Workshop facilitators and staff were also trained up as part of the intervention.	The project was implemented over 3.5 years.	1181 early marriages were reported to have been prevented. girls.

2. Education

Programme	Studies	Typologies	Country location	Included in meta-analysis?	Description	Target audience	Duration/dosage	Outcome summary
BALIKA	Amin S. et al. (2016) Amin S., et al. (2018) Makino, M., et al, (2021)	Education Empowerment SRH	Bangladesh (Khulna, Satkhira, and Narail)	Yes	The BALIKA program provided skills training to girls aged 12-18 in three selected districts in Bangladesh with high child marriage rates. The programme was implemented over 18 months from February 2014 to August 2015. The program provided training sessions, implemented in 'BALIKA centers' (safe space environments), located within village primary schools. Arm 1 focused on education, offering tutoring support in mathematics and English for school-going girls, and financial skills and communicative English for out-of-school girls, aiming to make learning accessible with online materials and practical lessons. Arm 2 emphasized gender rights, promoting negotiation and decision-making skills through discussions on gender roles and family dynamics, aided by videos and group activities. Arm 3 targeted livelihoods, providing information on female occupations and training in computing, mobile applications, photography, health screening, and entrepreneurship, supplemented by intensive community outreach activities conducted by locally recruited mentors.	Rural adolescent girls in communities having high prevalence of child marriage.	Taking place over an 18-month period, in all intervention arms, mentors delivered 44 hours of life-skills lessons and 100 hours of arm-specific training.	Overall, gender awareness, education, and livelihood skills arms all saw a significant reduction in the number of girls marriage under the age of 18. However, for girls under 16, the gender awareness arm did not have an impact, whilst livelihood skills and education arms did not have an impact for 16-17 but did for under 16s .
Keeping Girls in School (KGIS)	Ainul S., et al. (2022)	Education Empowerment	Bangladesh (Sherpur, Kushtia, and Chapainawabganj)	Yes	The program combats child marriage norms by providing skill-building activities and safe spaces for girls. Activities included tutoring, life skills sessions, and girls' groups sessions facilitated by female community mentors.	The program targeted marginalized adolescent girls in rural communities who had dropped out of school and girls who were underperforming at school, which put them at higher risk of child marriage.	Implemented over 2 years. Delivered through weekly life-skills and education sessions.	Significant difference between intervention and control locations – intervention prevented child marriage from increasing during Covid-19, whereas control locations saw increase in child marriage rates.

Programme	Studies	Typologies	Country location	Included in meta-analysis?	Description	Target audience	Duration/dosage	Outcome summary
Samata intervention	Prakash R., et al., (2019) Ramanaik et al. (2020)	Education Empowerment IES Social Norms	India (Karnataka)	Yes	The comprehensive Samata program engaged with girls, families, peers, teachers, and community leaders to address the risk of school dropout among low-caste adolescent girls in Bijapur and Bagalkot districts of Northern Karnataka, areas marked by high HIV prevalence among women in devadasi sex work. Implemented from January 2013 for five years, outreach workers were deployed to deliver mentoring, workshops focusing on life skills and leadership, and worked closely with families to promote girls' education, delay marriage, and access government schemes. Community-level interventions included street theatre and discussions to challenge discriminatory gender norms.	Low-caste adolescent girls in Bijapura and Bagalkot districts in northern Karnataka, characterised by high levels of HIV among women involved in devadasi sex work, whose daughters are at high risk of school dropout.	5-year programme, data was based on 3 year follow up.	(Prakash et al.) No overall impact, however, it added value in one of the two implementation districts- increasing secondary school entry and completion. (Ramanaik et al.) The intervention programme's effect increased in parallel to the gradient from thin to thicker agency among girls in progressively supportive family contexts. Engagement with the programme was however selective; families adhering to harmful gender norms were not receptive to outreach.
Improving Sexual and Reproductive Health of Young People	Mehra, D., et al. (2018)	Empowerment Education Norms SRH	India (Uttar Pradesh and Bihar)	No	The programme reached out with focused interventions for identified young people, parents, parents-in-law, and key community stakeholders including religious leaders, and elected members from local governance. The project also worked with district and local administration, relevant departments including Education, Health, Women and Child Development, Panchayati Raj and law-enforcement agencies. The programme prioritized the issue of child marriage for sectoral actions to address the needs and concerns of both unmarried and married young people. The intervention package included age and culturally appropriate life skill-based educational sessions, focusing on SRH. The national curriculum 'Life Skills & Adolescent Education Programme' was adapted to strengthen the components on early marriage and early pregnancy to suit the objectives of the intervention. The curriculum had additional activities with the understanding to promote education retention as a pathway to delay the age of marriage and first pregnancy.	Set in rural sites in high child-marriage prevalence districts in Uttar Pradesh and Bihar.	The project was carried out from 2009 to 2013.	Reduced likelihood of girls being married at endline.

Programme	Studies	Typologies	Country location	Included in meta-analysis?	Description	Target audience	Duration/dosage	Outcome summary
Scheme for Adolescent Girls – Kanyashree Prakalpa (SAG KP)	Banerjee A., et al (2023)	Education Empowerment IES(CCT)	India (West Bengal)	No	The SAG scheme was established in 2011 and aimed to empower out-of-school adolescent girls aged 11-14, while the Kanyashree Prakalpa, initiated in 2013 by the West Bengal government, focused on incentivising girls aged 13-18 to stay in school and delay marriage. These programs merged into the SAG-KP Convergence Program in 2015, expanding across states in 2018. The SAG-KP program employed three strategies: providing nutrition support and health services, offering education and vocational opportunities, and incentivising school retention and completion up to the 12th standard through the use of CCTs.	Both in-school and out-of-school adolescent girls across seven districts in the West Bengal were targeted for SAG-KP in 2015. This was scaled up to other districts and states in 2018.	Available for up to 7 years. The length of exposure to the programme differed depending on the age of the girl at the start of the programme with eligible girls ranging between 11-18 years old.	448 child marriages prevented between 2019-2021.
Aarambha	Foundation for Development Management (2022)	Education Social Norms	Nepal (Bara and Rautahat)	No	The Aarambha project focuses on enhancing literacy and numeracy skills for enrolled girls. Implemented activities include establishing community learning centres to offer financial literacy skills, adolescent SRH, and self-efficacy. Formal school teachers received gender-responsive training. Due to the pandemic, gender-transformative workshops were switched to phone-based teaching and radio programs, also providing psycho-social support to girls.	Aimed to work with married out-of-school girls as the direct beneficiaries, with indirect beneficiaries including family members, in-school girls and boys, elected government officials and community/religious leaders.	The project aims to roll out its interventions in four cohorts over five years from 2019 to 2024.	No evidence that it has succeeded in preventing early marriage (though the primary outcome was participation in school / learning, and primarily focused on how the intervention supports outcomes for already-married girls)
Improving Adolescent Lives Pakistan	Avdeenko A. & Frölich M., (2021)	Education Empowerment Social norms	Pakistan (Punjab and Sindh)	Yes	(UNICEF programme): 'Child Protection (CP)' intervention life-skills training, peer-led workshops, dialogues, and community mobilization) and an educational intervention focused on Non-Formal Basic Education (NFBE) for out of school adolescents.	Implemented in rural communities. NFBE activities were aimed at out-of-school adolescents.	Although the programme was designed to be 3.5 years, implementation was reported to have been most intense between end-2017 and December 2019. An overlap of interventions is noted where the CP and NFBE components were implemented in the same villages in parallel, but this, however, did not mean a joint implementation.	Reduction in child marriage rates for girls aged 10-17, but not boys, with particularly strong effects for girls aged 15-17.
Her Choice Alliance	Koster, W., et al (2021)	Education SRH Law and Policy	Bangladesh (Jessor, Kishoregan) Nepal (Makwanpur, Morang and Banke) Pakistan (Chakwal, Vehari)	Yes	Her Choice was implemented in 10 countries across Sub-Saharan Africa and South Asia. HC employed six strategies to combat child marriage, including: Investing in girls, Keeping Girls in School, Improving access to youth-friendly SRH services for girls, Strengthening the economic security of girls and their families, Transforming social norms and traditional practices, & Creating an enabling legal and policy environment on preventing CM.	The programme targeted rural communities.	The Her Choice programme operated from January 2016 to December 2020.	In most countries, from baseline, to midline, to endline, a decreasing share of 12-17-year-old girls were said to be married. The reduction was most striking in the countries where the share of married girls was highest at baseline, e.g. in Pakistan, Nepal (Morang and Banke).

3. Social norms change

Programme	Studies	Typologies	Country location	Included in meta-analysis?	Description	Target audience	Duration/ dosage	Outcome summary
Adolescent Girls Leadership Initiative (AWLI)	UNICEF Afghanistan, (2021).	Empowerment IES (CCT) Social Norms	Afghanistan (Nangahar, Samangan, Ghor, Herat, Farah)	No	The AWLI program, commenced in 2015 across five provinces in Afghanistan, aimed to empower adolescent girls make informed decisions about their lives, including matters related to health, relationships, and marriage. Under AWLI, there were a total of seven interventions, which included: Community Dialogues; Reflect Circles; Safe Spaces and Formal and Informal Networks; Mini Media Clubs; Community-based Life Skills Training; Unconditional-Cash Grants; and Community-based Livelihood Training.	Within each province, four districts were prioritized, totalling 20 districts, and these districts were in the most-deprived and remote areas, where the prevalence of child marriage was the highest.	The community dialogue activities took place every three months, and the Safe Spaces were open every day, but not 24/7. The community-based livelihoods training had a curriculum lasting 6 months. The UCT component was only partially achieved, as this was suspended in Ghor and did not reach all participants.	Examples provided of instances in which child marriage was prevented.
Entertainment-education-based television series	Sengupta et al. (2020)	Social Norms	Bangladesh	No	The Government of Bangladesh with UNICEF and partners launched a multi-phase trans-media campaign to end child marriage in 2017. The initiative involved a social norm-driven entertainment-education-based television series <i>Ichchedana (On the Wings of Wishes)</i> , which focused on adolescent empowerment and gender equality. The storyline centred around a girls' football team and portrayed the lives of a group of girls who face and overcome adolescent challenges.	The mass and social media assets were rolled out as a multi-phase national campaign. The media campaign was supplemented by on the ground social mobilisation and community engagement efforts in districts with high child marriage prevalence.	The initial phase included five public service announcements aimed at reminding audiences of the legal age of marriage. As of December 2020, the PSAs reached 147 million viewers on social media. The adolescent-focused drama centres on a girls' football team and comprised an initial season of 26 episodes, continuing with another 52-episodes over a second phase.	Qualitative and quantitative results indicated a behavioural change in respondents acting to prevent child marriage.
Protecting Human Rights	Rizvi, J. (2017)	Law and Policy Social Norms	Bangladesh (Barguna, Bogra, Chittagong, Dinajpur, Jessore, and Sylhet)	No	The PHR aimed to combat domestic violence and human rights violations, including child marriage, through legal reform, capacity building for NGOs and government, direct services, and changing public attitudes. The programme focussed on enforcing legislation through advocacy efforts, forming national gender forums, and enhancing public awareness through campaigns involving various stakeholders.	The enforcement of key domestic violence and human rights legislation targeted officials, NGOs, coalitions, and other HR stakeholders. Increased justice systems and support services targeted service providers and survivors. Campaigns and awareness raising targeted the general public as a whole.	The activity lasted 6 years, starting in March 2011 and ending in March 2017. Plan and its partners implemented these components in 102 union parishads.	1,534 child marriages prevented.

Programme	Studies	Typologies	Country location	Included in meta-analysis?	Description	Target audience	Duration/ dosage	Outcome summary
Tipping Point (TPP, TPP+)	CARE and ICDDR,B., (2022). Clark, C. et al (2023)	IES SRH Social Norms Empowerment	Bangladesh (Rangpur)	No	The Tipping Point Initiative was created to address the root causes of child marriage by challenging restrictive social norms and empowering girls. Two comprehensive implementation packages were developed: the Tipping Point Program and Tipping Point Program Plus (TPP+). Both programs aimed to challenge social expectations and promote girl-driven activism, with TPP+ featuring additional emphasized social norms change activities. Sessions covered social norms, improving financial literacy through participation in village savings and SRH education.	Primary recipients were unmarried adolescent girls aged 12-16. Secondary beneficiaries included adolescent boys, parents, religious leaders, local government and other stakeholders.	Implemented over a 17-month period, with a three-month suspension in between due to COVID-19 lockdowns. Adolescent boys and girls received 40 weekly group sessions, and parents received 18 monthly group sessions. Local government, religious leaders and other stakeholders took part in intensive trainings and follow-up meetings.	TPP+ reduced CM only amongst those who received 36-40 sessions. A later study concludes no quantitative impact on CM.
Breakthrough's mass media campaigns	Raghunathan et al. (2021)	Social Norms	India (Bihar and Jharkhand)	Yes	The intervention delivered to treatment groups i) a Full Package, comprising mass-media, training and community mobilization programs; ii) a Training Package comprising a combination of mass media and a training program at the block level; iii) a Community Mobilization Package comprising a combination of mass-media and a community mobilization program; iv) and an only Mass Media program.	The intervention was central to the rights of children and adolescents, but extended to all other influencers across the ecosystem and community, recognizing their part in determining marriage practices.	Implemented from November 2012 to December 2018 (6 years).	Compared to the control groups, the Full Package intervention increased the age at marriage for girls aged 13-25 on an average by 6.5 months and their education by 9 months.
Deepshikha	Baker et al. (2014)	Empowerment Social Norms	India (Chandrapur, Latur, Nandubur, Mumbai)	No	The programme comprised of life skills education and mobilisation of adolescent 'self-help' groups; a school-based child rights and life skills education project; and the creation and establishment of a State Gender Resource Centre in the state of Maharashtra.	Adolescent girls in the age group 12-18, including in school and out of school adolescents in the state of Maharashtra.	Phase one of the project spanned from August 2008 to November 2011. Two-thirds of girls reported that the sessions ran on a monthly basis, while others reported that the sessions were weekly. The sessions were usually 1 hour, but at times it was extended to 2 to 3 hours.	Reports that 280 child marriages were prevented.
Marriage: No Child's Play (MNCP)	Melnikas, A.J., et al. (2021) Melnikas A.J., et al. (2023) Melnikas A.J., et al. (2023).	Empowerment SRH Social Norms	India (Jharkhand, Bihar, Odisha, Rajasthan)	No	The MNCP project sought to empower girls, to raise awareness about the risks of child marriage, to improve girls' access to SRH services, and to support social norms favourable to girls' education, economic engagement, and agency in marital decision-making. Activities included life-skills education, SRHR information and peer support groups. The intervention also included enhancing access to education opportunities, economic opportunities, child protection systems and SRH services.	The project was implemented in four countries: India, Malawi, Mali, and Niger for girls aged 12-19 years old.	The intervention was active between 2017 and 2020, with adaptations added due to Covid-19.	Intervention significantly reduced child marriage rates in 3 out of 4 intervention states (not Bihar).

Programme	Studies	Typologies	Country location	Included in meta-analysis?	Description	Target audience	Duration/dosage	Outcome summary
Samata intervention	Prakash R., et al., (2019) Ramaiaik et al. (2020)	Education Empowerment IES Social Norms	India (Karnataka)	Yes	The comprehensive Samata program engaged with girls, families, peers, teachers, and community leaders to address the risk of school dropout among low-caste adolescent girls in Bijapur and Bagalkot districts of Northern Karnataka, areas marked by high HIV prevalence among women in devadasi sex work. Implemented from January 2013 for five years, outreach workers were deployed to deliver mentoring, workshops focusing on life skills and leadership, and worked closely with families to promote girls' education, delay marriage, and access government schemes. Community-level interventions included street theatre and discussions to challenge discriminatory gender norms.	Low-caste adolescent girls in Bijapur and Bagalkot districts in northern Karnataka, characterised by high levels of HIV among women involved in devadasi sex work, whose daughters are at high risk of school dropout.	5-year programme, data was based on 3 year follow up.	(Prakash et al.) No overall impact, however, it added value in one of the two implementation districts- increasing secondary school entry and completion. (Ramaiaik et al.) The intervention programme's effect increased in parallel to the gradient from thin to thicker agency among girls in progressively supportive family contexts. Engagement with the programme was however selective; families adhering to harmful gender norms were not receptive to outreach.
PanKH	Verma H., et al. (2019)	Empowerment SRH Social Norms	India (Rajasthan)	Yes	The intervention aimed to enhance outcomes related to marriage, educational attainment, and SRH. The intervention included group educational activities and sport sessions that were led by mentors at the community level.	The PANKH program targeted unmarried and married adolescent girls and their communities, reaching about 6,600 girls aged 12-19.	Implemented from 2015 to 2018, the intervention spanned 18 months.	Intervention had a significant impact on the rate of marriage among girls aged 15-17 years at baseline under both intervention arms. Among younger girls (aged 12-14 years at baseline), there was no change in the rate of marriage under intervention and control arms.
Teen camp	Zare, B (2022)	Social Norms Empowerment	India (Telangana)	No	Voice camps are free programs held at schools and open to all girls in a particular age group. In rural areas, camps takes place in a residential compound with classroom space and sleeping quarters. Activities center on taking pride in being a girl, being confident (including body language, vocal volume and identifying strengths and weaknesses), understanding your body (taking care of yourself through pubertal changes) and knowing your legal rights to protect yourself in case of emergency.	The camp reached 65,000 girls across seven states. The camp is generally offered for girls in seventh or eighth standard, and it is their age (12 or 13 years) that makes them eligible to attend this no-cost camp, rather than enrolment being based on a selection process.	Each camp contains approximately 5-6 activities and key messages per day, with 30 days' lessons over the camp curriculum.	Case studies of campers acting to prevent child marriage.

Programme	Studies	Typologies	Country location	Included in meta-analysis?	Description	Target audience	Duration/ dosage	Outcome summary
Improving Sexual and Reproductive Health of Young People	Mehra, D., et al. (2018)	Empowerment Education Norms SRH	India (Uttar Pradesh and Bihar)	No	The programme reached out with focused interventions for identified young people, parents, parents-in-law, and key community stakeholders including religious leaders, and elected members from local governance. The project also worked with district and local administration, relevant departments including Education, Health, Women and Child Development, Panchayati Raj and law-enforcement agencies. The programme prioritized the issue of child marriage for sectoral actions to address the needs and concerns of both unmarried and married young people. The intervention package included age and culturally appropriate life skill-based educational sessions, focusing on SRH. The national curriculum 'Life Skills & Adolescent Education Programme' was adapted to strengthen the components on early marriage and early pregnancy to suit the objectives of the intervention. The curriculum had additional activities with the understanding to promote education retention as a pathway to delay the age of marriage and first pregnancy.	Set in rural sites in high child-marriage prevalence districts in Uttar Pradesh and Bihar.	The project was carried out from 2009 to 2013.	Reduced likelihood of girls being married at endline.
SABLA-Landesa	Landesa (2013) Cedar E. et al. (2018)	IES Empowerment Social Norms	India (West Bengal)	No	A partnership with a Government of India pilot project, the Rajiv Gandhi Scheme for Empowerment of Adolescent Girls (SABLA), delivered a curriculum on land-based livelihoods and land rights in addition to core empowerment and nutrition modules. The programme sensitized the girls on land rights, asset creation, equal inheritance, and trained them on land-based livelihood skills.	Aimed at adolescent girls in rural West Bengal.	The basic sites had weekly girls group meetings, the Light engagement sites added community meetings to this and the Intense engagement sites added Community Conversations, as well as activities for adolescent boys and an additional weekly girls discussion session.	The average female participant marries approximately one and a half years later.
Aarambha	Foundation for Development Management (2022)	Education Social Norms	Nepal (Bara and Rautahat)	No	The Aarambha project focuses on enhancing literacy and numeracy skills for enrolled girls. Implemented activities include establishing community learning centres to offer financial literacy skills, adolescent SRH, and self-efficacy. Formal school teachers received gender-responsive training. Due to the pandemic, gender-transformative workshops were switched to phone-based teaching and radio programs, also providing psycho-social support to girls.	Aimed to work with married out-of-school girls as the direct beneficiaries, with indirect beneficiaries including family members, in-school girls and boys, elected government officials and community/religious leaders.	The project aims to roll out its interventions in four cohorts over five years from 2019 to 2024.	No evidence that it has succeeded in preventing early marriage (though the primary outcome was participation in school / learning, and primarily focused on how the intervention supports outcomes for already-married girls)
Her Turn	Bennett C., (2017)	Empowerment Social Norms	Nepal (Sindhupalchok and Gorkha).	No	The four-week long workshop focused on the issues of health, safety and leadership skill development. At the end, the group were given a cash grant to design and implement a project which addressed a pressing health or safety issue in their school. During the workshops, the girls created a peer-led Girls Support Committee, which continued to meet after the workshops and addressed social issues such as bullying and marriage prevention	Target group is rural adolescent girls aged 12-16, both in and out of school.	The programme consisted of a four-week long workshop. No indication was given as to the duration of the girls' project implementation.	Examples of the intervention resulting in child marriage prevention were provided, but no positive impact on elopement was reported.

