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Child Labour and Maternal Bargaining Power in India: A Systematic Literature Review

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Abstract

Child labour endures as a critical social and policy issue in India, shaped not only by poverty and economic necessity but also by the family structure and parental influence. Using a PRISMA-based systematic review, this study searched Scopus, Web of Science, EconLit, and Google Scholar from database inception to the most recent search in 2025, and synthesised 32 peer-reviewed journal articles. Central to this analysis is the often-overlooked role of mothers' bargaining power within the household. The review finds compelling evidence that when mothers hold greater bargaining power over household decisions and resources, children are more likely to remain in school and less likely to enter the labour force. However, a consistent gap persists in how current studies measure and address the influence of maternal decision-making on child labour. By systematically identifying these gaps and assessing the robustness of existing evidence, this study offers a roadmap for future research and actionable policy recommendations. The findings emphasise that empowering mothers is not only essential to breaking the cycle of child labour but also vital for advancing the Sustainable Development Goals in India.

Keywords: Child labour, Household decision making, India, Maternal bargaining power, Systematic review

1. Introduction

Child labour remains a deeply entrenched social and developmental challenge in India. Despite gains in school participation and repeated legal reforms, a significant number of children continue to combine schooling with work in ways that erode learning, compromise safety, and weaken long-run capability formation. Official figures commonly referenced in policy discussions place the number of working children aged five to fourteen at about 10.1 million (Ministry of Labour and Employment, 2020). More recent labour force evidence points to a decline in the aggregate child labour rate over time, yet also suggests that progress is uneven across gender, region, caste, and household structure (PLFS, 2021). These patterns underline a central policy difficulty: child labour is not merely a problem of noncompliance with law, but a persistent outcome produced by household constraints, labour market conditions, and social norms that shape children's time allocation (Sahoo, 2021).

India's legislative and programmatic response has been substantial. The Child and Adolescent Labour Prohibition and Regulation Act, strengthened by the 2016 amendment, along with targeted schemes such as the National Child Labour Project and expanded schooling initiatives, signals a clear commitment to reducing child labour and returning children to education. However, the continued prevalence of child labour indicates that statutory prohibition and programme coverage are insufficient when household-level incentives remain unchanged. This urgency is sharpened by Sustainable Development Goal target 8.7, which commits signatories to take immediate and effective measures to eradicate child labour in all its forms within a short time horizon (UNICEF & ILO, 2025).

A central limitation of older explanations is the tendency to treat households as if they were single decision-makers who mechanically convert income into child well-being. Classic economic accounts rightly emphasise poverty, imperfect credit markets, and low returns to schooling as drivers of child labour (Basu & Van, 1998; Ray, 2000). However, the decision to send a child to work or keep a child in school is rarely a neutral optimisation under a shared household preference. It is often a negotiated outcome shaped by unequal voice, unequal control over resources, and gendered expectations about care and domestic responsibilities (Kambhampati & Rajan, 2005). This is especially relevant in India, where women's economic participation, autonomy, and property rights vary sharply across regions and social groups, and where daughters can carry heavy domestic workloads that remain partially hidden in conventional labour measures (Lin & Adsera, 2013). An explanation of child labour that ignores who holds influence inside the household risks misdiagnosing both mechanisms and remedies.

Collective household models offer a disciplined way to incorporate these realities (Fuwa et al., 2006b). In collective frameworks, allocations reflect bargaining among members with potentially different preferences, and each member's relative weight depends on their resources, outside options, and the credibility of their fallback position (Chiappori, 1992). Within this view, maternal bargaining power matters because it can shift both what the household values and how it responds to constraint. When mothers have greater influence over household decisions, resources are more likely to be directed toward children's welfare, including education, health, and nutrition, and the tolerance for child work that disrupts schooling may weaken. Broader evidence from gender and development research supports this bargaining channel, while also emphasising that empowerment is multidimensional. It involves not only income, but also assets, education, legal rights, social norms, and the ability to act on preferences (Doss, 2013; Katz, 2007).

Empirical evidence from India broadly aligns with this bargaining logic but remains fragmented across measures, outcomes, and contexts. Maternal education is among the most consistently protective factors for children's schooling relative to work. Using household data from rural India, Kurosaki et al. (2006) show that parental characteristics are not symmetrically associated with schooling, with maternal education often more strongly linked to child enrolment and lower work participation. In urban India, Mukherjee and Das (2008) similarly connect parental education, especially mothers' education, with improved schooling outcomes and reduced child labour. These associations are plausible for multiple reasons. Education can improve women's access to information about school quality and entitlements, increase confidence in negotiation within the household, strengthen monitoring of children's attendance, and raise perceived returns to education (Das, 2023).

At the same time, education does not operate in a vacuum. Its effects are filtered through gender norms and the economic conditions households face. Studies that consider gender equity and household context show that decision-making is embedded in local constraints and social

expectations. Kambhampati (2009) finds that child schooling and work decisions vary with gender equity at both household and regional levels, suggesting that empowerment can translate into better child outcomes when local institutions and norms support women's agency. This is a crucial point for India, where the same indicator of empowerment can mean different things across states and social groups (Lancaster et al., 2008; Kingdon, 2005).

