

Exploring the Strengths and Limitations of Evidence Synthesis for Understanding What Works to Improve Girls' Outcomes: A Meta-Synthesis and Meta-Analysis of Interventions to End Child Marriage in South Asia

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Abstract

Efforts to prevent child marriage across South Asia have expanded significantly over the past decade, yet evidence on what drives effectiveness remains fragmented. Following PRISMA guidelines, we combine a meta-synthesis (65 studies) with a meta-analysis (29 studies) to assess intervention effectiveness across six typologies: social norms change, economic strengthening, education, girls' empowerment, adolescent sexual and reproductive health (SRH), and law and policy. Beyond assessing effectiveness, we critically reflect on these methods' capacity to explain underlying mechanisms.

Our analysis reveals variation in effectiveness across and within typologies, with several typologies showing stronger effects when combined. Social norms interventions reduce child marriage by 4.5% alone, rising to 6.45% when paired with empowerment and SRH components; empowerment interventions follow a similar pattern. By contrast, education and law and policy show no additive effects: standalone education outperforms combined approaches, while law and policy alone has no significant effect. Qualitative synthesis surfaces gendered and relational dynamics not captured in effect sizes: norms around girls' education appear more amenable to change than those governing gender roles and relations; empowerment interventions' effectiveness depends partly on the receptiveness of household decision-makers, especially fathers; and economic interventions may carry unintended consequences, including making dowry more affordable.

These findings prompt us to interrogate how far pooled effect-size estimation, even paired with qualitative synthesis, can isolate the active components of multi-component interventions targeting entrenched gender norms. Key evidence-base limitations, including small samples, high heterogeneity, and a near-absence of experimental designs, constrain causal inference. Stronger experimental designs, clearer theories of change, and tighter quantitative-qualitative integration are needed to better capture the gendered and relational processes shaping meaningful change for girls and women in South Asia and beyond.

Keywords: early marriage; gender norms; girls' agency; intervention mechanisms; mixed-methods