Programme	Studies	Typologies	Country location	Included in meta-analysis?	Description	Target audience	Duration/dosage	Outcome summary
It takes Nepal to end Child Marriage	World Vision (2024)	Social Norms	Nepal (Udayapur, Sarlahi, Mahottari, Rautahat, Sindhuli, Kethmand, Lalitpur, Lamjung, Jumla, Kailali, Achham, Doti, Bajhang, and Kanchanpur).	No	The campaign set out to strengthen systems; change behaviours of children, adolescents and their family; and influence the effective implementation of policy. The campaign aimed to reduce child marriage in Nepal through improved community practices and government systems, adopting three major approaches: 1) strengthening legal and social system for the protection of most vulnerable children; 2) increasing community resilience including children; and 3) a multi-sectoral response to end child marriage.	The campaign targets children, adolescents, young people, and their families, as well as intensive engagement with the Governments in local, provincial, and federal level. 46 municipalities and rural municipalities were targeted.	Between 2017-2023 (six years).	No significant effect on child marriage.
Improving Adolescent Lives Pakistan	Avdeenko A. & Frölich M., (2022)	Education Empowerment Social Norms	Pakistan (Punjab and Sindh)	Yes	(UNICEF programme): 'Child Protection (CP)' intervention life-skills training, peer-led workshops, dialogues, and community mobilization) and an educational intervention focused on Non-Formal Basic Education (NFBE) for out of school adolescents.	Implemented in rural communities. NFBE activities were aimed at out-of-school adolescents.	Although the programme was designed to be 3.5 years, implementation was reported to have been most intense between end-2017 and December 2019. An overlap of interventions is noted where the CP and NFBE components were implemented in the same villages in parallel, but this, however, did not mean a joint implementation.	Reduction in child marriage rates for girls aged 10-17, but not boys, with particularly strong effects for girls aged 15-17.
Street theatre performance and group discussions	Cassidy et al. (2022)	Social Norms	Pakistan (Punjab and Sindh)	Yes	Mobile cinema screening of a street-theatre performance, developed by local NGOs and performed by local actors. The screening was followed by facilitated group discussions. The intervention was targeted at men, women or both in the different intervention arms.	The intervention was deliberately designed to be delivered in a social setting within the village, targeting men, women or both from each target household.	The screening (approximately 10 minutes) was followed up 3 months later by the group discussions, taking place over the first 6 months of 2019.	Findings show that that targeting men, or both genders jointly, significantly reduces child marriage of girls in targeted households.
Her Choice Alliance	Koster, W., et al (2021)	Education SRH Law and Policy	Bangladesh (Jessor, Kishoregan) Nepal (Makwanpur, Morang and Banke) Pakistan (Chakwal, Vehari)	Yes	Her Choice was implemented in 10 countries across Sub-Saharan Africa and South Asia. HC employed six strategies to combat child marriage, including: Investing in girls, Keeping Girls in School, Improving access to youth-friendly SRH services for girls, Strengthening the economic security of girls and their families, Transforming social norms and traditional practices, & Creating an enabling legal and policy environment on preventing CM.	The programme targeted rural communities.	The Her Choice programme operated from January 2016 to December 2020.	In most countries, from baseline, to midline, to endline, a decreasing share of 12-17-year-old girls were said to be married. The reduction was most striking in the countries where the share of married girls was highest at baseline, e.g. in Pakistan, Nepal (Morang and Banke).

4. Girls' (youth) empowerment

Programme	Studies	Typologies	Country location	Included in meta-analysis?	Description	Target audience	Duration/dosage	Outcome summary
Adolescent Girls Leadership Initiative (AWLI)	UNICEF Afghanistan, (2021).	Empowerment IES (CCT) Social Norms	Afghanistan (Nangahar, Samangan, Ghor, Herat, Farah)	No	The AWLI program, commenced in 2015 across five provinces in Afghanistan, aimed to empower adolescent girls make informed decisions about their lives, including matters related to health, relationships, and marriage. Under AWLI, there were a total of seven interventions, which included: Community Dialogues; Reflect Circles; Safe Spaces and Formal and Informal Networks; Mini Media Clubs; Community-based Life Skills Training; Unconditional-Cash Grants; and Community-based Livelihood Training.	Within each province, four districts were prioritized, totalling 20 districts, and these districts were in the most-deprived and remote areas, where the prevalence of child marriage was the highest.	The community dialogue activities took place every three months, and the Safe Spaces were open every day, but not 24/7. The community-based livelihoods training had a curriculum lasting 6 months. The UCT component was only partially achieved, as this was suspended in Ghor and did not reach all participants.	Examples provided of instances in which child marriage was prevented.
World Vision Child Activists	Cuevas-Parra, P. & Tisdal, E. (2020). Cuevas-Parra, P. & Tisdal, E. (2022)	Empowerment	Bangladesh	No	World Vision supported groups of child activists in Bangladesh and Ghana to participate in Child Parliaments/Forums, which were platforms for children to learn about and advocate for their rights. Mobilizing these forums and drawing on critical social capital and engaging key stakeholders, the child activists aimed to challenge perceptions of children, and prevent potential child marriages.	Children who are members of local Child Forums, initiated and supported by World Vision Bangladesh.	Varying intensity and time of participation in local Child Forum activities.	Activists provided examples where they had intervened to prevent child marriage. Child activists in Bangladesh reported preventing 72 child marriages.
Kishoree Kontha (KK)	Buchmann N., et al (2016). Buchmann N., et al (2018). Buchmann N., et al (2021).	Empowerment CCT	Bangladesh (Daulatkhan, Babuganj, Muladi, Patuakhali Sadar, Bauphal and Bhola Sadar)	Yes	Safe Spaces, accommodating up to 20 girls each, were established, with peer educators trained to deliver the curriculum. The curriculum included education support and social competency training covering life skills, legal rights, reproductive health knowledge, and financial literacy. The program also involved community mobilization to inform and engage parents, teachers, and leaders.	Kishoree Kontha targeted girls aged 10-19 in communities randomly selected in south central Bangladesh, where Save the Children was managing a food security program that provided transfers to pregnant and lactating mothers.	Four six-month cycles of the program ran between December 2007 and August 2010.	Empowerment intervention did not result in a reduction in child marriage, whilst the conditional incentive was found to delay marriage.
BALIKA	Amin S. et al. (2016) Amin S., et al. (2018) Makino, M., et al, (2021)	Education Empowerment IES SRH	Bangladesh (Khulna, Satkhira, and Narail)	Yes	The BALIKA program provided skills training to girls aged 12-18 in three selected districts in Bangladesh with high child marriage rates. The programme was implemented over 18 months from February 2014 to August 2015. The program provided training sessions, implemented in 'BALIKA centers' (safe space environments), located within village primary schools. Arm 1 focused on education, offering tutoring support in mathematics and English for school-going girls, and financial skills and communicative English for out-of-school girls, aiming to make learning accessible with online materials and practical lessons. Arm 2 emphasized gender rights, promoting negotiation and decision-making skills through discussions on gender roles and family dynamics, aided by videos and group activities. Arm 3 targeted livelihoods, providing information on female occupations and training in computing, mobile applications, photography, health screening, and entrepreneurship, supplemented by intensive community outreach activities conducted by locally recruited mentors.	Rural adolescent girls in communities having high prevalence of child marriage.	Taking place over an 18-month period, in all intervention arms, mentors delivered 44 hours of life-skills lessons and 100 hours of arm-specific training.	Overall, gender awareness, education, and livelihood skills arms all saw a significant reduction in the number of girls marriage under the age of 18. However, for girls under 16, the gender awareness arm did not have an impact, whilst livelihood skills and education arms did not have an impact for 16-17 but did for under 16s.

Programme	Studies	Typologies	Country location	Included in meta-analysis?	Description	Target audience	Duration/dosage	Outcome summary
Keeping Girls in School (KGIS)	Ainul S., et al. (2022)	Education Empowerment	Bangladesh (Sherpur, Kushtia, and Chapainawabganj)	Yes	The program combats child marriage norms by providing skill-building activities and safe spaces for girls. Activities included tutoring, life skills sessions, and girls' groups sessions facilitated by female community mentors.	The program targeted marginalized adolescent girls in rural communities who had dropped out of school and girls who were underperforming at school, which put them at higher risk of child marriage.	Implemented over 2 years. Delivered through weekly life-skills and education sessions.	Significant difference between intervention and control locations – intervention prevented child marriage from increasing during Covid-19, whereas control locations saw increase in child marriage rates.
Kishori Abhijan	Amin S., et al. (2011) Amin S., et al. (2016)	Empowerment IES	Bangladesh (14 rural districts)	Yes	The program aimed to reduce school dropout rates, increase girls' economic independence, and delay marriage. It provided life skills training to boost self-esteem and leadership skills, along with education on gender roles, health, nutrition, and legal rights, including laws against early marriage. Livelihood training offered specific vocational skills like poultry care and handicrafts.	Adolescent girls aged 12-18 in rural Bangladesh.	The intervention was conducted over three years. Participating girls met weekly to learn life skills and receive livelihoods training.	A delay in marriage amongst participants compared to control group, but not statistically significant. Reduced marriage rates for young girls in poor districts.
BRAC STAR	Rahman, A., et al. (2021)	Empowerment IES	Bangladesh (Dhaka, Chattogram, Sylhet, Rajshahi, and Khulna)	Yes	Skills Training for Advancing Resources classroom training on theory (such as financial literacy, market assessment, and basic communicative English), and soft skills and on-the-job training (apprenticeship). Competency-Based Training and Assessment, was carried out as per the National Skill Development Policy 2011, was followed to conduct theoretical training.	14–18-year-old urban adolescents who had completed class five and had been out of school for at least a year.	During the six-month-long apprentice training period, once a week, STAR staff provided lessons on various issues.	62 per cent reduction in child marriage amongst participants.
Tipping Point (TPP, TPP+)	CARE and ICDDR,B., (2022). Clark, C. et al (2023)	IES SRH Social Norms Empowerment	Bangladesh (Rangpur)	No	The Tipping Point Initiative was created to address the root causes of child marriage by challenging restrictive social norms and empowering girls. Two comprehensive implementation packages were developed: the Tipping Point Program and Tipping Point Program Plus (TPP+). Both programs aimed to challenge social expectations and promote girl-driven activism, with TPP+ featuring additional emphasized social norms change activities. Sessions covered social norms, improving financial literacy through participation in village savings and SRH education.	Primary recipients were unmarried adolescent girls aged 12-16. Secondary beneficiaries included adolescent boys, parents, religious leaders, local government and other stakeholders.	Implemented over a 17-month period, with a three-month suspension in between due to COVID-19 lockdowns. Adolescent boys and girls received 40 weekly group sessions, and parents received 18 monthly group sessions. Local government, religious leaders and other stakeholders took part in intensive trainings and follow-up meetings.	TPP+ reduced CM only amongst those who received 36-40 sessions. A later study concludes no quantitative impact on CM.
Deepshikha	Baker et al. (2014)	Empowerment Social Norms	India (Chandrapu, Latur, Nandubar, Mumbai)	No	The programme comprised of life skills education and mobilisation of adolescent 'self-help' groups; a school-based child rights and life skills education project; and the creation and establishment of a State Gender Resource Centre in the state of Maharashtra.	Adolescent girls in the age group 12-18, including in school and out of school adolescents in the state of Maharashtra.	Phase one of the project spanned from August 2008 to November 2011. Two-thirds of girls reported that the sessions ran on a monthly basis, while others reported that the sessions were weekly. The sessions were usually 1 hour, but at times it was extended to 2 to 3 hours.	Reports that 280 child marriages were prevented.

Programme	Studies	Typologies	Country location	Included in meta-analysis?	Description	Target audience	Duration/dosage	Outcome summary
Marriage: No Child's Play (MNCP)	Melnikas, A.J., et al. (2021) Melnikas A.J., et al. (2023) Melnikas A.J., et al. (2023).	Empowerment SRH Social Norms	India (Jharkhand, Bihar, Odisha, Rajasthan)	No	The MNCP project sought to empower girls, to raise awareness about the risks of child marriage, to improve girls' access to SRH services, and to support social norms favourable to girls' education, economic engagement, and agency in marital decision-making. Activities included life-skills education, SRHR information and peer support groups. The intervention also included enhancing access to education opportunities, economic opportunities, child protection systems and SRH services.	The project was implemented in four countries: India, Malawi, Mali, and Niger for girls aged 12-19 years old.	The intervention was active between 2017 and 2020, with adaptations added due to Covid-19.	Intervention significantly reduced child marriage rates in 3 out of 4 intervention states (not Bihar).
Project RISHTA	McDougal L., et al. (2017).	SRH Empowerment	India (Jharkhand)	No	Project RISHTA was a community-based initiative led by youth aimed at reducing early marriage in rural Jharkhand. Peer educators were trained to counsel young people on preventing child marriage, SRH education, and youth development opportunities. The program focused on empowering youth to support school retention and develop vocational skills.	Girls and decision makers in rural areas were the target of the intervention. Data collected for girls between 13 and 24 with known exposure to project RISHTA.	Ongoing since 2001, with interviews conducted in 2024. Girls and decision makers in their families would have been exposed to the project at different times, depending on age when the project was introduced.	27 girls were able to prevent child marriage.
Samata intervention	Prakash R., et al., (2019) Ramanik et al. (2020)	Education Empowerment IES Social Norms	India (Karnataka)	Yes	The comprehensive Samata program engaged with girls, families, peers, teachers, and community leaders to address the risk of school dropout among low-caste adolescent girls in Bijapur and Bagalkot districts of Northern Karnataka, areas marked by high HIV prevalence among women in devadasi sex work. Implemented from January 2013 for five years, outreach workers were deployed to deliver mentoring, workshops focusing on life skills and leadership, and worked closely with families to promote girls' education, delay marriage, and access government schemes. Community-level interventions included street theatre and discussions to challenge discriminatory gender norms.	Low-caste adolescent girls in Bijapura and Bagalkot districts in northern Karnataka, characterised by high levels of HIV among women involved in devadasi sex work, whose daughters are at high risk of school dropout.	5-year programme, data was based on 3 year follow up.	(Prakash et al.) No overall impact, however, it added value in one of the two implementation districts- increasing secondary school entry and completion. (Ramanik et al.) The intervention programme's effect increased in parallel to the gradient from thin to thicker agency among girls in progressively supportive family contexts. Engagement with the programme was however selective; families adhering to harmful gender norms were not receptive to outreach.
Planning Ahead for Girls' Empowerment and Employability (PAGE)	Nanda, P et al (2017)	Empowerment	India (New Delhi)	Yes	The Empowerment component focused on building girls' understanding of gender and power and developed their self-efficacy skills. The Employability component included skill-building as well as interaction with employment partners through school-based career events, during which information was provided to advance the girls' understanding of and interest in various career possibilities.	Girls enrolled in four schools across East and South Delhi, including all girls in grades 9 to 11 in intervention sites.	Four modules implemented over 2 years, between 2014 and 2016. 27 45-minute sessions were conducted from October 2014-March 2015 and July-December 2015, with a summer break in the months April-June 2015.	Slight reduction in percentage of girls married from baseline to endline, compared to a slight increase in the control group (no tests for statistical significance) .

Programme	Studies	Typologies	Country location	Included in meta-analysis?	Description	Target audience	Duration/dosage	Outcome summary
PanKH	Verma H., et al. (2019)	Empowerment SRH Social Norms	India (Rajasthan)	Yes	The intervention aimed to enhance outcomes related to marriage, educational attainment, and SRH. The intervention included group educational activities and sport sessions that were led by mentors at the community level.	The PanKH program targeted unmarried and married adolescent girls and their communities, reaching about 6,600 girls aged 12-19.	Implemented from 2015 to 2018, the intervention spanned 18 months.	Intervention had a significant impact on the rate of marriage among girls aged 15-17 years at baseline under both intervention arms. Among younger girls (aged 12-14 years at baseline), there was no change in the rate of marriage under intervention and control arms.
Teen camp	Zare, B (2022)	Social Norms Empowerment	India (Telegana)	No	Voice camps are free programs held at schools and open to all girls in a particular age group. In rural areas, camps take place in a residential compound with classroom space and sleeping quarters. Activities center on taking pride in being a girl, being confident (including body language, vocal volume and identifying strengths and weaknesses), understanding your body (taking care of yourself through pubertal changes) and knowing your legal rights to protect yourself in case of emergency.	The camp reached 65,000 girls across seven states. The camp is generally offered for girls in seventh or eighth standard, and it is their age (12 or 13 years) that makes them eligible to attend this no-cost camp, rather than enrolment being based on a selection process.	Each camp contains approximately 5-6 activities and key messages per day, with 30 days' lessons over the camp curriculum.	Case studies of campers acting to prevent child marriage.
Improving Sexual and Reproductive Health of Young People	Mehra, D., et al. (2018)	Empowerment Education Norms SRH	India (Uttar Pradesh and Bihar)	No	The programme reached out with focused interventions for identified young people, parents, parents-in-law, and key community stakeholders including religious leaders, and elected members from local governance. The project also worked with district and local administration, relevant departments including Education, Health, Women and Child Development, Panchayati Raj and law-enforcement agencies. The programme prioritized the issue of child marriage for sectoral actions to address the needs and concerns of both unmarried and married young people. The intervention package included age and culturally appropriate life skill-based educational sessions, focusing on SRH. The national curriculum 'Life Skills & Adolescent Education Programme' was adapted to strengthen the components on early marriage and early pregnancy to suit the objectives of the intervention. The curriculum had additional activities with the understanding to promote education retention as a pathway to delay the age of marriage and first pregnancy.	Set in rural sites in high child-marriage prevalence districts in Uttar Pradesh and Bihar.	The project was carried out from 2009 to 2013.	Reduced likelihood of girls being married at endline.
Scheme for Adolescent Girls – Kanyashree Prakalpa (SAG KP)	Banerjee A., et al (2023)	Education Empowerment IES(CCT)	India (West Bengal)	No	The SAG scheme was established in 2011 and aimed to empower out-of-school adolescent girls aged 11-14, while the Kanyashree Prakalpa, initiated in 2013 by the West Bengal government, focused on incentivising girls aged 13-18 to stay in school and delay marriage. These programs merged into the SAG-KP Convergence Program in 2015, expanding across states in 2018. The SAG-KP program employed three strategies: providing nutrition support and health services, offering education and vocational opportunities, and incentivising school retention and completion up to the 12th standard through the use of CCTs.	Both in-school and out-of-school adolescent girls across seven districts in the West Bengal were targeted for SAG-KP in 2015. This was scaled up to other districts and states in 2018.	Available for up to 7 years. The length of exposure to the programme differed depending on the age of the girl at the start of the programme—with eligible girls ranging between 11-18 years old.	448 child marriages prevented between 2019-2021.

Programme	Studies	Typologies	Country location	Included in meta-analysis?	Description	Target audience	Duration/dosage	Outcome summary
SABLA-Landesa	Landesa (2013) Cedar E. et al. (2018)	IES Empowerment Social Norms	India (West Bengal)	No	A partnership with a Government of India pilot project, the Rajiv Gandhi Scheme for Empowerment of Adolescent Girls (SABLA), delivered a curriculum on land-based livelihoods and land rights in addition to core empowerment and nutrition modules. The programme sensitized the girls on land rights, asset creation, equal inheritance, and trained them on land-based livelihood skills.	Aimed at adolescent girls in rural West Bengal.	The basic sites had weekly girls group meetings, the Light engagement sites added community meetings to this and the Intense engagement sites added Community Conversations, as well as activities for adolescent boys and an additional weekly girls discussion session.	The average female participant marries approximately one and a half years later.
Her Turn	Bennett C., (2017)	Empowerment Social Norms	Nepal (Sindhupalchok and Gorkha).	No	The four-week long workshop focused on the issues of health, safety and leadership skill development. At the end, the group were given a cash grant to design and implement a project which addressed a pressing health or safety issue in their school. During the workshops, the girls created a peer-led Girls Support Committee, which continued to meet after the workshops and addressed social issues such as bullying and marriage prevention	Target group is rural adolescent girls aged 12-16, both in and out of school.	The programme consisted of a four-week long workshop. No indication was given as to the duration of the girls' project implementation.	Examples of the intervention resulting in child marriage prevention were provided, but no positive impact on elopement was reported.
Improving Adolescent Lives Pakistan	Avdeenko A. & Frölich M., (2022)	Education Empowerment Social Norms	Pakistan (Punjab and Sindh)	Yes	(UNICEF programme): 'Child Protection (CP)' intervention life-skills training, peer-led workshops, dialogues, and community mobilization) and an educational intervention focused on Non-Formal Basic Education (NFBE) for out of school adolescents.	Implemented in rural communities. NFBE activities were aimed at out-of-school adolescents.	Although the programme was designed to be 3.5 years, implementation was reported to have been most intense between end-2017 and December 2019. An overlap of interventions is noted where the CP and NFBE components were implemented in the same villages in parallel, but this, however, did not mean a joint implementation.	Reduction in child marriage rates for girls aged 10-17, but not boys, with particularly strong effects for girls aged 15-17.
GIRLS inspire	Smith, K. (2019).	Empowerment IES	Bangladesh Pakistan	No	Implemented in Bangladesh, Mozambique, Pakistan and Tanzania, the project provided life skills and vocational training opportunities to women and girls, with a focus on enhancing their decision-making abilities and raising awareness of social norms related to CM. Contextualized training on social rights and various skills, including health, financial literacy, entrepreneurship and leadership, was provided. Community advocacy efforts were geared towards enhancing their decision-making capacities and creating safe and supportive learning environments. Additionally, the project emphasized increasing economic opportunities for women and girls through skills training and employment placements, acknowledging the importance of a holistic approach to achieving sustainable livelihoods.	The intervention targeted women and girls, family and community members in rural communities of the participating countries. Workshop facilitators and staff were also trained up as part of the intervention.	The project was implemented over 3.5 years.	1181 early marriages were reported to have been prevented. girls.

5. Sexual and reproductive health

Programme	Studies	Typologies	Country location	Included in meta-analysis?	Description	Target audience	Duration/ dosage	Outcome summary
BALIKA	Amin S. et al. (2016) Amin S., et al. (2018) Makino, M., et al. (2021)	Education Empowerment SRH	Bangladesh (Khulna, Satkhira, and Narail)	Yes	The BALIKA program provided skills training to girls aged 12-18 in three selected districts in Bangladesh with high child marriage rates. The programme was implemented over 18 months from February 2014 to August 2015. The program provided training sessions, implemented in 'BALIKA centers' (safe space environments), located within village primary schools. Arm 1 focused on education, offering tutoring support in mathematics and English for school-going girls, and financial skills and communicative English for out-of-school girls, aiming to make learning accessible with online materials and practical lessons. Arm 2 emphasized gender rights, promoting negotiation and decision-making skills through discussions on gender roles and family dynamics, aided by videos and group activities. Arm 3 targeted livelihoods, providing information on female occupations and training in computing, mobile applications, photography, health screening, and entrepreneurship, supplemented by intensive community outreach activities conducted by locally recruited mentors.	Rural adolescent girls in communities having high prevalence of child marriage.	Taking place over an 18-month period, in all intervention arms, mentors delivered 44 hours of life-skills lessons and 100 hours of arm-specific training.	Overall, gender awareness, education, and livelihood skills arms all saw a significant reduction in the number of girls marriage under the age of 18. However, for girls under 16, the gender awareness arm did not have an impact, whilst livelihood skills and education arms did not have an impact for 16-17 but did for under 16s .
Keeping Girls in School (KGIS)	Ainul S., et al. (2022)	Education Empowerment	Bangladesh (Sherpur, Kushtia, and Chapainawabganj)	Yes	The program combats child marriage norms by providing skill-building activities and safe spaces for girls. Activities included tutoring, life skills sessions, and girls' groups sessions facilitated by female community mentors.	The program targeted marginalized adolescent girls in rural communities who had dropped out of school and girls who were underperforming at school, which put them at higher risk of child marriage.	Implemented over 2 years. Delivered through weekly life-skills and education sessions.	Significant difference between intervention and control locations – intervention prevented child marriage from increasing during Covid-19, whereas control locations saw increase in child marriage rates.
Tipping Point (TPP, TPP+)	CARE and ICDDR, B., (2022). Clark, C. et al (2023)	IES SRH Social Norms Empowerment	Bangladesh (Rangpur)	No	The Tipping Point Initiative was created to address the root causes of child marriage by challenging restrictive social norms and empowering girls. Two comprehensive implementation packages were developed: the Tipping Point Program and Tipping Point Program Plus (TPP+). Both programs aimed to challenge social expectations and promote girl-driven activism, with TPP+ featuring additional emphasized social norms change activities. Sessions covered social norms, improving financial literacy through participation in village savings and SRH education.	Primary recipients were unmarried adolescent girls aged 12-16. Secondary beneficiaries included adolescent boys, parents, religious leaders, local government and other stakeholders.	Implemented over a 17-month period, with a three-month suspension in between due to COVID-19 lockdowns. Adolescent boys and girls received 40 weekly group sessions, and parents received 18 monthly group sessions. Local government, religious leaders and other stakeholders took part in intensive trainings and follow-up meetings.	TPP+ reduced CM only amongst those who received 36-40 sessions. A later study concludes no quantitative impact on CM.

Programme	Studies	Typologies	Country location	Included in meta-analysis?	Description	Target audience	Duration/ dosage	Outcome summary
PRACHAR	Rahman M., & Daniel E., (2010) Pathfinder International (2010) Pathfinder International (2011) Pandey et al. (2016)	SRH	India (Bihar)	Yes	PRACHAR aims to elevate the age of marriage for girls, postpone the first childbirth until age 21, and ensure a three-year gap between subsequent births in Bihar. Its strategies, primarily focused on raising awareness and knowledge about reproductive health (RH), targets unmarried adolescents, young couples, guardians, and influential community members. Through interventions such as RH training for adolescents, "infotainment" parties for newlyweds, and information dissemination via various channels like wall paintings and street theatre, PRACHAR promotes healthy family planning practices.	Beneficiaries included adolescents in rural areas of selected districts of Bihar.	Three-day non-residential training programmes. Two implementation phases from 2002-2008 tested and refined the intervention model in Bihar, with ongoing scaling in additional districts.	Earlier studies found a delayed age of marriage for girls who participated in the programme. The Pathfinder International (2010 and 2011) found that participant women were married between 1.5 and 2.6 years later than non-participants. However, a later study by Pandey et al. (2016), suggested no significant impact on child marriage.
Marriage: No Child's Play (MNCP)	Melnikas, A.J., et al. (2021) Melnikas A.J., et al. (2023) Melnikas A.J., et al. (2023).	Empowerment SRH Social Norms	India (Jharkhand, Bihar, Odisha, Rajasthan)	No	The MNCP project sought to empower girls, to raise awareness about the risks of child marriage, to improve girls' access to SRH services, and to support social norms favourable to girls' education, economic engagement, and agency in marital decision-making. Activities included life-skills education, SRHR information and peer support groups. The intervention also included enhancing access to education opportunities, economic opportunities, child protection systems and SRH services.	The project was implemented in four countries: India, Malawi, Mali, and Niger for girls aged 12-19 years old.	The intervention was active between 2017 and 2020, with adaptations added due to Covid-19.	Intervention significantly reduced child marriage rates in 3 out of 4 intervention states (not Bihar).
Project RISHTA	McDougal L., et al, (2017).	SRH Empowerment	India (Jharkhand)	No	Project RISHTA was a community-based initiative led by youth aimed at reducing early marriage in rural Jharkhand. Peer educators were trained to counsel young people on preventing child marriage, SRH education, and youth development opportunities. The program focused on empowering youth to support school retention and develop vocational skills.	Girls and decision makers in rural areas were the target of the intervention. Data collected for girls between 13 and 24 with known exposure to project RISHTA.	Ongoing since 2001, with interviews conducted in 2024. Girls and decision makers in their families would have been exposed to the project at different times, depending on age when the project was introduced.	27 girls were able to prevent child marriage.
PanKH	Verma H., et al. (2019)	Empowerment SRH Social Norms	India (Rajasthan)	Yes	The intervention aimed to enhance outcomes related to marriage, educational attainment, and SRH. The intervention included group educational activities and sport sessions that were led by mentors at the community level.	The PanKH program targeted unmarried and married adolescent girls and their communities, reaching about 6,600 girls aged 12-19.	Implemented from 2015 to 2018, the intervention spanned 18 months.	Intervention had a significant impact on the rate of marriage among girls aged 15-17 years at baseline under both intervention arms. Among younger girls (aged 12-14 years at baseline), there was no change in the rate of marriage under intervention and control arms.

Programme	Studies	Typologies	Country location	Included in meta-analysis?	Description	Target audience	Duration/ dosage	Outcome summary
Improving Sexual and Reproductive Health of Young People	Mehra, D., et al. (2018)	Empowerment Education Norms SRH	India (Uttar Pradesh and Bihar)	No	<p>The programme reached out with focused interventions for identified young people, parents, parents-in-law, and key community stakeholders including religious leaders, and elected members from local governance. The project also worked with district and local administration, relevant departments including Education, Health, Women and Child Development, Panchayati Raj and law-enforcement agencies. The programme prioritized the issue of child marriage for sectoral actions to address the needs and concerns of both unmarried and married young people.</p> <p>The intervention package included age and culturally appropriate life skill-based educational sessions, focusing on SRH.</p> <p>The national curriculum 'Life Skills & Adolescent Education Programme' was adapted to strengthen the components on early marriage and early pregnancy to suit the objectives of the intervention. The curriculum had additional activities with the understanding to promote education retention as a pathway to delay the age of marriage and first pregnancy.</p>	Set in rural sites in high child-marriage prevalence districts in Uttar Pradesh and Bihar.	The project was carried out from 2009 to 2013.	Reduced likelihood of girls being married at endline.
Her Choice Alliance	Koster, W., et al (2021)	Education SRH Law and Policy	Bangladesh (Jessor, Kishoregan) Nepal (Makwanpur, Morang and Banke) Pakistan (Chakwal, Vehari)	Yes	<p>Her Choice was implemented in 10 countries across Sub-Saharan Africa and South Asia. HC employed six strategies to combat child marriage, including: Investing in girls, Keeping Girls in School, Improving access to youth-friendly SRH services for girls, Strengthening the economic security of girls and their families, Transforming social norms and traditional practices, & Creating an enabling legal and policy environment on preventing CM.</p>	The programme targeted rural communities.	The Her Choice programme operated from January 2016 to December 2020.	In most countries, from baseline, to midline, to endline, a decreasing share of 12-17-year-old girls were said to be married. The reduction was most striking in the countries where the share of married girls was highest at baseline, e.g. in Pakistan, Nepal (Morang and Banke).

6. Law and Policy

Programme	Studies	Typologies	Country location	Included in meta-analysis?	Description	Target audience	Duration/dosage	Outcome summary
FSSAP and free tuition policy	Hong, S.Y., & Sarr, L.R. (2012)	IES (CCT) Law and policy	Bangladesh	Yes	Since 1990, a free tuition policy has been in effect, alongside a program offering monthly stipends to girls aged 11 to 15 in grades 6 through 10. This stipend covers various expenses including tuition, uniforms, textbooks, and examination fees.	Both policies have been implemented in rural areas nationwide (all 460 rural upazilas in the country), targeting girls aged 11 to 15.	Stipends were provided on a monthly basis, and annual cost of secondary education was provided to include tuition and other costs such as uniform, textbooks and examination fee.	The free tuition program did not significantly increase the age of marriage, while the stipend program did lead to an increase in the age of marriage by 1.5 years.
Child Marriage Law Information Intervention	Amirapu, A., et al. (2020)	Law and policy	Bangladesh	Yes	Explored whether formal laws influenced social norms and marriage behaviour in an environment with weak law enforcement. Did this by administering a randomised video-based information treatment that accelerates knowledge transmission about a new child marriage law in Bangladesh.	The primary recipients were from a nationally representative survey of women, with marriage outcomes measured for those with unmarried adolescent daughters. Arms of the study included the intervention implemented with either 0, 1 or 2 members of the extended family. The intervention was aimed at rural settings with weak law enforcement.	The information intervention took the form of a short drama written and performed exclusively for the study and lasting 2-3 minutes, involving the marriage of a 15-year old girl. This video was shown, individually, to study participants.	Increased rates of child marriage.
Child Marriage Restraint Act 2017	Datta, B. K., & Hassan, S. (2021)	Law and policy	Bangladesh	No	Legal exceptions such as parental permission and customary or religious laws that supersede the minimum legal age of marriage may weaken child marriage prevention efforts. Hence, the special provision in the 2017 CMRA could have a detrimental impact on eradicating child marriage. Using available data, the researchers examine trends in child marriage in Bangladesh following the enactment of the new law to inform policymakers working toward eliminating child marriage.	Retrospective data from the 2006, 2013, and 2019 waves of the Bangladesh MICS, which entails a two-stage stratified sample covering both urban and rural areas of the 64 districts of Bangladesh.	The law had been implemented for 2 years prior to the last wave of MICS data used.	No significant effect on child marriage.
Protecting Human Rights	Rizvi, J. (2017)	Law and Policy Social Norms	Bangladesh (Barguna, Bogra, Chittagong, Dinajpur, Jessore, and Sylhet)	No	The PHR aimed to combat domestic violence and human rights violations, including child marriage, through legal reform, capacity building for NGOs and government, direct services, and changing public attitudes. The programme focussed on enforcing legislation through advocacy efforts, forming national gender forums, and enhancing public awareness through campaigns involving various stakeholders.	The enforcement of key domestic violence and human rights legislation targeted officials, NGOs, coalitions, and other HR stakeholders. Increased justice systems and support services targeted service providers and survivors. Campaigns and awareness raising targeted the general public as a whole.	The activity lasted 6 years, starting in March 2011 and ending in March 2017. Plan and its partners implemented these components in 102 union parishads.	1,534 child marriages prevented.
Changes in age at marriage laws	Batyra, L. M., & Pesando, M. (2021)	Law and policy	Nepal Bhutan	Yes	This study adopts a cohort perspective to explore trends in child marriage, and the effectiveness of age at marriage policies at reducing the practice. The researchers adopt a cross-national perspective comparing six low- and middle-income countries that introduce changes in the minimum age at marriage over the past two decades. These countries belong to two broad regions: Sub-Saharan Africa, and Central Asia .	Using nationally representative DHS/MICS data to identify the age of women's first union and as well as the exact date of policies' implementation, to identify women who were subject to the new law and whether they entered their first union before the age of 18.	For Nepal, the law was implemented in 2002 and the DHS was carried out in 2016 (14 years to follow up). For Bhutan, the law was implemented in 1996 and the MICS survey was carried out in 2010 (14 years to follow up).	No significant effect on child marriage.
Her Choice Alliance	Koster, W., et al (2021)	Education SRH Law and Policy	Bangladesh (Jessor, Kishoregan) Nepal (Makwanpur, Morang and Banke) Pakistan (Chakwal, Vehari)	Yes	Her Choice was implemented in 10 countries across Sub-Saharan Africa and South Asia. HC employed six strategies to combat child marriage, including: Investing in girls, Keeping Girls in School, Improving access to youth-friendly SRH services for girls, Strengthening the economic security of girls and their families, Transforming social norms and traditional practices, & Creating an enabling legal and policy environment on preventing CM.	The programme targeted rural communities.	The Her Choice programme operated from January 2016 to December 2020.	In most countries, from baseline, to midline, to endline, a decreasing share of 12-17-year-old girls were said to be married. The reduction was most striking in the countries where the share of married girls was highest at baseline, e.g. in Pakistan, Nepal (Morang and Banke).
Do Age-of-Marriage Laws Work?	Collin, M., and Talbot, T., (2017)	Law and policy	Maldives India Bangladesh	Yes	Using data from every available round of the DHS, this study examines whether or not a country's observed distribution of marriage ages suggests that its government is enforcing laws against underage marriage.	The study's scope is the effect of the legal minimum age of marriage (both with and without parental consent) on married women, through retrospectively using data on their age of first marriage alongside the corresponding minimum age of marriage.	The data covers the minimum age of marriage for girls between 1995 and 2012.	No significant effect on child marriage.

Annex C: Study selection and data extraction

1. Excluded full texts

Type	Year	Author	Title	Exclusion reason
Report	2009	R. Acharya; S. Kalyanwala; S. J. Jejeebhoy; V. Nathani	Broadening Girls' Horizons: Effects Of A Life Skills Education Programme In Rural Uttar Pradesh	Pre 2010
Report	2013	I. Administrative Staff College of	Evaluation of SABLA Scheme	Study protocol
Journal Article	2021	M. Y. Akhter; P. Deb; J. Biswas	Role of Public Libraries with special reference to Women Empowerment through Kanyashree Prakalpa in West Bengal of India	No clear CM outcome
Journal Article	2022	S. Akter; C. Williams; A. Talukder; M. N. Islam; J. V. Escallon; T. Sultana; N. Kapil; M. Sarker	Harmful practices prevail despite legal knowledge: a mixed-method study on the paradox of child marriage in Bangladesh	No behaviour measure
Journal Article	2022	M. F. Amigó; S. Gurung	The transformational possibilities of a peer education program to address child-marriage in Nepal	No clear CM outcome
Report	2017	S. Amin; N. Asadullah; S. Hossain; Z. Wahhaj	Can Conditional Transfers Eradicate Child Marriage?	Evidence review
Journal Article	2019	R. B. Banseria; S. S. Saroshe; S. P. Dixit	Evaluation of SABLA	No clear CM outcome
Journal Article	2015	T. S. Beattie; P. Bhattacharjee; S. Isac; C. Davey; P. Javalkar; S. Nair; R. Thalinja; G. Sudhakar; M. Collumbien; J. F. Blanchard; C. Watts; S. Moses; L. Heise	Supporting adolescent girls to stay in school, reduce child marriage and reduce entry into sex work as HIV risk prevention in north Karnataka, India: protocol for a cluster randomised controlled trial	Study protocol
Report	2019	G. Bedoya; A. Coville; J. Haushofer; M. Isaqzadeh; J. Shapiro	No Household Left Behind: Afghanistan Targeting the Ultra Poor Impact Evaluation	No clear CM outcome
Journal Article	2023	R. Bhandari; S. Malakoff; D. S. Thakuri; R. Balami; S. Khatri; C. Simon; W. Castro; N. A. Hanson-Hall	Findings from a mixed-methods evaluation of a multi-level adolescent and youth reproductive and maternal health intervention in Karnali Province, Nepal	No clear CM outcome
Generic	2011	J. E. Bradley; P. Bhattacharjee; B. M. Ramesh; M. Girish; A. K. Das	Evaluation of Stepping Stones as a tool for changing knowledge, attitudes and behaviours associated with gender, relationships and HIV risk in Karnataka, India	No clear CM outcome

Type	Year	Author	Title	Exclusion reason
Report	2017	Care	TIPPING POINT NEPAL Phase 1 Evaluation Findings	No clear CM outcome
Report	2017	Care	TIPPING POINT BANGLADESH Phase 1 Evaluation Findings	No clear CM outcome
Report	2022	Care	Family Support for Girl's Leadership and Empowerment	No clear CM outcome
Report	2022	Care	Advocacy for Girls' Rights and Against Child, Early & Forced Marriage	No clear CM outcome
Report	2013	Chiranjibi	A report on Mid-term Evaluation of Stromme Foundation Project Nepal (2011-15)	No clear CM outcome
Report	2013	Choices	Transforming Gender Norms among Very Young Adolescents: An Innovative Intervention and Evaluation in Nepal	No clear CM outcome
Generic	2020	U. Das; Sarkhel	Does more schooling imply improved learning? Evidence from a Conditional Cash Transfer programme in India	No clear CM outcome
Journal Article	2023	U. Das; P. Sarkhel	Does more schooling imply improved learning? Evidence from the Kanyashree Prakalpa in India	Duplicate
Report	2015	Deloitte	Evaluation of Meena Radio Programme UNICEF Evaluation of Meena Radio Programme Final Report	No behaviour measure
Journal Article	2015	K. Dempsey; N. Anandaraja; R. Premkumar; S. Arole	Impact of a health education program on Adolescent Girls' health knowledge in rural Maharashtra, India	No clear CM outcome
Report	2019	I. Development Research	Stopping Child Marriage in Bangladesh: Developing a Behaviour Change Intervention Using Social Media	Contextual study
Journal Article	2022	A. Dutta; A. Sen	CAN ECONOMIC INSTRUMENTS CHANGE MINDSETS? THE IMPACT OF A CONDITIONAL CASH TRANSFER ON ASPIRATIONS OF ADOLESCENT GIRLS	No clear CM outcome

Type	Year	Author	Title	Exclusion reason
Journal Article	2014	F. Ebrahimi	Child Marriage and Domestic Violence A curse For Afghan Society	No clear CM outcome
Report	2016	E. Farzana; H. Jyotirmoy; S. Johana	Impact of BALIKA program on learning outcomes among Girls in Rural Bangladesh	No clear CM outcome
Report	2018	F. Ferreira; C. Cruz; K. Smith	Baseline-Endline Report: Reaching the Unreached (RtU) through Open and Distance Learning (ODL) in Bangladesh, India and Pakistan	Contextual study
Journal Article	2017	F. J. Ferreira; M. A. Kamal	Community Engagement to End Child Early Forced Marriage– Experiences in Selected South Asian Countries	No behaviour measure
Report	2020	K. Ford; R. Singh	Influencing Policy to Reduce Child Marriage in India: Reflections from Young Lives	Contextual study
Report	2017	M. R. Gandhi; T. Malainambirajan	IMPACT OF NEHRU YUVA KENDRA SANGATHAN IN VIRDHUNAGAR DISTRICT	No clear CM outcome
Report	2018	A. Ghimire; F. Samuels; R. Tiwari; S. Bhujel	Gendered experiences of adolescents Baseline findings from World Vision’s Rupantaram adolescent lifeskills curriculum	Baseline study
Generic	2018	J. Gibbons	Female Secondary School Stipend Programs in Bangladesh and Pakistan: What can we learn from South Asia’s CCTs?	Evidence review
Report	2019	I. Girls	PREVENTING CHILD, EARLY AND FORCED MARRIAGE (CEFM) THROUGH OPEN, DISTANCE AND TECHNOLOGY-BASED EDUCATION FINAL REPORT	Duplicate
Report	2020	K. Government of	AN EVALUATION OF BETI BACHAO BETI PADHAO” SCHEME IMPLEMENTED IN VIJAYAPURA DISTRICT IN KARNATAKA STATE KARNATAKA EVALUATION AUTHORITY DEPARTMENT OF PLANNING, PROGRAMME MONITORING AND STATISTICS GOVERNMENT OF KARNATAKA”	No clear CM outcome

Type	Year	Author	Title	Exclusion reason
Report	2015	D. Green	OXFAM ACTIVE CITIZENSHIP CASE STUDY THE 'WE CAN' CAMPAIGN IN SOUTH ASIA	No clear CM outcome
Report	2021	C. Her	5 years of building child marriage free communities Insights from an external evaluation	No clear CM outcome
Report	2021	C. Her	Report external end term evaluation	No clear CM outcome
Report	2016	Icrw	Towards gender equality: The GEMS journey thus far	No clear CM outcome
Report	2017	Icrw	Implementation and Evaluation of the Gender Equity Movement in Schools (GEMS) program in specific sites-Vietnam, India and Bangladesh	No clear CM outcome
Report	2011	Icrw; Coro; Tiss	Building Support for Gender Equality Young Adolescents in School Mumbai India	No behaviour measure
Journal Article	2023	M. N. Islam; A. Rabbani; A. Talukder; R. R. Siddiqua; S. Nujhat; M. Rahman; A. Roy; M. Sarker	Edutainment and the prevention of under-age marriages: The evaluation of a television series designed to promote positive role models in Bangladesh	No behaviour measure
Report	2018	M. C. Jawad Tasneem Kakal Maryse Kok	YES I DO. 2018 Midline Study	Not in South Asia
Report	2018	S. Jayachandran; T. Jain; D. Dhar	Impacts Of Breakthrough's School-Based Gender Attitude Change Programme In Haryana, India	No behaviour measure
Journal Article	2018	A. Khudejha; Y. Mayevskaya; M. Sommer; A. Razzaque; B. Laird; Y. Khan; S. Qureshi; K. Falb; L. Stark	Promoting Adolescent Girls' Well-Being in Pakistan: a Mixed-Methods Study of Change Over Time, Feasibility, and Acceptability, of the COMPASS Program	No behaviour measure
Report	2021	S. Kidd; D. Athias; A. Tran	Universal Child Benefits: transforming the lives of children across South Asia	No clear CM outcome
Report	2021	W. Koster; E. Miedema; N. R. M. Pouw	AISSR-UvA Her Choice Impact Evaluation Report	Duplicate

Type	Year	Author	Title	Exclusion reason
Report	2023	D. M. Lai	From: Juan Echanove Associate Vice President, Food and Water Systems CARE USA Subject: Statement of Difference on the Final Evaluation for SHOUHARDO III	No clear CM outcome
Report	2023	B. Magic	Adolescent and Livelihood Programmes IMPACT REPORT 2022-23	No clear CM outcome
Conference Proceedings	2017	S. R. Mahmud; S. N. Tumpa; A. B. Islam; C. N. Ferdous; N. Paul; T. T. Anannya; leee	BONITAA: A Smart Approach to Support the Female Rape Victims	No clear CM outcome
Report	2017	M. K. Mahmud Tahreen Tahrima Chowdhury Paritosh Roy Amin Bin Hasib	Impact Evaluation of the 1st Phase of SWAPNO	No clear CM outcome
Report	2014	P. Maitra; S. Mani	Learning and Earning: Evidence from a Randomized Evaluation in India	Marriage as an exposure variable
Journal Article	2022	L. Maxwell; Z. Khan; K. M. Yount	Do laws promoting gender equity and freedom from violence benefit the most vulnerable? A multilevel analysis of women's and adolescent girls' experiences in 15 low- and-middle-income countries	No clear CM outcome
Report	2019	A. J. Melnikas; G. Saul; S. Kumar Singh; J. Mkandawire Mouhamadou Gueye	More Than Brides Alliance: Midline evaluation report	Midline report
Report	2014	P. Nanda; N. Datta; P. Das	Impact of Conditional Cash Transfers on Girls' Education	No clear CM outcome
Conference Proceedings	2014	P. Nanda; N. Datta; P. Das; A. Mishra; P. Achyut; R. Patel	Looking at Conditional Cash Transfers as Solutions to Early Marriage: An Analysis from Evaluation Survey in North India	No clear CM outcome
Journal Article	2013	Nct	Evaluation of an Intervention for Adolescent Girls in Karnataka	No behaviour measure
Journal Article	2019	Nct	Evaluation of Tipping Point	Study protocol

Type	Year	Author	Title	Exclusion reason
Journal Article	2019	Nct	Preventing Early Child Marriage in Nepal	Study protocol
Journal Article	2023	Nct	Development and Testing of Balika Bodhu	Study protocol
Journal Article	2023	J. N. Nielsen; F. Saopkota; J. Karki; S. Singh; K. Shakya; M. Rahman; T. Bishop; M. De Graffenried; A. Stormer; M. Green	Building adolescent self-efficacy, health and resilience: lessons from Nepal and Bangladesh	No clear CM outcome
Journal Article	2020	N. Omidakhsh; J. Heymann	Improved child marriage laws and its association with changing attitudes and experiences of intimate partner violence: a comparative multi-national study	No clear CM outcome
Journal Article	2013	P. Parihar; R. Nanda; S. K. Kher; N. Ahmed; S. P. Singh	Impact of Self-Help Groups on Rural Women in Jammu District	No clear CM outcome
Journal Article	2022	K. Parvin; A. Talukder; M. A. Mamun; S. Kalra; A. Laterra; R. T. Naved	A cluster randomized controlled trial for measuring the impact of a social norm intervention addressing child marriage in Pirogacha in Rangpur district of Bangladesh: study protocol for evaluation of the Tipping Point Initiative	Study protocol
Report	2021	C. Population	More Than Brides Alliance—Marriage: No child's play, Endline evaluation brief	No behaviour measure
Thesis	2011	M. S. Pradhan	Social Exclusion and Social Change: Access To, and Influence of, Community-Based Collective Action Programs in Nepal	No clear CM outcome
Journal Article	2020	R. Prakash; T. S. Beattie; B. Cislighi; P. Bhattacharjee; P. Javalkar; S. Ramanaik; R. Thalinja; C. Davey; M. Gafos; C. Watts; M. Collumbien; S. Moses; S. Isaac; L. Heise	Changes in Family-Level Attitudes and Norms and Association with Secondary School Completion and Child Marriage Among Adolescent Girls: Results from an Exploratory Study Nested Within a Cluster-Randomised Controlled Trial in India	No behaviour measure

Type	Year	Author	Title	Exclusion reason
Report	2014	G. Prennushi; A. Gupta	Women's Empowerment and Socio-Economic Outcomes Impacts of the Andhra Pradesh Rural Poverty Reduction Program The World Bank South Asia Region Sustainable Development Department	No clear CM outcome
Journal Article	2021	B. Rasmussen; N. Maharaj; A. Karan; J. Symons; S. Selvaraj; R. Kumar; M. Kumnick; P. Sheehan	Evaluating interventions to reduce child marriage in India	No clear CM outcome
Report	2020	Rutgers	Hello, I Am (2017-2020) End of programme summary of results and key learnings	No clear CM outcome
Journal Article	2022	R. Satyanarayana; M. Collumbien; A. Pujar; L. Howard-Merrill; B. Cislighi; R. Prakash; P. Javalkar; R. Thalinja; T. Beattie; S. Moses; S. Isac; M. Gafos; P. Bhattacharjee; L. Heise	'I have the confidence to ask': thickening agency among adolescent girls in Karnataka, South India	No clear CM outcome
Report	2017	R. Sayara	Evaluation of Afghanistan's Child Protection Action Network	No clear CM outcome
Journal Article	2013	P. C. Scales; P. L. Benson; L. Dershem; K. Fraher; R. Makonnen; S. Nazneen; A. K. Syvertsen; S. Titus	Building Developmental Assets to Empower Adolescent Girls in Rural Bangladesh: Evaluation of Project Kishoree Kontha	No clear CM outcome
Generic	2018	A. H. Schaeffing	From Girls to the Poor Understanding Changes in a Cash Transfer Education Stipend Project in Bangladesh	No clear CM outcome
Report	2018	P. Shahmir Hamid	Yes I do Alliance: Mid-Term Review Report	Midline report
Report	2008	R. Shahnaz; R. Karim	Providing Microfinance and Social Space to Empower Adolescent Girls: An Evaluation of BRAC's ELA Centres	Pre 2010
Report	2010	N. Sinha; J. Yoong	Long Term Financial Incentives And Investment In Daughters: Evidence From Conditional Cash Transfers In North India	No clear CM outcome

Type	Year	Author	Title	Exclusion reason
Report	2015	L. C. Smith	Quantitative Impact Evaluation Of The SHOUHARDO II Project In Bangladesh	No clear CM outcome
Report	2020	I. Spotlight	COUNTRY PROGRAMME DOCUMENT AFGHANISTAN	No clear CM outcome
Report	2017	M. Subramanyam; C. Ebert; C. Bommer; L. Bogler; A. Kumar; S. Varghese; S. Atre; S. Vollmer	Impact Of The Gram Varta Programme On Health, Nutrition, And Women's Empowerment In India	No behaviour measure
Report	2015	Unfpa	Financial Incentives for Girls – What Works?	No behaviour measure
Report	2015	Usaid; Care	SHOUHARDO II Final Quantitative Performance Evaluation	No clear CM outcome
Report	2016	D. Van Esbroeck	Final evaluation of the My Voice My Rights Programme-Synthesis report EVALUATION OF THE 'MY RIGHTS MY VOICE' PROGRAMME SYNTHESIS REPORT	No clear CM outcome
Journal Article	2022	K. M. Yount; R. L. Durr; I. Bergenfeld; C. J. Clark; Z. Khan; A. Laterra; P. Pokhrel; S. Sharma	Community Gender Norms and Gender Gaps in Adolescent Agency in Nepal	No behaviour measure
Journal Article	2011	A. Parrot	Human Rights and Health Status of Girls and Young Women in Afghanistan Under the New Democracy: Forced and Child Marriages	Evidence review
Report	2016	F. Van; G. M. Van; L. De Jeude -W Out; V. D. Bender	Final Term Evaluation Girl Power Programme, 2011-2015 Including in-depth case studies For the Girl Power Alliance	No clear CM outcome
Journal Article	2015	S. C. White	Qualitative perspectives on the impact evaluation of girls' empowerment in Bangladesh	Evidence review
Report	2014	T. Her	Her Turn 2014 Annual Report	No clear CM outcome
Journal Article	2014	M. M. Islam; A. J. Gagnon	Child marriage-related policies and reproductive health in Bangladesh: a cross-sectional analysis	Study protocol

Type	Year	Author	Title	Exclusion reason
Report	2020	A. Javed	Early Marriage and Social Norms: Evidence from India's Unenforced Child Marriage Ban	Study protocol
Report	2021	C. Maillard; S. Greijer; H. Reda; B. Mwamlima; H. Juillard	External Evaluation of the Yes I Do Programme and Alliance Final Report	Programme terminated early
Report	2021	Plan	Yes I Do Alliance 2016-2020 End Report	Programme terminated early
Journal Article	2015	Q. Baig; S. Sadaf	She leads: A movement to liberate marginalized women in Pakistan	Study protocol
Report	2022	N. Buchmann; E. Field; R. Glennerster; S. Nazneen; X. Y. Wang; L. Barisal	Financial Incentives and an Adolescent Empowerment to Reduce Child Marriage in Rural Bangladesh Researchers: Fieldwork: Innovations for Poverty Action (IPA)	Duplicate
Journal Article	2018	V. Chandra-Mouli; M. Plesons; A. Barua; P. Sreenath; S. Mehra	How can collective action between government sectors to prevent child marriage be operationalized? Evidence from a post-hoc evaluation of an intervention in Jamui, Bihar and Sawai Madhopur, Rajasthan in India	No clear CM outcome
Report	2016	E. Field; R. Glennerster; S. Nazneen; N. Buchmann; S. Pimkina	Empowering Girls in Rural Bangladesh	Duplicate
Journal Article	2013	S. A. Ali	Effectiveness of linking comprehensive sexuality education with economic empowerment education for girls to improve reproductive health and gender equality indicators in a muslim society: Qualitative findings from a pilot programme	Study protocol
Generic	2005	S. Amin; L. Suran	Program Efforts to Delay Marriage Through Improved Opportunities: Some Evidence from Rural Bangladesh	Pre 2010
Journal Article	2011	B. Ghosh	Child Marriage, Society and the Law: A Study in a Rural Context in West Bengal, India	No clear CM outcome
Report	2021	Commonwealth of Learning	Reaching the Unreached: Scale-Up Empowerment Study	No clear CM outcome

Type	Year	Author	Title	Exclusion reason
Journal Article	2021	H. K. Biswas	Impact of Kanyashree Prakalpa on Educational Progress of School-Going Girls: A Case Study of Domkal Block In Murshidabad District of West Bengal	No behaviour measure
Report	2016	Brac	MONITORING and EVALUATING COMMUNITY IMPACT of the BUILDING YOUNG WOMEN'S LEADERSHIP THROUGH SPORTS (BYLTS) PROGRAMME BRAC Adolescent Development Programme	No clear CM outcome
Journal Article	2022	C. Misunas; S. Amin	Identifying Latent Classes of Empowerment Among Early Adolescent Girls and the Factors that Cultivate Them: Evidence from a Community-Based Skills Training Program	No clear CM outcome
Report	2013	M. A. Alim	Changes in Knowledge and Attitudes of School Girls Towards Sexual Harassment and its Incidence: an Impact Assessment of the MEJNIN Programme	No clear CM outcome
Report	2015	T. Her	Her Turn 2015 Annual Report	not a research study
Report	2008	A. Kanesathasan; L. J. Cardinal; E. Pearson; S. Das Gupta; S. Mukherjee; A. Malhotra; I. Center for Research on Women Icrw	Catalyzing Change Improving Youth Sexual and Reproductive Health Through disha, an Integrated Program in India	No clear CM outcome
Report	2020	A. Amirapu; N. Asadullah; Z. Wahhaj	Can Child Marriage Law Change Attitudes and Behaviour? Experimental Evidence from an Information Intervention in Bangladesh	Time period <1year
Report	2021	M. Valenza; C. Chávez; A. Rigole; T. L. Sumy; M. Mohsin; I. Hossain	Ready to Start School, Learn and Work Evidence from three education programmes for out-of-school children and adolescents in Bangladesh	Time period <1year

Type	Year	Author	Title	Exclusion reason
Journal Article	2023	K. M. Yount; R. L. Durr; I. Bergenfeld; S. Sharma; C. J. Clark; A. Laterra; S. Kalra; A. Sprinkel; Y. F. Cheong	Impact of the CARE Tipping Point Program in Nepal on adolescent girls' agency and risk of child, early, or forced marriage: Results from a cluster-randomized controlled trial	Time period <1year
Report	2010	J. Ara; N. C. Das	Impact Assessment of Adolescent Development Programme in the Selective Border Regions of Bangladesh	No behaviour measure
Report	2023	Care	IMAGINE programs in Bangladesh and Niger. IMAGINE Endline Evaluation Report	No clear CM outcome
Journal Article	2020	T. S. Beattie; R. Prakash; P. Javalkar; M. Collumbien; S. Ramanai; R. Thalinja; S. Murthy; C. Davey; S. Moses; L. Heise; C. Watts; S. Isac; M. Gafos; P. Bhattacharjee	Assessing the effect of the Samata intervention on factors hypothesised to be on the pathway to child marriage and school drop-out: results from a cluster-randomised trial in rural north Karnataka, India	No clear CM outcome
Report	2018	E. Field; R. Glennerster; S. Nazneen; S. Pimkina; I. Sen; N. Buchmann	Age At Marriage, Women's Education, And Mother And Child Outcomes In Bangladesh	Ethics
Report	2012	M. A. Alim; M. Ashrafun Nahar; F. Z. Khatoun	How the Adolescents Applied their Learning in their Lives: An Evaluation of the Adolescent Development Programme of BRAC	No clear CM outcome
Report	2018	Unicef	An Intervention for Prevention of Child Marriage in Gujarat	Policy brief
Journal Article	2022	S. Sood; A. Ramaiya	On the Wings of Wishes" , Adolescent Girls in Bangladesh Taking Flight Using A Social Behavioral Change Communication Program to Address Child Marriage Related Social Norms: A Longitudinal Panel Study"	No clear CM outcome
Report	2024	World Vision	It Takes Nepal to End Child Marriage Campaign Impact Report	Not a research study
Journal Article	2021	K. M. Yount; Y. F. Cheong; Z. Khan; S. S. Miedema; R. T. Naved	Women's participation in microfinance: Effects on Women's agency, exposure to partner violence, and mental health	No clear CM outcome

2. Review results

Type	Year	Author	Title	Legal and ethical?	Location (country)	Location (region/state - if mentioned)	Income and economic strengthening	CCT	Education	Social norms change	Employment	Sexual and reproductive health	Law and policy reform	Systems strengthening	Impact of intervention on CH as primary or secondary outcome (yes/no)	Description of sample identification, recruitment and numbers (yes/no)	Qual, quant, mixed	Number of arms	Sample size information	Sample size - criteria met?	Time between intervention and evaluation (months/unspecified)	Time > 1 year?	Adequate description of methods used to collect data (yes/no)	Adequate description of methods used in analysis (yes/no)	Included in meta-analysis?	If quant/mixed-exclusion meta-analysis methods, reason for exclusion (yes/no)
Report	2011	A. Alam, J. E. Baer, X. V. D. Carpio	Does Clean For School Influence Young Women's In the Longer Term? Evidence from Pakistan	Yes	Pakistan		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Quantitative	2	17,761 (RDD model)	yes	5 years	yes	yes	yes	Not RCT/quasi-experimental	
Report	2020	A. Aminapu, N. Asaullah, Z. Wahaj	Can Child Marriage Law Change Attitudes and Intentions? Evidence from an Information Intervention in Bangladesh	Yes	Bangladesh							Yes	Yes	Yes	Yes	Yes	Mixed	2	971	yes	1 year	yes	yes	yes		
Journal Article	2023	A. Banerjee, A. Karar, N. Ghosh, I. Bhattacharya, S. Adhikari	Empowering Adolescent Girls during a Global Health Crisis: Insights from the Adolescent Girls and the Knowledge Platform Convergence (SAG-KPI) Program	Yes	India	West Bengal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	no	Quantitative	1	180 marriages prevented in 2021	yes	2 years	yes	yes	no	No raw data to convert OR to DID	
Report	2020	A. Datta, A. Sen	Kanyashree Prakalpa in West Bengal, India: Identification and evaluation	Yes	India	West Bengal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Quantitative	2	1050 households	yes	4 years	yes	yes	yes	Not RCT/quasi-experimental	
Report	2021	A. J. Mehinikas, G. Sauli, M. Chau, N. Pandey, J. Mandawire, M. Guaye, A. Datta, S. Amin	More Than Brides Alliance: Endline evaluation report	Yes	India	Bihar, Jharkhand, Rajasthan, Odisha			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Quantitative	1	2882	yes	3 years	yes	yes	no	Not RCT/quasi-experimental	
Journal Article	2023	A. J. Mehinikas, G. Sauli, M. Chau, N. Pandey, J. Mandawire, A. Datta, S. Amin	Community-based empowerment program to improve girls' status in Bihar, India: Brides Alliance intervention in India, Malawi, Mali and Niger	Yes	India				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Quantitative	1	609 villages	yes	4 years	yes	yes	no		
Journal Article	2023	A. J. Mehinikas, G. Sauli, N. Pandey, M. Makino, S. Amin, M. Chau	Do Child Marriage Programs Help Girls Weather Shocks Like COVID-19? Evidence from the More Than Brides Alliance Intervention	Yes	India	Bihar, Jharkhand, Rajasthan, Odisha	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Quantitative	1	4461	yes	3 years	yes	yes	no		
Journal Article	2014	A. Krishnan, R. Amarchand, P. Byass, C. Panday, N. Ng	No one says 'Not to marry' - a mixed methods approach for evaluating conditional cash transfer schemes to improve girl children's status in Haryana, India	Yes	India	Haryana	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Mixed	3	1946	yes	3 years (ABAD arm), 5 years (Revised ABAD arm), 3 years	yes	yes	yes	Duplicate dataset	
Journal Article	2021	A. Rahman, A. Bhattacharjee, R. Rahman	Labour Market Outcomes and Child Marriage: Evidence from BRAC's Skills Training Programme	Yes	Bangladesh		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Quantitative	1	1000	yes	3 years	yes	yes	yes		
Journal Article	2020	A. Saugata, S. Sood, N. Kapil, R. Advisor	Enabling Gender Norm Change Through Communication: A Case Study of A Trias-Media Entertainment-Education Initiative in Bangladesh (2015-2019)	Yes	Bangladesh		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Mixed	3	4356	yes	2 years	yes	yes	no		
Report	2022	Alexandra Avdeenko and Marius Frölich	Improving Adolescent Lives in Pakistan: An Impact Evaluation	Yes	Pakistan			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Mixed	3	7,415 interviews	yes	4 years	yes	yes	yes		
Journal Article	2014	Arshia Sivasankaran, V. S. M. E. F. and Employment 2014, p. 1	Work and Women's Marriage, Fertility and Health: Evidence from Tunga Mill in India	Yes	India		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Quantitative	1	1019	yes	Lifetime participation in a savings group or micro-finance organisation	yes	yes	no		
Journal Article	2022	B. K. Datta, S. Hassan	An Early Assessment of the 2017 Child Marriage Restraint Act of Bangladesh	Yes	Bangladesh				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Quantitative	1	MICS data used across 64 districts	yes	2 years	yes	yes	no		
Journal Article	2022	B. Zine	Transforming through Time, Come, Marginalized Girls in India Recasting Themselves as Agents of Change	Yes	India				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Qualitative	1	60	yes	5 years	yes	yes	no	Duplicate dataset	
Report	2017	C. Bennett	It's His Turn: Short-term and mid-term impact evaluation of Return programming	Yes	Nepal				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Qualitative	1	3,259 adolescents across 3 districts	yes	3+ years	yes	yes	no	Duplicate dataset	
Journal Article	2023	C. J. Clark, K. J. Jha, S. V. E. Ranz, I. B. Beck, L. D. D. F. E. Ching, S. Kafra, A. Laterra, K. M. Yount	Qualitative endline results of the tipping point to prevent child, early and forced marriage in Nepal	Yes	Nepal		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Mixed	3	125	yes	20 months	yes	yes	no	version aged 15-21 at baseline, not possible to calculate CM	
Report	2022	Care	Impact of Tipping Point Initiative, a social norms intervention, in addressing child marriage and other adolescent health and behavioral outcomes in a northern district of Bangladesh	Yes	Bangladesh	Rangpur district	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Mixed	3	1123	yes	17 months	yes	yes	no		
Journal Article	2018	D. Mehra, A. Sarkar, P. Sreenath, J. Behara, S. Mehra	Effectiveness of a community based intervention to delay early marriage, early pregnancy and improve school retention among adolescents in India	Yes	India	Utah Pradesh, Bihar	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Quantitative	2	1770	yes	4 years	yes	yes	no		
Journal Article	2021	E. Batyev, L. Maria Pasando	Trends in Child Marriage and New Evidence on the Selective Impact of Changes in Age-at-Marriage Laws on Early Marriage	Yes	Nepal, Bhutan, India, Mauritania, Tajikistan, Kazakhstan		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Quantitative	2	7932 in total, 3935 (Bhutan), 3158 (Nepal)	yes	laws introduced between 1995-2010, and latest MICS data from 2017. Bhutan MICS 2010, Law implemented 1996; Nepal DHS 2016;	yes	yes	yes		
Report	2018	E. Cochar, L. Louis, N. Kulkarni, C. Anderson, E. Louis, P. Snydel, U. Chatterjee, V. Dharmaraj	Landsea Research, Evaluation and Learning (REL) Program in Six Districts of West Bengal	Yes	India	West Bengal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Mixed	2	1506	yes	17 months	yes	yes	no		
Journal Article	2020	E. K. M. Tisdall, P. Cuevas-Parra	Challenges for children's participation: Child activism for ending child marriage	Yes	Bangladesh				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Qualitative	1	36 activists interviewed	yes	NA	yes	yes	no	Not possible to calculate/estimate standard error	

Journal Type	Year	Author	Title	Legal and ethical?	Location (country)	Location (region/state - if mentioned)	Income and economic strengthening	non-CCT	CCT	Education	Social norms change	Empowerment	Sexual and reproductive health	Law and policy reform	Systems strengthening	Impact of intervention on CH as primary or secondary outcome (Yes/no)	Description of sample identification, recruitment and numbers (Yes/no)	Qual, quant, mixed	Number of arms	Sample size information	Sample size - criteria met?	Time between intervention and outcome (months/unspecified)	time > 1 year?	Adequate description of methods used to collect data (Yes/no)	Adequate description of methods used to analyze data (Yes/no)	Included in meta-analysis?	If quant/mixed- exclusion meta-analysis methods, reason for
Journal Article	2015	Heath, Rebeck, Mobarak, A. Mushiq	Manufacturing growth and the lives of Bangladesh women	Yes	Bangladesh		Yes	Yes								Yes	Yes	Quantitative	1	124	Yes	6-30 average years of exposure	Yes	Yes	no		
Report	2019	Mishika Verma, Divya Sebastian, Ananya Verma, Pooja Verma, Madhura Das, Pranita Achyut, Ronak Soni, ICRW, Alison Andrew, Sonya Kulkova, Gabriele Smanrelli (IFSI), and Sanjay Sharma (Manjan Foundation)	Pushing Boundaries by Empowering Adolescent Girls and Communities: Evidence from Evaluation of the PankH Program in Rajasthan, India	Yes	India	Rajasthan	Yes			Yes	Yes	Yes				Yes	Yes	Mixed	2	5921	Yes	16 months	Yes	Yes	no	Not RCT/quasi-experimental	
Report	2017	Priya Nanda, Abhishek Gauram, Priya Das, Aditi Vyas, Abala Ganakaracra, Naini Datta	Planning Ahead for Girls' Empowerment and Employability	Yes	India	Delhi				Yes	Yes	Yes				Yes	Yes	Quantitative	1	647 (intervention) 662 (control)	Yes	2 years	Yes	Yes	yes	Hazard ratio effect size not compatible with other measurements	
Report	2011	J. Baez, X. D. Cerpio, A. Alam, T. C. Nguyen, A. D. Haidoyan, J. Iborrice	Do Conditional Cash Transfers Lead to Medium-Term Improvements in Health from A Female School Stipend Program in Pakistan	Yes	Pakistan		Yes	Yes								Yes	Yes	Quantitative	2	17,761 (RDD model)	Yes	4-5 years	Yes	Yes	no	Not RCT/quasi-experimental	
Report	2014	UNICEF	Kanyashree Prakalpa Rapid Assessment	Yes	India	West Bengal	Yes									Yes	Yes	Mixed	1	9 schools across 3 districts	Yes	1 year	Yes	Yes	no	Not RCT/quasi-experimental	
Report	2019	Kristina Smith	Baseline-Endline Report Preventing Child, Early and Forced Marriage (CEFM) through Open, Distance and Technology-based Education	Yes	Bangladesh, Pakistan (Mozambique and Tanzania)		Yes	Yes				Yes				Yes	Yes	Mixed	1	2025	Yes	3.5 years	Yes	Yes	no	No effect measure	
Report	2013	Landasa	Security for Girls through Land	Yes	India	West Bengal	Yes	Yes		Yes	Yes	Yes				Yes	Yes	Mixed	1	7800	Yes	1 year	Yes	Yes	No		
Report	2017	M. Collin, T. Talbot, W. Bank	Do Age-of-Marriage Laws Work? Evidence from a Large Sample of Developing Countries	Yes	Global (midwives mentioned)		Yes			Yes	Yes	Yes	Yes			Yes	Yes	Quantitative	1	DHS data from 60 countries	Yes	18 years	Yes	Yes	yes		
Report	2022	Foundation for Development	Evidence/Evaluation of Aarbhaj Project Cohort II Final Evaluation Report: Evaluator Foundation for Development Management	Yes	Nepal	province 2				Yes	Yes	Yes				Yes	Yes	Mixed	1	400	Yes	5 years	Yes	Yes	no		
Journal Article	2021	M. Mulken, T. D. Ngo, S. Psaki, S. Amin, K. Auzan	Metagenomic Impacts of Interventions Aiming to Drive Child and Adolescent Growth, Aposos	Yes	Bangladesh				Yes		Yes	Yes	Yes			Yes	Yes	Quantitative	3	11,699	Yes	2 years	Yes	Yes	yes		
Journal Article	2023	M. Saha	Analysis of Kanyashree Prakalpa with Survey Data	Yes	India	West Bengal	Yes									Yes	Yes	Quantitative	1	DHS4 data	Yes	1 year	Yes	Yes	no	Hazard ratio effect size not compatible with other measurements	
Journal Article	2021	M. Tameez, A. O'Donoghue	The effect of a large-scale welfare program on child marriage in India	Yes	India		Yes	Yes								Yes	Yes	Quantitative	1	48,247 (round 2 Younger cohort)	Yes	4 years (round 2), 10 years (round 3), 16 years (round 4)	Yes	Yes	yes		
Report	2016	N. Buchmann, E. Field, R. Glenister, S. Nazreen, S. Pinkina, I. Sen, L. Abbott, M. Duthee, R. Khander, E. Lino, P. Mehta, P. Rahman, A. Dkt, R. Sharma, P. Shoemaker, S. Humaira, M. Bhaskar	The effect of conditional incentives and a girls' empowerment curriculum on adolescent marriage, childbearing and education in rural Bangladesh: a community clustered randomized controlled trial	Yes	Bangladesh		Yes				Yes	Yes				Yes	Yes	Quantitative	4	12,454	Yes	4.5 years	Yes	Yes	no	Not RCT/quasi-experimental	
Report	2018	N. Buchmann, E. Field, R. Glenister, S. Nazreen, S. Pinkina, I. Sen, L. Abbott, M. Duthee, R. Khander, E. Lino, P. Mehta, P. Rahman, A. Dkt, R. Sharma, P. Shoemaker, S. Humaira, M. Bhaskar, J. Sun	Pover vs Money: Alternative Approaches to Reducing Child Marriage in Bangladesh, a Randomized Control Trial	Yes	Bangladesh		Yes	Yes			Yes	Yes				Yes	Yes	Quantitative	4	15464	Yes	4.5 years	Yes	Yes	no		
Journal Article	2021	N. M. Buchmann Erica Field Rachel Glenister Shahana Nazreen Xiao Yu Wang, L. Abbott, M. Duthee, R. Khander, E. Lino, P. Mehta, P. Rahman, A. Dkt, R. Sharma, P. Shoemaker, S. Humaira, M. Bhaskar, J. Sun, S. Prato, S. Avani, N. Buchmann, E. M. Field, Glenister, S. Nazreen, S. Pinkina, Wang, S. Nazreen Bangladesh	A Signal to End Child Marriage: Theory and Experimental Evidence from Bangladesh	Yes	Bangladesh		Yes				Yes	Yes				Yes	Yes	Quantitative	4	24,095	Yes	1 and 4.5 years	Yes	Yes	yes		
Report	2020	N. Mathers	Poverty, cash transfers and adolescents' lives: exploring the unintended consequences of Nepal's social pension: a mixed-methods study	Yes	Nepal	Bairahat	Yes	Yes				Yes				Yes	Yes	Quantitative	1	1689	Yes	10 years	Yes	Yes	yes		
Report	2016	N. Rindsey, S. J. Jejeebhoy Rajib Acharye, S. Kumar Singh, M. Acharya Sharma, S. J. Jejeebhoy, R. Acharya	Effects of the PRACHAR project's reproductive health training programme for adolescents: findings from a longitudinal study	Yes	India	Bhar							Yes			Yes	Yes	Quantitative	2	3980	Yes	3 - 4 years	Yes	Yes	yes		
Report	2021	N. Bhagunathan, S. Leena, M. Siddhi	Can media campaigns change attitudes and spark actions to reduce early child marriage? Impact of a community-based media campaign in Bihar state of India	Yes	India	Bihar Jharkhand	Yes			Yes	Yes					Yes	Yes	Quantitative	3	705 (control) 373, 381, 379, 729 (treatment arms)	Yes	7 years	Yes	Yes	yes		
Journal Article	2022	P. Cuevas-Pare, T. E. Kay, M	Investing in activism: Learning from children's actions to stop child marriage	Yes	Bangladesh (land Ghana)						Yes	Yes				Yes	Yes	Mixed	1	75 case studies	Yes	> 1 year	Yes	Yes	no	No effect measure	
Report	2016	P. Nanda, N. Datta, E. Pradhan, P. Das, S. Lamba, A. Warner	Making Change with Cash? Impact of a Conditional Cash Transfer Program on Age of Marriage in India	Yes	India		Yes									Yes	Yes	Quantitative	1	5684	Yes	3 years	Yes	Yes	no		
Report	2011	pathfinder international	Multisectoral, Gendered Approach to Improve Family Planning and Sexual and Reproductive Health for Young People: A Research Study Pathfinder International Acknowledgments	Yes	India	Bhar							Yes			Yes	Yes	Mixed	1	1225	Yes	5 years	Yes	Yes	yes		

Type	Year	Author	Title	Location (country)	Location (region/state - if mentioned)	Income and economic strengthening	non-CT	CT	Education	Social norms change	Empowerment	Sexual and reproductive health	Law and policy reform	Systems strengthening	Impact of intervention on CMI as primary or secondary outcome (yes/no)	Description of sample identification, recruitment and numbers (yes/no)	qual, quant, mixed	Number of arms	Sample size	Sample size - criteria met?	Time between intervention and evidence (months/unspecified)	time > 1 year?	Adequate description of methods used to collect data (yes/no)	Adequate description of methods used to analyze data (yes/no)	Included in meta-analysis?	If quant/mixed-methods, reason for exclusion (meta-analysis)
Report	2010	Rahman M., & Daniel E.	A Reproductive Health Communication Model That Helps Improve Young Women's Reproductive Life and Reduce Population Growth: The Case of PRACHAR from Bihar, India	India	Bihar							Yes		Yes	Yes	Yes	Quantitative	1	1200	Yes	Yes	Yes	Yes	no	Not possible to calculate/estimate standard error	
Report	2022	R. Cassidy, A. Dam, W. Janssens, U. Khan, K. Morsani	Father of the Bride, or Steel Magnolias? Targeting men, women or both to reduce child marriage	Pakistan	Punjab and Sindh				Yes			Yes		Yes	Yes	Yes	Quantitative	4	1687 (father treatment), 1687 (mother treatment), 756 (both treatment)	Yes	midline 6 months after intervention, endline 18 months after intervention,	Yes	Yes	yes	Mean age effect size not enough to conduct analysis	
Journal Article	2019	R. Prakash, T. S. Beattie, P. Javalkar, P. Bhattacharjee, R. Thaling, S. Murthy, C. Davey, M. Garos, J. K. Ghosh, M. Gumber, S. Moses, L. Hasee, S. Isaac	The Samata intervention to increase secondary school completion and reduce child marriage among adolescent girls: results from a cluster-randomised controlled trial in India	India	Karnataka	Yes			Yes	Yes	Yes			Yes	Yes	Yes	Quantitative	1	1265 (intervention) 1192 (control)	Yes	Yes	Yes	Yes	yes	Duplicate dataset	
Journal Article	2023	R. Sara, S. Priyanka	Long-Term Effects of an Education Stipend Program on Domestic Violence: Evidence from Bangladesh	Bangladesh		Yes			Yes					Yes	Yes	Yes	Quantitative	2	2,885	Yes	5 years and 2 years (each arm)	Yes	Yes	yes	Continuous measure of age at marriage	
Report	2017	Raj, A., McDougall, L., Jackson, E	Community Experiences with Project RISHTA: A Youth Empowerment Program to Delay Marriage in Jharkhand, India	India	Jharkhand	Yes			Yes		Yes			Yes	Yes	Yes	Qualitative	1	49	Yes	13 years	Yes	Yes	no		
Journal Article	2012	Robert Jensen	Do labor opportunities affect young women's work and family decisions? Experimental evidence from India	India		Yes								Yes	Yes	Yes	Quantitative	1	1,279	Yes	3 years	Yes	Yes	No		
Report	2022	S. Anur, F. Rahman Noor, M. Ifran Hossain, I. Ehsani, M. Mansur, U. Siddi, S. Amin	Keeping girls in schools to reduce child marriage in rural Bangladesh: Endline assessment	Bangladesh	Chapainabaganj, Khaulata, and Sharpur	Yes			Yes	Yes	Yes	Yes		Yes	Yes	Yes	Mixed	2	3127	Yes	2 years	Yes	Yes	yes		
Report	2011	S. Amin	Empowering adolescent girls in rural Bangladesh: Kishor Abhiyan	Bangladesh		Yes			Yes		Yes			Yes	Yes	Yes	Quantitative	2	2500	Yes	2 years	Yes	Yes	yes	Duplicate dataset	
Report	2016	S. Amin, J. Ahmed, J. Sahai, I. Hossain, E. Haque	Delaying Child Marriage Through Community-Based Skills-Development Programs For Girls: Results From A Randomized Controlled Study in Rural Bangladesh	Bangladesh	Khulna, Sokhria, and Narail	Yes			Yes	Yes	Yes	Yes		Yes	Yes	Yes	Mixed	4	11,609	Yes	4 years	Yes	Yes	yes		
Journal Article	2018	S. Amin, J. S. Sarin, J. A. Ahmed	Skills-Building Programs to Reduce Child Marriage in Bangladesh: A Randomized Controlled Trial	Bangladesh		Yes			Yes		Yes			Yes	Yes	Yes	Quantitative	4	11609	Yes	18 months	Yes	Yes	no	Not RCT/quasi-experimental	
Journal Article	2021	S. Biswas, U. Das	Whats the Worth of a Promise? Evaluating the Indirect Effects of a Program to Reduce Early Marriage in India	India	Hydrabad	Yes			Yes					Yes	Yes	Yes	Quantitative	2	321 (treatment), 293 (control)	Yes	4 years	Yes	Yes	yes	Not RCT/quasi-experimental	
Report	2021	S. Dey, T. Ghosal	Can Conditional Cash Transfer Defeat Child Marriage? Impact of Kanyashree Prakrapa in West Bengal, India	India	West Bengal	Yes			Yes					Yes	Yes	Yes	Quantitative	2	124,365 (baseline), 699,686 (endline)	Yes	2-3 years	Yes	Yes	yes	No effect measure	
Report	2021	S. Rahman Khandker, H. Akhteruzzaman, N. Fuwa, R. Hayashi	THE FEMALE SECONDARY STIPEND AND ASSISTANCE PROGRAM IN BANGLADESH WHAT DID IT ACCOMPLISH?	Bangladesh		Yes			Yes					Yes	Yes	Yes	Quantitative	1	1769 households	Yes	20 years	Yes	Yes	yes	Hazard ratio effect size not compatible with other measurements	
Journal Article	2020	S. Ramanak, M. Columbian, A. Pujar, L. Hayward-Merrill, B. Colaghi, B. Prakash, P. Javalkar, R. Thaling, T. Murthy, S. Ghosh, S. Ghosh, M. Garos, P. Bhattacharjee, L. Hasee	I have the confidence to ask': thickening agency among adolescent girls in Karnataka, South India	India	Karnataka	Yes			Yes	Yes	Yes			Yes	Yes	Yes	Qualitative	1	31	Yes	3 years	Yes	Yes	no		
Report	2012	S. Yeon Hong, L. Remi Sarr	Long-term Impacts of the Free Tuition and Female Empowerment Program on the Labor Market Participation of Married Women in Bangladesh	Bangladesh		Yes			Yes			Yes		Yes	Yes	Yes	Quantitative	2	5852 (Panel A) 3503 (Panel B)	Yes	20 years	Yes	Yes	yes		
Report	2014	Baker et al.	Evaluation of Empowering Young Girls and Women in Maharashtra, India	India	Maharashtra	Yes				Yes	Yes			Yes	Yes	Yes	Mixed	1	907	Yes	3 years	Yes	Yes	no	Duplicate dataset	
Report	2021	T. Fujii, C. Ho, R. Ray, A. Shonchay	Conditional Cash Transfer, Less Farming, and SMS Messages: Evidence from a Randomized Field Experiment in Bangladesh	Bangladesh		Yes			Yes					Yes	Yes	Yes	Quantitative	4	798 (both cohorts)	Yes	2 years	Yes	Yes	yes		
Journal Article	2023	T. Museddy, F. Said	Educate the Girls: Long Run Effects of Secondary Schooling for Girls in Pakistan	Pakistan		Yes			Yes					Yes	Yes	Yes	Quantitative	1	83,165 (treatment), 135,550 (control)	Yes	3.4 years (average)	Yes	Yes	yes		
Report	2017	J. Rizvi	Protecting Human Rights (PHRI) Final Performance Evaluation	Bangladesh	Dhaka, Bogra, Jessore, Chittagong	Yes			Yes	Yes	Yes			Yes	Yes	Yes	Mixed	1	324	Yes	6 years	Yes	Yes	no		
Report	2021	Unicef	Summative Evaluation of the AFGHAN WOMEN'S LEADERSHIP INITIATIVE (AWLI) in Support of Adolescent Girls	Afghanistan		Yes			Yes	Yes	Yes			Yes	Yes	Yes	Qualitative	1	162	Yes	5 years	Yes	Yes	no		
Report	2021	W. Koster, E. Miedema, A. Sotrows, N. Pouw, F. Bah	Her Choice Impact Evaluation Report: On 5-years of 'Her Choice' Building Child-Marriage Free Communities'	Bangladesh, Nepal, Pakistan		Yes			Yes	Yes	Yes	Yes		Yes	Yes	Yes	Mixed	3	604 (Bangladesh) 304 (Pakistan) 200 (Nepal)	Yes	4 years	Yes	Yes	yes		
Journal Article	2018	Y. Hahn, A. Islam, K. Nuzhat, R. Smyth, H. S. Wing	Education, marriage, and fertility: Long-term evidence from a female stipend program in Bangladesh	Bangladesh		Yes				Yes				Yes	Yes	Yes	Quantitative	2	24239	Yes	5 years, 2 years (each intervention arm)	Yes	Yes	yes	Mean age effect size not enough to conduct analysis	
Report	2016	Y. Sayeed	Effect Of Girls' Secondary School Stipend On Completed Schooling, Age At Marriage, And Age At First Birth: Evidence From Bangladesh	Bangladesh		Yes								Yes	Yes	Yes	Quantitative	2	18,394 (arm 1) 20,880 (arm 2)	Yes	Less than 5 years (arm 1) 5 years (arm 2)	Yes	Yes	yes		

3. Meta-analysis data

Study code	Location (country)	Typology	Modality	An RCT or quasi-experimental study design*	Child marriage outcomes recorded as either a dichotomous measure (i.e. married or not by age 18) or a continuous measure (i.e. age at marriage) OR both	Outcome info	Effect measure	Raw effect measure	Standard error / 95% confidence interval	Conversion	Effect size	Standard error
Ainul et al., 2022	Bangladesh	empowerment + education + SRH	Life skills, Tutoring, SRH education, vocational training, CCTs for out-of school girls	quasi-experimental	dichotomous	Married < 18	DiD	-0.048		Calculated SE using p=0.5 and sample size	-0.048	0.018
Alam et al., 2011	Pakistan	Income and economic strengthening	CCT (school)	quasi-experimental	dichotomous	Marriage age 15 - 19	DiD	0.010	0.009		0.010	0.009
Amin et al., 2016 (education arm)	Bangladesh	education	Tutoring	RCT	dichotomous	Marriage < 18	DiD	-0.065		Calculated SE using p=0.5 and sample size	-0.065	0.037
Amin et al., 2016 (gender-awareness arm)	Bangladesh	empowerment + SRH	SRH, sensitisation and awareness, life skills	RCT	dichotomous	Marriage < 18	DiD	-0.064		Calculated SE using p=0.5 and sample size	-0.064	0.037
Amin et al., 2016 (livelihoods arm)	Bangladesh	empowerment	Life skills	RCT	dichotomous	Marriage < 18	DiD	-0.051		Calculated SE using p=0.5 and sample size	-0.051	0.039
Amirapu et al., 2020 (treatment 1)	Bangladesh	Law and policy	Knowledge of laws	quasi-experimental	dichotomous	Marriage age 13 - 17 after 10 months	Risk difference (OLS model)	0.071	0.042		0.071	0.042
Amirapu et al., 2020 (treatment 2)	Bangladesh	Law and policy	Knowledge of laws	quasi-experimental	dichotomous	Marriage age 13 - 17 after 10 months	Risk difference (OLS model)	0.038	0.042		0.038	0.042
Avdeenko and Frölich, 2022 (child protection + non-formal basic education arm)	Pakistan	empowerment + education + social norms	Life skills, Tutoring, Sensitisation and awareness raising	RCT	dichotomous	Females married age 10-17	Risk difference (intent to treat effect regression model)	-0.014	0.006		-0.014	0.006

Study code	Location (country)	Typology	Modality	An RCT or quasi-experimental study design*	Child marriage outcomes recorded as either a dichotomous measure (i.e. married or not by age 18) or a continuous measure (i.e. age at marriage) OR both	Outcome info	Effect measure	Raw effect measure	Standard error / 95% confidence interval	Conversion	Effect size	Standard error
Aveenko and Frölich, 2022 (child protection, non-formal education pool)	Pakistan	empowerment + social norms	Life skills, Sentisation and awareness raising	RCT	dichotomous	Females married age 10-17	Risk difference (intent to treat effect regression model)	-0.004	0.003		-0.004	0.003
Aveenko and Frölich, 2022 (child protection, not non-formal basic education pool)	Pakistan	empowerment + social norms	Life skills, Sentisation and awareness raising	RCT	dichotomous	Females married age 10-17	Risk difference (intent to treat effect regression model)	-0.013	0.006		-0.013	0.006
Aveenko and Frölich, 2022 (non-formal basic education arm)	Pakistan	empowerment + education	Life skills, Tutoring	RCT	dichotomous	Females married age 10-17	Risk difference (intent to treat effect regression model)	-0.008	0.006		-0.008	0.006
Batyra and Pesando, 2021 (Bhutan sample)	Bhutan	Law and policy	Legislative reform	quasi-experimental	dichotomous	Marriage < 18	Percentage point	0.03		Calculated SE using p=0.5 and sample size	0.03	0.016
Batyra and Pesando, 2021 (Nepal sample)	Nepal	Law and policy	Legislative reform	quasi-experimental	dichotomous	Marriage < 19	Percentage point	-0.08		Calculated SE using p=0.5 and sample size	-0.08	0.018
Biwas and Das, 2021	India	Income and economic strengthening	CCT (marriage)	quasi-experimental	dichotomous	Marriage < 18	Risk difference (intent to treat effect regression model)	-0.05	0.025		-0.05	0.025
Buchmann et al., 2021 (empowerment + incentive arm)	Bangladesh	empowerment + income	Life skills, CCT	RCT	dichotomous	Married < 18	Risk difference (OLS model)	0.019	0.014		0.019	0.014
Buchmann et al., 2021 (empowerment arm)	Bangladesh	empowerment	Life skills	RCT	dichotomous	Married < 18	Risk difference (OLS model)	-0.007	0.008		-0.007	0.008

Study code	Location (country)	Typology	Modality	An RCT or quasi-experimental study design*	Child marriage outcomes recorded as either a dichotomous measure (i.e. married or not by age 18) or a continuous measure (i.e. age at marriage) OR both	Outcome info	Effect measure	Raw effect measure	Standard error / 95% confidence interval	Conversion	Effect size	Standard error
Buchmann et al., 2021 (incentive arm)	Bangladesh	Income and economic strengthening	CCT (marriage)	RCT	dichotomous	Married < 18	Risk difference (OLS model)	-0.049	0.01		-0.049	0.01
Cassidy et al., 2022 (arm 1: female only)	Pakistan	social norms	Media campaigns	RCT	dichotomous	Marriage < 18	Risk difference (logit regression)	-0.026		Calculated SE using p=0.5 and sample size	-0.026	0.018
Cassidy et al., 2022 (arm 2: male only)	Pakistan	social norms	Media campaigns	RCT	dichotomous	Marriage < 18	Risk difference (logit regression)	-0.054		Calculated SE using p=0.5 and sample size	-0.054	0.018
Cassidy et al., 2022 (arm 3: female and male)	Pakistan	social norms	Media campaigns	RCT	dichotomous	Marriage < 18	Risk difference (logit regression)	-0.052		Calculated SE using p=0.5 and sample size	-0.052	0.018
Dey and Ghosal, 2022	India	Income and economic strengthening	CCT (school + marriage)	quasi-experimental	dichotomous	Marriage < 19	Risk difference	-0.161	23.1 (t-statistic)		-0.161	0.007
Dutta and Sen, 2020	India	Income and economic strengthening	CCT (school + marriage)	quasi-experimental	dichotomous	Marriage < 18	DiD	-0.14		Calculated SE using p=0.5 and sample size	-0.001	0.051
Fujii et al., 2021 (CCT gain arm)	Bangladesh	Income and economic strengthening	CCT (school)	RCT	dichotomous	Marriage < 18	DiD	-0.051	0.064		-0.051	0.064
Fujii et al., 2021 (CCT loss arm)	Bangladesh	Income and economic strengthening	CCT (school)	RCT	dichotomous	Marriage < 18	DiD	-0.104	0.058		-0.104	0.058
Fujii et al., 2021 (SMS reminder)	Bangladesh	education	SMS attendance reminder for parents	RCT	dichotomous	Marriage < 18	DiD	-0.103	0.059		-0.103	0.059
Hahn et al., 2018 (Cohort 1: 5 years of FSSP)	Bangladesh	Income and economic strengthening	CCT (school + marriage)	quasi-experimental	continuous	Age at marriage	mean (years)	0.574	0.082		0.574	0.082
Hahn et al., 2018 (Cohort 2: 2 years of FSSP)	Bangladesh	Income and economic strengthening	CCT (school + marriage)	quasi-experimental	continuous	Age at marriage	mean (years)	0.34	0.081		0.34	0.081
Khandker et al., 2021	Bangladesh	Income and economic strengthening	CCT (school + marriage)	quasi-experimental	continuous	Age at marriage	mean (years)	3.165	2.08 (t-stat)	Calculated SE using p=0.5 and sample size	3.165	0.065

Study code	Location (country)	Typology	Modality	An RCT or quasi-experimental study design*	Child marriage outcomes recorded as either a dichotomous measure (i.e. married or not married by age 18) or a continuous measure (i.e. age at marriage) OR both	Outcome info	Effect measure	Raw effect measure	Standard error / 95% confidence interval	Conversion	Effect size	Standard error
Koster et al., 2021 (Bangladesh)	Bangladesh	all	Education access, SRH education, Awareness raising, Policy enforcement	quasi-experimental	dichotomous	Married 12-17	DiD	-0.002		Calculated SE using p=0.5 and sample size	-0.002	0.055
Koster et al., 2021 (Nepal)	Nepal	all	Education access, SRH education, Awareness raising, Policy enforcement	quasi-experimental	dichotomous	Married 12-17	DiD	0.11		Calculated SE using p=0.5 and sample size	0.12	0.086
Koster et al., 2021 (Pakistan)	Pakistan	all	Education access, SRH education, Awareness raising, Policy enforcement	quasi-experimental	dichotomous	Married 12-17	DiD	-0.116		Calculated SE using p=0.5 and sample size	-0.116	0.1
Krishnan et al., 2014 (ABAD intervention)	India	Income and economic strengthening	CCT (marriage)	quasi-experimental	continuous	Age at marriage	mean (years)	-0.2	0.188		-0.2	0.188
Krishnan et al., 2014 (revised ABAD intervention)	India	Income and economic strengthening	CCT (marriage)	quasi-experimental	continuous	Age at marriage	mean (years)	0.1	0.173		0.1	0.173
Krishnan et al., 2014 (Laadil intervention)	India	Income and economic strengthening	CCT (school + marriage)	quasi-experimental	continuous	Age at marriage	mean (years)	0.8	0.168		0.8	0.168
Makino et al., 2021 (high participation villages)	Bangladesh	empowerment	Life skills	RCT	dichotomous	Married < 18 (high participation villages)	Risk difference (ANCOVA)	-0.017	0.026		-0.017	0.026
Makino et al., 2021 (high participation villages)	Bangladesh	empowerment + SRH	Sensitisation and awareness raising	RCT	dichotomous	Married < 18 (high participation villages)	Risk difference (ANCOVA)	-0.026	0.019		-0.026	0.019
Makino et al., 2021 (high participation villages)	Bangladesh	education	Tutoring	RCT	dichotomous	Married < 18 (high participation villages)	Risk difference (ANCOVA)	-0.048	0.024		-0.048	0.024
Makino et al., 2021 (low participation villages)	Bangladesh	empowerment	Life skills	RCT	dichotomous	Married < 18 (low participation villages)	Risk difference (ANCOVA)	-0.049	0.029		-0.049	0.029
Makino et al., 2021 (low participation villages)	Bangladesh	empowerment + SRH	Sensitisation and awareness raising	RCT	dichotomous	Married < 18 (low participation villages)	Risk difference (ANCOVA)	-0.048	0.024		-0.048	0.024

Study code	Location (country)	Typology	Modality	An RCT or quasi-experimental study design*	Child marriage outcomes recorded as either a dichotomous measure (i.e. married or not by age 18) or a continuous measure (i.e. age at marriage) OR both	Outcome info	Effect measure	Raw effect measure	Standard error / 95% confidence interval	Conversion	Effect size	Standard error
Makino et al., 2021 (low participation villages)	Bangladesh	education	Tutoring	RCT	dichotomous	Married < 18 (low participation villages)	Risk difference (ANCOVA)	-0.013	0.029		-0.013	0.029
Mathers, 2020 (UCT eligible male)	Nepal	Income and economic strengthening	UCT (OAA)	quasi-experimental	dichotomous	Married girls 10 - 17	DiD	0.029	0.028		0.029	0.028
Mathers, 2020 (UCT eligible couple)	Nepal	Income and economic strengthening	UCT (OAA)	quasi-experimental	dichotomous	Married girls 10 - 17	DiD	0.023	0.044		0.023	0.044
Mathers, 2020 (UCT eligible female)	Nepal	Income and economic strengthening	UCT (OAA)	quasi-experimental	dichotomous	Married girls 10 - 17	DiD	0.023	0.042		0.023	0.042
Meinikas et al., 2023 (cluster 1)	India	empowerment + social norms	Safe spaces, life skills, sensitisation and awareness	quasi-experimental	dichotomous	Married < 18 (cluster 1)	Risk difference (ANCOVA)	-0.061	0.017		-0.061	0.017
Meinikas et al., 2023 (cluster 2)	India	empowerment + social norms	Safe spaces, life skills, sensitisation and awareness	quasi-experimental	dichotomous	Married < 18 (cluster 2)	Risk difference (ANCOVA)	-0.064	0.017		-0.064	0.017
Mussadiq and Said, 2023	Pakistan	Income and economic strengthening	CCT (school)	quasi-experimental	dichotomous	Married < 16	Risk difference	-0.048	SE=SD/ sqrt(n)		-0.048	0.001
Nanda et al., 2017	India	empowerment	Life skills, Economic empowerment interventions	quasi-experimental	dichotomous	Married < 18	Risk difference	-0.06	0.027	Calculated SE using p=0.5 and sample size	-0.06	0.027
Pandley et al., 2016 (combined intervention district)	India	SRH	SRH	quasi-experimental	dichotomous	Married < 18	Risk difference	-0.019		Calculated SE using p=0.5 and sample size	-0.019	0.027
Pandley et al., 2016 (comprehensive intervention district)	India	SRH	SRH	quasi-experimental	dichotomous	Married < 18	Risk difference	0.056		Calculated SE using p=0.5 and sample size	0.056	0.027
Pandley et al., 2016 (standalone intervention district)	India	SRH	SRH	quasi-experimental	dichotomous	Married < 18	Risk difference	0.019		Calculated SE using p=0.5 and sample size	0.019	0.023
Prakash et al., 2019	India	social norms + empowerment + income + education	Sensitisation and awareness raising	RCT	dichotomous	Married < 18	Risk difference	0.005	0.014		0.005	0.014

Study code	Location (country)	Typology	Modality	An RCT or quasi-experimental study design*	Child marriage outcomes recorded as either a dichotomous measure (i.e. married or not by age 18) or a continuous measure (i.e. age at marriage) OR both	Outcome info	Effect measure	Raw effect measure	Standard error / 95% confidence interval	Conversion	Effect size	Standard error
Raghunathan et al., 2021 (community mobilisation)	India	social norms	community mobilisation, mass media	RCT	dichotomous	Married < 17	Risk difference	-0.054	0.032		-0.054	0.032
Raghunathan et al., 2021 (full package intervention)	India	empowerment + SRH + social norms	Mentoring, SRH education, Media campaigns	RCT	dichotomous	Married < 18	Risk difference	-0.089	0.03		-0.089	0.03
Raghunathan et al., 2021 (mass media)	India	social norms	Media campaigns	RCT	dichotomous	Married < 19	Risk difference	-0.045	0.028		-0.045	0.028
Raghunathan et al., 2021 (training package intervention)	India	empowerment + SRH + social norms	Mentoring, SRH education, Media campaigns	RCT	dichotomous	Married < 18	Risk difference	-0.108	0.031		-0.108	0.031
Rahman et al., 2021	Bangladesh	empowerment + income	Life skills, education to support income generation	quasi-experimental	dichotomous	Married < 18	Risk difference (likelihood model)	-0.09	0.05		-0.09	0.05
Sara and Priyanka, 2011	Bangladesh	Income and economic strengthening	CCT (school)	quasi-experimental	continuous	Age at marriage	mean (years)	0.695	0.173		0.695	0.173
Sayed, 2016 (rural cohort)	Bangladesh	Income and economic strengthening	CCT (school + marriage)	quasi-experimental	continuous	Age at marriage	mean (years)	0.611	0.168		0.611	0.168
Sayed, 2016 (urban cohort)	Bangladesh	Income and economic strengthening	CCT (school + marriage)	quasi-experimental	continuous	Age at marriage	mean (years)	0.207	0.528		0.207	0.528
Tsaneva and O'Donoghue, 2021	India	Income and economic strengthening	Workfare program	quasi-experimental	dichotomous	Marriage < 18	Risk difference	0.027	0.006		0.027	0.006
Verma et al., 2018 (girls only intervention)	India	empowerment + SRH	Safe spaces, life skills, SRH education	RCT	dichotomous	Married < 18	Risk difference	-0.02	0.017	Calculated SE using p=0.5 and sample size	-0.02	0.017
Verma et al., 2018 (integrated intervention)	India	empowerment + SRH + social norms	Safe spaces, life skills, SRH education, sensitisation and awareness training	RCT	dichotomous	Married < 18	Risk difference	-0.01	0.017	Calculated SE using p=0.5 and sample size	-0.01	0.017
Yeon Hong and Remi Sarr, 2013	Bangladesh	Income and economic strengthening	CCT (school + marriage)	quasi-experimental	continuous	Age at marriage	mean (years)	1.413	0.371		1.413	0.371

Annex D: Terms of Reference

TERMS OF REFERENCE META-SYNTHESIS AND META-ANALYSIS OF EVIDENCE ON CHILD MARRIAGE IN SOUTH ASIA

1. BACKGROUND AND JUSTIFICATION:

Child marriage is defined as a formal or informal union in which one or both parties are under the age of 18¹. It is a global issue that threatens the lives, well-being and futures of girls and adolescents around the world. It places children and adolescents at high risk of violence and abuse with devastating and lifelong impact. As such, child marriage is recognized as a harmful traditional practice and a form of gender-based violence that perpetuates gender inequality and discrimination, limits the opportunities and choices of children, and undermines the development of families, communities, and societies. While specific drivers vary by context, child marriage is fueled by poverty, harmful social norms, insecurity and barriers to education.

Child marriage affects millions of girls and boys every year. According to recent data from UNICEF, around 21% of girls globally were married before the age of 18, and 4% were married before the age of 15². In absolute numbers, this translates into approximately 650 million women and girls alive today who were married as children, and an additional 115 million girls who are at risk of becoming child brides by 2030 if current trends continue.

Although child marriages occur across the globe, 90% of the burden is in low- and middle-income countries³. It is most prevalent in Sub-Saharan Africa, South Asia, and the Middle East and North Africa. Despite this significant progress in the last decades, South Asia is still home to 285 million child brides – representing 44 per cent of all child brides globally.⁴ While the levels of child marriage vary considerably across the region, from over 50 percent in Bangladesh to 2 percent in Maldives, more than one in four young women in south Asia were first married or in union before their 18th birthday.

The circumstances brought by the COVID 19 pandemic might imply that over the next decade, up to 10 million more girls will be at risk of becoming child brides⁵.

Child marriage is now recognized as both a human rights violation and as having profoundly negative impacts at all societal levels through lost earnings and the intergenerational perpetuation of poverty. In 2016, the elimination of child marriage by 2030 became an international commitment under goal 5 on gender equality in the Sustainable Development Goals, leading to a rapid increase in policy and programmatic efforts to end the practice.

The commitment to end child marriage has been renewed in 2020 by a resolution on child, early and forced marriage adopted by consensus at the Third Committee of the 75th Session of the United Nations General Assembly.⁶

UNICEF Response

UNICEF is playing a critical role in child marriage reduction at global, regional and country levels. As early as 2008, UNICEF's Child Protection Strategy identified child marriage as an important child protection issue to be tackled. UNICEF's expanded vision for ending child marriage, as reflected in the framework of the Global Programme to End Child Marriage, recognizes that all sectors need to

¹ United Nations definition. This definition is in line with the Convention on the Rights of Child

² "Child Marriage: Latest trends and future prospects" (2020) <https://www.unicef.org/media/87871/file/Child-Marriage-Latest-trends-and-future-prospects-2020.pdf>

³ 20 Years of the Evidence Base on What Works to Prevent Child Marriage: A Systematic Review, El Sevier

⁴ "Child Marriage: Latest trends and future prospects" *ibid.*

⁵ United Nations Population Fund, 'Impact of the COVID-19 Pandemic on Family Planning and Ending Gender-Based Violence, Female Genital Mutilation and Child Marriage', UNFPA Information Note, UNFPA, New York, 2020; and United Nations Children's Fund, 'COVID-19: A threat to progress against child marriage', UNICEF, New York, 2021

⁶ United Nations General Assembly, Seventy-Fifth Session of the Third Committee, Agenda Item 68 (a) Promotion and Protection of the Rights of Children, Child, early and forced marriage (revised draft resolution), A/C.3/75/L.18/Rev.1, 10 November 2020, <<http://undocs.org/A/C.3/75/L.18/Rev.1>>, accessed 14 May 2021.

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be mobilized in this work, from education to communication for development, to health, human immunodeficiency virus and social protection.

Work on child marriage has remained a priority for UNICEF, as reflected in the organization's strategic plan for 2018–2021 at both impact and outcome levels. UNICEF's Gender Action Plan (2018–2021) also identifies ending child marriage as one of five corporate priorities, further raising its profile within the organization.

UNICEF is working with governments, civil society organizations, communities, and children and adolescents themselves to prevent and respond to child marriage through a multi-sectoral and human rights-based approach that includes policy advocacy, capacity building, social mobilization, service delivery, and monitoring and evaluation.

In partnership with the United Nations Population Fund, UNICEF launched the Global Programme to Accelerate Action to End Child Marriage (GPECM) in 2015. The Global Programme aims at promoting the rights of adolescent girls to avert marriage and pregnancy and enables them to achieve their aspirations through education and alternative pathways. Phase I of the programme (2016–2019) aimed to strengthen critical institutions and systems in selected locations of the twelve countries where the GPECM is implemented, to deliver quality services and opportunities to adolescent girls, and set the foundations of attitudes, behaviors and norms against child marriage in families and communities. The Phase II (2020–2023) was designed to accelerate actions to end child marriage by enhancing investments in and support for both unmarried and married adolescent girls; by engaging key actors and increasing political support, resources, gender-responsive policies and frameworks; and by improving data and evidence on what works. Phase III (2024–2030) will be looking at a longer-term gender transformative goal for significantly larger proportions of adolescent girls to fully enjoy a childhood free from the risk of marriage.⁷

2. OBJECTIVE:

The body of research on child marriage has significantly expanded in recent years, but there are still significant gaps in our understanding, especially regarding effective interventions within particular contexts.

The combined meta-synthesis and meta-analysis aims at identifying, critically appraising, synthesizing and compiling all relevant and available evidence on what works to prevent child marriage in the South Asian Region (SAR). It will include models of child marriage prevention or reduction that have proven successful in humanitarian or fragile contexts, as well as for minority or extremely vulnerable populations. Interventions that had an impact on child marriage as a primary, secondary or unintended outcome will also be included in this study. The meta-analysis will provide a quantitative estimate of the effect size of ECM interventions from available rigorous studies that meet the relevant criteria.

The overarching purpose of the meta-synthesis and the meta-analysis is to enhance learning and facilitate evidence-based decision-making to improve programme results in South Asia. It aims at capturing learning on effective interventions to prevent child marriage in order to shed light on what works for ECM in the South Asian region.

The objectives of the meta-synthesis and the meta-analysis are thus threefold:

1. Recognizing patterns of results in different country contexts in the South Asian region.
2. Identifying evidence and knowledge gaps on child marriage in the region.
3. Estimating effect sizes for selected interventions with available data.

⁷ <https://www.unicef.org/protection/unfpa-unicef-global-programme-end-child-marriage>

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The meta-synthesis and the meta-analysis will serve to inform and improve the design of future interventions in the region and ultimately, the overall performance of UNICEF in this area. It will thus encourage the culture and use of rigorous evaluation and of evidence-based documents in decision making.

The findings will also feed into UNICEF ROSA's efforts to substantially contribute to the phase III programmatic discussion for the GPECM (2024-2030).

The primary intended audiences and users for this evaluation is UNICEF management, the broader UNICEF child marriage professionals, particularly at country office levels as well as donors; the programme governments and implementing partners. It is intended to be useful to all stakeholders working on child marriage.

3. SCOPE OF WORK:

Key aspects of the meta-synthesis and analysis scope are summarized in the following table:

Meta-synthesis and analysis scope

Area	Scope
Sectoral	<p>The meta-synthesis will consider all studies that examine the impact of an intervention on ECM, regardless of whether the intervention was designed to reduce ECM or to improve other aspects (health, schooling, etc.).</p> <p>The meta-analysis will only consider rigorous studies that provide estimates of the effect size.</p>
Temporal	<p>The meta-synthesis and analysis will look at evidence gathered between 2014 and 2023 on proven interventions to prevent child marriage and support girls. It will cover the two phases of the GPECM as well as the three UNICEF strategic plans (2014-2017; 2018-2021 and 2022-2025).</p> <p>If the number of eligible studies for the meta-analysis is insufficient, the period of study inclusion will be expanded to include earlier studies that meet the relevant criteria.</p>
Geographic	<p>The evaluation will include all countries within the South Asia region (Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka)</p>
Source	<p>Evidence extracted from evaluations, studies and research on ECM from UNICEF and other actors (published and grey literature from 2014-2023)</p>
Programme context	<p>All contexts where the programme operates will be included</p>
Evaluation criteria	<p>The meta-synthesis and analysis will focus on effectiveness. When data is available, it will also attend to address sustainability and scalability.</p>

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4. METHODOLOGY:

Meta-synthesis and analysis questions

The meta-synthesis and analysis will be a comprehensive and rigorous collation, assessment, and presentation of evidence (using both peer-reviewed and grey literature) with relevant critical appraisal of the literature.

The meta-synthesis will seek to answer the following main question, which could be further refined and/or elaborated at the preparation phase (please refer to section 6 of this document).

What type of interventions are effective in reducing child marriage incidence among girls aged 10-18 years or delaying age at marriage?

If data is available, the meta-synthesis and analysis will include elements pertaining to sustainability and scalability. In that case, it will attend to answer the following question: *To what extent have the outcomes of UNICEF's Early Childhood Marriage interventions been sustained and/or scaled up after the intervention period has ended?*

The meta-analysis, we will seek to answer: *What is the average effect size of specific interventions seeking to reduce child marriage in South Asia?*

By conducting this meta-synthesis and analysis, we will be answering the question: *What is the current state of evidence related to child marriage in the South Asian region?* This will enable us to identify both existing evidence as well as knowledge gaps on child marriage in the region, providing a more comprehensive understanding of the issue and highlighting areas where further research and/or evaluation are needed.

To successfully answer the above-mentioned questions, the selected team is expected to follow the approach outlined in the next section. This doesn't preclude the possibility for the selected team to suggest additional steps or adjustment of the current proposed approach.

5. ACTIVITIES AND TASKS

Preparation (phase I)

The preparation phase aims at explaining and justifying the search strategies, the screening tools, and other appropriate parameters necessary for the meta-synthesis and the meta-analysis.

Main components of the preparation phase for the meta-synthesis and analysis:

- **Refine the meta-synthesis and analysis** approach and steps proposed in this TOR, including the research question for the meta-synthesis and for the meta-analysis. The selected team should suggest additional tools and/or software's to conduct this assignment (e.g. artificial intelligence, natural language processing, Nvivo, etc.).
- **Conduct preliminary screening:** Examine existing relevant literature, including evidence gap maps and systematic reviews, to inform search strategies for the meta-synthesis and for the meta-analysis. A preliminary collection of evidence⁸ was already produced by ROSA's evaluation, impact and learning section and could be used as a starting point for the selected team.
- **Define search strategy and protocols for the meta-synthesis and analysis:** The selected team will develop a prespecified research protocol that describes the review aims and methods for both the published and grey literature. It should include a broad search

⁸ Referring to research, study and evaluation

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strategy⁹. This protocol will be applied systematically across the screening process to ensure quality and replicability. The draft review protocol will be revised considering comments from the Management Group and the Evaluation Reference Group (refer to section 7 of this TOR).

- **Map the ECM actors in SAR:** As part of the preparation phase, the selected team will be tasked with conducting a comprehensive actor's analysis, which involves identifying all relevant actors working on ending child marriage in the South Asian region. This analysis will provide a foundation for the data collection phase. To support this effort, ROSA's Evaluation, Impact, and Learning section has already produced a preliminary mapping of relevant actors, which can serve as a starting point for the selected team to further develop and refine.
- **Map the typology of ECM interventions:** the selected team will be responsible for developing a typology of interventions aimed at ending child marriage in the South Asian region. This typology should cover a range of thematic areas such as education, poverty reduction, life skills, health, social protection, and more, and should also include various modalities such as cash transfers, vocational training, community interventions, law and policy, and capacity development of governments. The team should pay particular attention to capturing innovative interventions that have been successful in the region. This mapping will be used during the data collection phase and will also serve as a foundation for the coding process, enabling the team to more effectively analyze and synthesize the data they gather.
- **Conduct scoping interviews:** To further refine the ECM actors and the typology of interventions maps, as well as to identify regional and country-level databases for the comprehensive screening in phase II, the selected team will conduct a limited number of scoping interviews with UNICEF ECM focal points and other relevant stakeholders. These interviews will enable the team to gather insights and feedback from those who have deep expertise and knowledge in the field, providing valuable guidance and direction.

Components specific to the meta-analysis:

- **Propose an analytical method for the meta-analysis:** The selected team should propose analytical methods¹⁰ for conducting the meta-analysis. The team is expected to present the advantages and disadvantages of each method, as well as the main associated challenges to allow the Management Group to make an informed decision. The proposal should also include an effect size measure and specify the types of effect sizes to be used, along with the proposed conversion to a common measure and the appropriate statistical methods to combine results and to determine homogeneity¹¹.

At the conclusion of the preparation phase, the selected team will submit a final inception report for approval. Prior to finalization, the team will prepare a PowerPoint presentation to present the report to the Management Group and Evaluation Reference Group, in accordance with section 7 of the TOR. The team should allow adequate time for the receipt and integration of feedback and comments on the draft protocols and ensure that any comments received are satisfactorily integrated into the final report.

⁹ e.g. search strings, reporting of hits for search strings, required snowballing, the degree of single and double screening, approach to arbiter disagreements, data extraction and management, unit of analysis issues, risk of bias assessment procedures, choice of effect measures to ensure that scales are comparable (e.g. range of net effect), the assessment and investigation of heterogeneity, assessment of reporting biases and finally data management.

¹⁰ E.g. Univariate meta-analysis, Meta-regression analysis, Meta-analytic structural equation modeling and Qualitative meta-analysis

¹¹ The test for homogeneity investigates the hypothesis that the size of the effect is equal in all included studies. If the test for homogeneity is significant, calculating a combined estimate may not be appropriate. If this is the case, the reviewer should re-examine the studies included in the analysis for substantial differences among study designs or characteristics of subjects.

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Data collection and review (phase II)

During this phase, the selected team will undertake the necessary bibliographic and screening tasks. The selected team will complete and deliver a full search coded file detailing the process and results of the search, the nature of included studies, reasons for exclusions, risks of bias assessments and sampling strategies used in studies.

- **Execute the comprehensive search and screening:** The team will execute the screening process as outlined in the approved protocol (c.f. preparation phase). The team will conduct a search of electronic databases and grey literature from 2014 onward. This should include key electronic databases¹² at global, regional and country levels (a minimum of 8 databases should be used to prevent biased results). The screening will necessarily include external documents produced by other entities than UNICEF (e.g. Government counterparts, other UN agencies, international development partners, Universities and NGO partners). Additionally, it is expected that the selected team maps grey literature through a web-based search of UN and other organizations engaged in child marriage. The team will have to hand search the literature based on identified citations in the published and grey literature for additional titles (referred hereafter as snowballing). In some limited cases, effort should be made to contact the authors to request additional information.
- **Map out the landscape of evidence for the meta-synthesis:** The selected team is expected to map the identified evidence/studies against identified type of interventions (c.f. approved mapping formulated during phase I) through an iterative search process. The selected team should also provide an overview of evidence collected per country. To address the challenge of identifying relevant articles, (semi) automated approaches using text mining and machine learning could be used.
- **Validate and select studies for the meta-synthesis:** The selected team will propose inclusion/exclusion criteria (e.g. scope of the evidence¹³, quality, evaluation approaches adopted¹⁴, language, etc.) for the selection of the evidence to be included in the data extraction. To facilitate discussion with the Management Group, the selected team will be responsible for mapping the available evidence for each type of intervention using 2-3 scenarios of eligibility criteria using PRISMA flow diagrams. By organizing the evidence in this way, the team can provide a more focused and structured overview of the available evidence, enabling the Management Group to more easily understand and evaluate the evidence base for each type of intervention.

Components specific to the meta-analysis:

- **Screening for the meta-analysis:** Beyond the elements listed in the meta-synthesis section for the screening process, at least two reviewers should independently search sources for relevant studies for the meta-analysis. It is essential that the selected team mitigate the publication bias¹⁵ by collecting sufficient data from grey literature.
- **Map out the landscape of evidence for the meta-analysis:** The selected team is expected to differentiate the data for the meta-synthesis from the evidence collected for the meta-analysis by mapping the studies providing net size effects against identified type of interventions (c.f. approved mapping formulated during phase I).
- **Validate and select studies for the meta-analysis:** The selected team will propose specific inclusion/exclusion criteria for the meta-analysis. One goal of inclusion and exclusion criteria is to create a homogenous condition for the data needed for the meta-analysis. The rationale for

¹² PubMed, EMBASE, Cochrane, PsycINFO, CINAHL, Popline, Sociological Abstracts, Google scholar, Econlit. Other databases can be suggested by the selected team. Additional databases can be added based on discussion with the ECM focal points and other key stakeholders during the scoping discussions.

¹³ E.g. exclude studies that measured knowledge and/or attitudes toward ECM

¹⁴ While the assignment prioritized experimental design studies, the meta-synthesis may also require the collection and analysis of qualitative studies.

¹⁵ Studies with negative results are less likely to be published and, therefore, results from meta-analyses may overstate a treatment effect

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choosing these criteria should be clearly stated. Although some criteria may overlap with those proposed for the meta-synthesis, dedicated criteria should be proposed for selecting studies to be included in the meta-analysis, in accordance with the approved analytical method from Phase I.

The team is expected to develop 2-3 scenarios for different eligibility criteria proposals, using PRISMA flow diagrams. The scenarios should also include the number of excluded studies and reasons for exclusion.

While it is possible to conduct a meta-analysis with just two studies, the combined power of the studies must be greater than the power of each individual study. Therefore, it is recommended to include the maximum number of relevant and rigorous studies for each intervention in the meta-analysis. This will require the team to appraise the quality of the evidence collected, ensuring that it is reliable, relevant, and of sufficient quality to be included in the meta-analysis. Additionally, the selected team should be careful to avoid studies that published the same data but appears in different studies.

- **Develop a coding form for the meta-analysis:** the selected team will propose a coding sheet to extract key characteristics of studies listed such as the name of the study, the effect size, the study sample size, year, country, type of ECM approach, etc.

The data collection and review phase will culminate in the submission and eventually approval of the final Data Collection and Review Report. Prior to finalization, the selected team will prepare a PowerPoint presentation to present the report to the Management Group and Evaluation Reference Group, in accordance with section 7 of the TOR. The team must allow adequate time for the receipt and integration of comments on the draft protocols, and ensure that any comments received are satisfactorily integrated into the final report.

Analysis (phase III)

In this phase, the selected team will present the Management Group and the Evaluation Reference Group with the written meta-synthesis and analysis report.

- **Pilot data extraction for the meta-synthesis:** To ensure the accuracy and effectiveness of the data extraction tool and coding process, the selected team should conduct a pilot study on one type of intervention approach. This will involve applying the data extraction and coding protocols to a small subset of the available evidence to test their validity and reliability. The team will then engage with the Management Group to assess the initial results from the pilot study, in order to refine and improve the protocols before conducting the full analysis.
- **Conduct the data extraction and analysis:** based on the selected inclusion/exclusion criteria, the team is expected to extract key evidence per type of interventions. Once the data extraction and coding process is complete, the selected team will be responsible for synthesizing and analyzing the results, with the goal of identifying patterns and key results achieved for each type of intervention. This will involve analyzing the data, identifying common themes and patterns, and drawing conclusions about the effectiveness of each intervention type. The team will have to provide a range of net effects for each instrument using statistical methods of combining evidence, based on the evidence extracted and analyzed.

Components specific to the meta-analysis:

- **Pilot data extraction for the meta-analysis:** The selected team should conduct a pilot meta-analysis on one type of intervention approach (same as the one selected for the meta-synthesis). This will involve applying the data extraction, coding protocols and application of the agreed analytical method to a small subset of evidence (cf. selected analytical method agreed on phase

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l). This approach will help to refine the methodology, particularly the analytical model¹⁶, and identify any potential issues before conducting the full meta-analysis.

- **Perform a sensitivity analysis on the pilot:** the selected team should conduct a sensitivity analysis on the data to ensure the robustness of the meta-analytical findings. It is important to thoroughly examine any significant deviations in the results and identify influential outlier observations that could potentially bias the observed findings. The selected team should compare the results with and without outliers for the MG in order to make an informed decision on the next steps. This approach should be initially applied to the pilot study and then extended to the rest of the meta-analysis.
- **Provide a quality scoring and risk for selected studies:** To ensure that rigorous studies receive more weight in a meta-analysis, it's essential to provide a quality score and risk assessment for each selected study. Two reviewers should use the same quality instrument to score the studies, and the results of the quality assessment should be compared. Any discrepancies in quality scores should be resolved through discussion. Additionally, the selected team should present the selected studies through a forest plot, in which the point estimate for the risk ratio is represented and the confidence interval for each study is represented by a horizontal line.

The analysis phase will conclude with the submission and approval of the pilot meta-synthesis and the pilot meta-analysis Report and a discussion with the Management Group to assess the initial results from the pilot study.

Reporting (phase IV)

- **Prepare the report:** the selected team will be responsible for preparing a comprehensive compendium of ECM evidence in the South Asian region, organized by type of intervention. The final structure of the meta-synthesis and analysis report will be further refined and agreed upon at the end of Phase II. However, the report is expected to include several key chapters, such as:
 1. An introductory chapter, providing an overview of the objectives, scope, and detailed methodology of the meta-synthesis and the meta-analysis.
 2. A chapter on ECM trends in SAR, drawing on data provided by UNICEF and other relevant sources, to provide context for the analysis of interventions.
 3. A chapter on drivers of ECM in SAR, exploring the social, cultural, economic, and political factors that contribute to child marriage in the region.
 4. A chapter on the different interventions including results achieved per selected instruments on ECM, a summary of how the intervention was implemented in the different studies. with around three pages dedicated to each instrument. This chapter should present the instrument and the drivers it addresses, summarize the number of studies considered for the analysis of the instrument, duration of the intervention, and any country-specific results.
 5. A separate chapter on the results of the meta-analysis including information on the range of net effects and effect size achieved
 6. A concluding chapter on conclusions and recommendations, drawing on the findings of the meta-synthesis and analysis to make recommendations for future programming and policy in the area of ECM in SAR.

¹⁶ E.g. Mantel-Haenszel method for fixed effects theory, and the DerSimonian-Laird method for the random effects theory

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The report will also include several annexes, such as a methodology annex¹⁷ and a list of studies considered. The selected team will be responsible for ensuring that the report is comprehensive, well-organized, and clearly presented.

- **Create a repository of evidence:** The team will facilitate the repository of all studies, evaluations and research collected during the comprehensive screening in phase II. Those should be arranged per countries.
- **Provide data set:** the selected team will deliver the dataset extracted from all studies included in the synthesis, covering all relevant characteristics. It is also expected that all data generated during the review and critical appraisal (including code) will be delivered.

The reporting phase will conclude with the submission and approval of the meta-synthesis and analysis Report. Prior its finalization, the team is expected to prepare a PPT for a presentation of the report to the Management Group and Evaluation Reference Group as per section 7 of this TOR.

6. DURATION:

Indicative detailed timeline

Activity	Time Estimate
Preparation	July-August 2023
Preliminary screening, definition of the search strategy and protocol, mapping and conduction of scoping interviews	July 2023
Presentation summarizing the results of the preparation phase (cf. section 8)	July 2023
Submission of the draft Inception Report	Early August 2023
Data collection and review	August- September 2023
Comprehensive search and screening	August 2023
Validation and selection of key studies	September 2023
Presentation summarizing the results of the data collection and review phase (cf. section 8)	September 2023
Submission of the Data collection and review Report	September 2023
Reporting and dissemination	October - December 2023
Pilot data extraction	October 2023
Conduct the data extraction and analysis	October-November 2023
Presentation summarizing the results of the analysis and reporting phase as indicated in section 8	November 2023
Submission of the draft meta-synthesis and analysis report	November- December 2023

¹⁷ This should include the inclusion and exclusion criteria of both components (meta synthesis and meta-analysis). The meta-analysis a detailed description 1) The research questions; 2) studies researched and those identified for analysis including the criteria used;3) methodology used to assess homogeneity of studies; 4) description of the techniques used to combine the data; 5) how the relevant data will be extracted from the studies; how bias will be assessed; 6) integration of results and how results will be interpreted.

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7. WORKING LOCATIONS: REMOTE

8. DELIVERABLES:

The expected deliverables are the following:

Inception Report (phase I)

- i. This process will begin with the development of a PowerPoint summarizing the results of the preliminary screening, the proposal for the search strategy and protocol, the mapping of ECM actors in SAR, the typology of ECM interventions as well as the planned timeline. This will be presented to the MG and the ERG in two separate meetings.
- ii. Based on this power point, a draft inception report will be developed. This report will further develop the points enumerated in the previous bullet point (i) as well as the elements described in section 6 of this TOR. The draft inception report should also integrate the comments received during the presentations to the MG and ERG.
- iii. The final the inception report will be approved by the MG once all comments from the MG and ERG are dully addressed. The report should not exceed 30 pages, excluding annexes

Data collection Report (phase II)

- iv. A detailed PowerPoint (PPT) that reflects the results of the comprehensive screening as presented in section 6, including the evidence mapping. The PPT should also include the landscape of evidence per type of interventions and SAR countries. Finally, the PTT should provide a proposal for inclusion and exclusion criteria and their application via 2-3 scenarios for discussions within the MG. Please refer to section 6 for more details.
- v. Based on this PPT, a draft data collect report will be developed. This report will further develop the points enumerated in the previous bullet point (iv) as well as the elements described in section 6 of this TOR. The draft data collection report should also integrate the comments received during the presentations to the MG and ERG.
- vi. The final the data collection report will be approved by the MG once all comments from the MG and ERG are dully incorporated. The report should not exceed 40 pages, excluding annexes
- vii. Facilitate the inventory of collected documents.

Final meta-synthesis and analysis report (phase III & IV)

- viii. The team will pilot the data extraction and analysis on one type of intervention. This will allow the MG to provide early comments on the approach as well as testing the extraction and analysis process for the meta-synthesis and the meta-analysis. The document shouldn't exceed 3 pages for the meta-synthesis and 2 for the meta-analysis.
- ix. Draft meta-synthesis and analysis report. The report should not exceed 60 pages (excluding annexes) following the structure provided in section 6 of this TOR. Further detail will be provided before the finalization of phase II (data collection and review). The report will be shared with the MG and then the ERG for comments.
- x. The final meta-synthesis and analysis will be approved by the MG once all comments from the MG and ERG are dully incorporated.
- xi. For the purpose of the MG and/or ERG final meeting, the team will have to prepare a PPT summarizing the key findings, conclusions and recommendations of the meta-synthesis and analysis.
- xii. The team is expected to contribute to dissemination, outreach, and uptake. Beyond the Management Group and Evaluation Reference Group, this shouldn't exceed more than two events.
- xiii. Data gathered and produced in the exercise is transferred in an organized archive that will permit follow- on users to replicate or extend the analysis.

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9. PROPOSED PAYMENT SCHEDULE:

No	Deliverable	Percentage of payment
1	Approved Inception Report	20 per cent of total contract value
2	Approved Data collection and review Report	30 per cent of total contract value
3	Approved Meta-synthesis and analysis report and final learning briefs	50 per cent of total contract value

- The team will be paid upon satisfactory completion of assigned tasks and receipt of key deliverables and as certified by the Manager.
- UNICEF reserves the right to withhold payment or partial payment for deliverables that are of poor quality or that do not meet the deadline stated in the contract.
- If deliverables are submitted before the end of the contract, payment will be processed.
- Final payment may not be less than ten per cent of the total value of the contract.
- The final payment will be processed within 30 days of the expiry date of the contract upon confirmation of satisfactory delivery of services.

Important notes:

- i. Monitoring deliverables about work progress are not listed but will be periodically required.
- ii. Page limits, if any, to be established during the inception period. In general, there will not be artificial limits, but the report should aim for **conciseness, readability, and visual appeal**.
- iii. The language of the deliverables will be in English

10. CONTRACT SUPERVISION:

The meta-synthesis and analysis will be led by ROSA's evaluation, impact and learning section. The evaluation will be conducted by an external company/university or consortium selected on competitive basis and according to performance and demonstrable ability.

ROSA's evaluation, impact and learning section will be responsible for the day-to-day oversight, management and support of the meta-evaluation (e.g. budget management, quality assurance of intermediate and final product, including tools, communications and meetings, providing input to key methodological and strategic choices and decisions, etc.).

A Management Group (MG), composed by designated members of the regional Child Protection section and from the ROSA's evaluation, impact and learning section will provide a first quality review of all tools and deliverables presented before key deliverables are shared with the Evaluation Reference Group and/or other stakeholders.

An Evaluation Reference Group (ERG) will be created. It will consist in a mix of UNICEF HQ, regional and country levels managers and advisors. The ERG will serve as an advisory organ for the meta-synthesis and analysis, providing substantive technical inputs, facilitating access to documents, and

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ensuring the high technical quality of the products as well as organizational learning and ownership of the exercise.

Deliverables must be in professional-level standard English, written in a concise, clear and easy-to-understand language, and comply with the most recent UNICEF Style Book and the UNICEF Brand Book, although changes may be considered and agreed with the MG. PowerPoint presentations should include notes below each slide to make them easy to understand for people who could not attend the sessions where the presentations are utilized.

The final report is expected to meet the UNICEF-adapted UNEG Evaluation reports standards, benchmarks used in UNICEF's Global Evaluation Reports Oversight System (GEROS) and integrated norms and standards¹⁸. The meta-synthesis and analysis should also abide by UNICEF evaluation practices and standards, particularly around ethics, gender equity and integration of disability¹⁹.

The final report that will be made available on the UNICEF and widely disseminated to key stakeholders. UNICEF will have copyright of the report, presentations and data collected. However, the members of the selected team and their roles and products will be acknowledged in the report.

11. QUALIFICATIONS AND EXPERIENCE REQUIRED:

Organization qualification and experience

To conduct this assignment, an international company, university or a consortium composed with a minimum team of three persons is expected. There is no upper limit to the team size. At minimum, the team should consist of a team leader with a senior level of experience and expertise in conducting meta-synthesis and analysis evaluation and research, and two research analyst positions (please refer to the section 10 on team composition and requested qualification).

The selected company/university/consortium should have a proven track record of conducting literature reviews, syntheses, and critical appraisal of literature. They should be capable of conducting meta-analysis using a range of statistical methods to extract a range of net effects per ECM approaches. While expertise and experience in evidence reviews in ECM is required, a strong understanding of quantitative and qualitative synthesis and experience with statistical analysis is essential.

The team should have in-depth knowledge and expertise in child marriage issues and a comprehensive understanding of the relevant literature, policies, and programs. Familiarity with the South Asia context is an advantage for completion of the assignment.

The selected company/university/consortium should have a proven ability to deliver high-quality and timely products while managing multiple priorities simultaneously. Access to relevant databases is also essential for conducting comprehensive research.

Team composition and requested qualifications

¹⁸ [UNICEF's procedure on ethical standards in research, evaluation, data collection and analysis \(2021\)](#)

¹⁹ Ethical Guidelines for UN Evaluations, UNICEF Guidance on Gender Integration in Evaluation, Integrating Human Rights and Gender Equality in Evaluation, UNEG Guidance on Integrating Disability Inclusion in Evaluations

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The Team Leader is responsible for the meta-synthesis and analysis. S/he will be responsible for overseeing the assignment, providing guidance to the research analysts, and ensuring the quality of the work within the agreed timeline.

Expected responsibilities:

- Lead and direct all parts of the assignment, including work planning.
- Coordinate and supervise the research analysts' work in their contributing roles.
- Provide guidance to the team in terms of conducting literature review, data collection, analysis, and synthesis, ensuring adherence to established protocols and guidelines.
- Develop and oversee the implementation of a detailed work plan, ensuring that timelines are met, and deliverables are submitted according to the agreed-upon schedule.
- Identify potential risks or issues that could impact the successful completion of the assignment and work with the team to develop mitigation strategies.
- Act as the leading contact person for the Management Group and work closely with it throughout the process, ensuring regular updates and consultation.
- Manage and ensure the quality of the process and methodological approach.
- Ensure the comprehensiveness and quality of all data collected and analysed, and of key deliverables before submission to the Management Group, by reviewing and harmonizing their format and content in line with the requirements specified in the TOR as well as adjustment required by the Management Group.
- Take direct responsibility for all deliverables being delivered timely and of satisfactory quality.
- Participate, design and facilitate the validation workshop in coordination with the Management Group.
- Ensure that all team members are aware of their roles and responsibilities and are effectively communicating and collaborating with one another.
- Prepare and present regular progress reports to the Management Group, highlighting any issues or concerns that may impact the project's success.
- Ensure that ethical considerations and principles are adhered to throughout the project, including obtaining necessary ethical approvals.
- Contribute to dissemination, outreach, and uptake.

Key qualifications:

- At least eight years of professional experience in literature reviews, syntheses, and critical appraisal of literature with a proven track record of leading and managing similar assignments.
- Master's level degree (or equivalent) in a relevant field across the social sciences, with an advantage for degrees or primary emphasis in evaluation, or areas directly related to the evaluation.
- Experience in conducting meta-synthesis, evaluations or research (preferably in the area of ECM) with a strong track record of publications and presentations.
- Substantial experience and knowledge in child marriage as an area of research and practice
- Experience in conducting meta-analysis using a range of statistical methods to combine evidence and extra range of net effects per ECM approaches.
- Proven expertise in various forms of quantitative and qualitative synthesis and experience with advanced statistical analysis.
- In-depth knowledge and expertise in child marriage issues, particularly in South Asia, and familiarity with the relevant literature, policies, and programs in the region.
- Experience working with multilateral or intergovernmental organizations in the field of child marriage or related areas.
- Strong leadership and management skills, with demonstrated ability to supervise and mentor a diverse team of professionals and foster a collaborative and inclusive team culture.

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- Proven ability to deliver high-quality and timely products, meet tight deadlines, and manage multiple priorities simultaneously.
- Excellent written and oral communication skills in English, with the ability to write and present complex technical information in a clear and concise manner.

Two Research analysts are supporting the team leader in his/her responsibilities. The research analysts will be responsible for conducting the data extraction, analysis, and synthesis, under the guidance of the team leader.

Expected responsibilities:

- Under the supervision of the team leader, conduct a comprehensive search of literature databases, grey literature, and other relevant sources to identify studies and evidence related to the topic.
- Screen potential studies for inclusion based on predefined inclusion and exclusion criteria and conduct full-text reviews of relevant studies.
- Extract data from selected studies using a standardized data extraction tool and ensure accuracy and consistency of data.
- Support the team leader in conducting data analysis and synthesis, including identifying patterns and trends in the data.
- Assist in the preparation of key deliverables, including the meta-synthesis report, presentations, and other materials as needed.
- Contribute to the development of data visualizations, tables, and other data products to support the analysis and presentation of findings.
- Participate in team meetings and provide regular updates to the team leader on progress and challenges.
- Work collaboratively with the team leader and other team members to ensure that all tasks are completed on time and to the expected quality standards.
- Provide support for the validation workshop and other dissemination and outreach activities as needed.

Key qualifications:

- At least three years of professional experience in research, studies, evaluations or evidence generation exercises in international cooperation, development assistance.
- Experience in data collection, screening, and extraction, with a strong attention to detail and ability to work accurately and efficiently.
- Experience working with databases and data management software.
- Strong analytical skills and ability to contribute to data analysis and synthesis.
- Excellent written and oral communication skills in English.
- Ability to work on multiple tasks under pressure and meet tight deadlines.
- Demonstrated ability to work collaboratively in a team environment.
- Experience working with multilateral or intergovernmental organizations is an asset
- Experience conducting meta synthesis

Any changes to the team composition presented in the proposal and included in a potential contract would need to be discussed with and agreed by UNICEF.

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12. APPLICATION AND EVALUATION PROCESS:

In making the final decision, UNICEF considers both technical and financial aspects. The Evaluation Team first reviews the technical aspects of the offer, followed by review of the financial offers of the technically compliant vendors. The proposal obtaining the highest overall score after adding the scores for the technical and financial proposals together, that offers the best value for money will be recommended for award of the contract.

Each valid proposal will be assessed by an evaluation panel first on its technical merits and subsequently on its price. The weight allocated to the technical proposal is **70 %** (i.e. 70 out of 100 points). To be further considered for the financial evaluation a minimum score of 49 points is required.

Only proposals with a score of 50 or more points in the technical evaluation will be financially evaluated (i.e. the financial proposal will be opened). For further details and the distribution of points kindly refer to section 14. Evaluation Weighting Criteria.

The weight allocated to the financial proposal is **30 %** as per the following: the maximum number of 30 points will be allotted to the lowest technically compliant proposal. All other price proposals will receive points in inverse proportion to the lowest price. Commercial proposals should be submitted on an all-inclusive basis for providing the contracted deliverables as described in the TOR.

The proposal(s) obtaining the overall highest score after adding the scores for the technical and financial proposals is the proposal that offers best value for money and will be recommended for award of the contract.

The Technical Proposal should include but not be limited to the following:

- **Methodology**
Detailed Methodology / approach to requirement detailing how to meet or exceed UNICEF requirements for this assignment as well as comments and suggestions on the terms of reference.
- **Company Profile**
- *Ensure to include information related to the experience of the company as required (Copy of the company registration)*
- **References**
Details of similar assignments undertaken in last *three* years including the following information:
 - o Title of Project
 - o Year and duration of project
 - o Scope of Project
 - o Outcome of Project
 - o Reference / Contact persons
- **Work Plan**
Proposed work plan showing detailed sequence and timeline for each activity and person days of each proposed team member
- **Team Composition**
Title and role of each team member.

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- **CV's**
CV of each team member (including qualifications and experience)
Ensure to include information related to the qualifications and experience of each proposed team member as required.
- **Any project dependencies or assumptions**

The Financial Proposal should include but not be limited to the following:

Bidders are expected to submit a lump sum financial proposal to complete the entire (as per instruction given under **page 18**). In order to arrive at the lumpsum offer for a given sample size, the firm may work out the budget detail as below:

- **Resource costs**
Daily rate multiplied by number of days of the experts involved in the study.
- **Any other costs (if any)**
Indicate nature and breakdown

Mandatory documents under Financial Proposal:

- **MDM Form (enclosed)**
- **Recent Financial Audit Report**
Report should have been carried out in the past 2 years and be certified by a reputable audit organization.

Full marks are allocated to the lowest priced proposal. The financial scores of the other proposals will be in inverse proportion to the lowest price.

Bidders are requested to provide a detailed cost proposal – Financial Proposal, factoring in all cost implications for the required services. A special discount or lower rates can be offered for this specific assignment, if applicable.

13. EVALUATION WEIGHTING CRITERIA:

The ratio between the technical and financial criteria depends on the relative importance of one component to the other.

Cumulative Analysis will be used to evaluate and award proposals. The evaluation criteria associated with this TOR is split between technical and financial as follows:

- Weightage for Technical Proposal = 70 %
- Weightage for Financial Proposal = 30 %
- Total Score = 100%

a. Technical Proposal:

The technical proposal should address all aspects and criteria outlined in this Request for Proposal.

The Technical Proposals will be evaluated against the following:

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REF	CATEGORY	POINTS
1	Overall response: <ul style="list-style-type: none"> • Completeness of response- mandatory (failure of submitting required documentation mentioned in the ToR lead to incompleteness) • Overall concord between RFP requirements and proposal 	15
2	Institutional Capacity (Company/key personnel/Individual Consultant): <ul style="list-style-type: none"> • Range and depth of experience (matching with the ToR requirements is must) • Samples of previous work (supplementing Request for Proposal is mandatory. Please attach the relevant samples with RFP) • References (of the agencies and personnel to be given clearly) • Key personnel: relevant experience and qualifications of the proposed team for the assignment 	40
3	Proposed methodology and approach: <ul style="list-style-type: none"> • Detailed proposal with main tasks, including sound methodology to achieve key outputs (Annex B has to be fully understood and reflected in the proposal) • Proposal presents a realistic implementation timeline 	15
Total Technical		70
Only proposals that receive a minimum of 49 points will be considered further.		

b. Financial Proposal

The total amount of points allocated for the price component is 30. The maximum number of points will be allotted to the lowest price proposal that is opened and compared among those invited firms/institutions which obtain the threshold points in the evaluation of the technical component. All other price proposals will receive points in inverse proportion to the lowest price, e.g.:

$$\text{Score for price proposal X} = \frac{\text{Max. Score for price proposal} * \text{Price of lowest priced proposal}}{\text{Price of proposal X}}$$

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Instructions for Financial Quote (Proposal)

Please prepare table of expected costing, below is an example of price tables

Description of Activity/Item	Proposed Person (Job title/function)	All-inclusive rate (Personnel)	No. of days proposed	Total Cost in NRs
1. Item 1:				
1.1 Personnel				
1.2 Other				
Subtotal Expenses:				
2. Item 2:				
2.1 Personnel				
2.2 Other				
Subtotal Expenses:				
2.3 Reimbursable Travel Cost*				
2.3. Other				
Subtotal Expenses				
3. Item 3:				
3.1 Personnel				
3.2 Editorial				
Subtotal Expenses:				
3.3 Reimbursable Travel Cost*				
Subtotal Expenses:				
Subtotal fixed cost:				
Subtotal reimbursable cost				
Grand Total**				



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Meta-synthesis and meta-analysis of evidence on child marriage in South Asia



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