Maternal employment further complicates the picture by combining an income effect with a time-allocation effect. In principle, mothers' employment can reduce child labour by relaxing budget constraints and increasing the affordability of schooling. In practice, it can also increase children's domestic work when children substitute for mothers in unpaid household production, particularly in settings with limited childcare, rigid gender norms, or irregular employment (Fuwa et al., 2006a). Self (2011) demonstrates this tension by distinguishing market and non-market child labour in rural India and showing how the relationship between maternal labour force participation and child work can depend on the type of work and household conditions. Francavilla et al. (2013) provide additional evidence on this relationship using multilevel analysis. This ambiguity should not be treated as an inconsistency. It provides evidence that empowerment policies and labour market changes can produce different child outcomes depending on whether women's work is chosen or compelled by distress, and on whether complementary services reduce the burden of household care work (Afridi et al., 2016; Li & Sekhri, 2020).

These empirical insights have grown in parallel with a policy environment that demands sharper synthesis. SDG Target 8.7 frames the eradication of child labour as an urgent, time-bound commitment and explicitly recognises that ending child labour requires both regulation and structural changes in how households survive and invest (UNICEF & ILO, 2025). In India, legal reforms and child protection programmes have expanded, but the household-level mechanisms that translate policy into reduced child labour remain contested. The literature is fragmented along three lines. First, measures of maternal bargaining power vary widely, spanning education, employment, reported decision-making authority, and control over resources, making direct comparisons difficult (Doss, 2013; Park et al., 2011). Second, definitions of child labour differ across studies, sometimes focusing on paid work, sometimes on unpaid family work, and sometimes on schooling outcomes alone, which can obscure substitution between forms of work that are differently visible to surveys and policy (Ray, 2000; Rammohan, 2014). Third, identification strategies range from descriptive associations to designs that exploit policy shifts or richer behavioural data, creating variation in the credibility of causal claims.

This review addresses these challenges by systematically synthesising published evidence on maternal bargaining power and child labour in India, with a deliberate focus on two closely linked dimensions that dominate both theory and measurement in the literature: maternal economic decision making and maternal education. Conceptually, the review is anchored in collective household bargaining models (Chiappori, 1992) and in the empowerment literature that clarifies how resources and institutions shape agency (Doss, 2013; Katz, 2007). Substantively, it treats child labour broadly, recognising that children's time can be absorbed by market work, unpaid family work, and domestic chores that compete with schooling, and that these margins matter for girls in particular (Lin & Adsera, 2013; Ray, 2000). Methodologically, the review follows PRISMA 2020 guidance to ensure transparent study identification, screening, and synthesis (Liberati et al., 2009; Page et al., 2021).

The review makes three contributions. It clarifies how different measures of bargaining power map onto distinct theoretical channels, separating income effects, time-substitution effects, and preference-shifting effects. It identifies where findings converge, such as the protective role of

maternal education, and where they diverge, such as the mixed impacts of maternal employment under economic stress. It also highlights research and policy gaps, including the under-measurement of domestic child work, limited treatment of endogeneity in empowerment proxies, and insufficient attention to how regional institutions shape bargaining credibility. The remainder of the paper defines key concepts. It outlines the review protocol, then synthesises evidence across thematic areas, concluding with implications for research design and integrated policy strategies that advance SDG 8.7 by empowering mothers while protecting children's right to learn.

2. Literature Review

Much of the early economics of child labour treated the household as if it pursued a single set of preferences, so child work emerged mainly from poverty, imperfect credit markets, and low returns to schooling (Basu & Van, 1998; Ray, 2000). This framework remains helpful in explaining why children's labour supply can rise when households face income shocks or liquidity constraints. Kambhampati and Rajan (2005) examined this "luxury axiom" in the Indian context. They found support for it, while also revealing that mothers' wages have a more substantial protective effect than fathers' wages. However, it is less informative about who inside the family drives decisions when schooling competes with farm work, family enterprise work, or domestic tasks. Collective household approaches respond to this limitation by modelling allocation as a negotiated outcome in which control over resources and credible outside options shape who gets their preferences reflected in spending and time allocation (Chiappori, 1992). This logic motivates the present review's conceptual anchoring in bargaining and distribution factors such as assets, income control, legal rights, and outside options. Fuwa et al. (2006b) directly tested unitary versus collective models using primary data from Andhra Pradesh and found evidence supporting collective models, with maternal characteristics significantly influencing child time use and school enrolment independently of paternal characteristics. Sawada et al. (2006) further support this, showing that credit constraints shape maternal employment, which in turn affects the labour burden on daughters, a key prediction of collective models.

Across studies, maternal education is among the most consistent correlates of reduced child labour and improved schooling. Evidence from household survey data often finds that maternal education is at least as predictive as paternal education for enrolment and grade progression, suggesting that mothers' schooling shapes both preferences for child human capital and the capacity to act on those preferences. Das & Mukherjee (2007) found that mothers' education is a very important factor in curbing child labour among urban boys. Kingdon (2005) showed that strong pro-male bias in educational expenditure is significantly mitigated by maternal education. Rammohan (2014) confirmed that parental education reduces child labour, though boys remain more likely to be full-time students while girls are more likely to combine work and schooling. Mehta and Bhattacharya (2019) identified maternal education as a key discriminator for child welfare outcomes across selected states. Das (2023) found that higher maternal education and age increase mothers' decision-making capacity within households. The proposed mechanisms are not limited to higher-income groups. Maternal education can lower information frictions about school quality and entitlements, strengthen monitoring of attendance, and raise perceived returns to schooling, especially for daughters (Park et al., 2011). The perceived returns to schooling matter significantly. Chamarbagwala (2008) demonstrates that higher regional returns to primary education increase school attendance and reduce child labour. However, this effect is contingent on household income; only children in the top three quintiles benefit, suggesting that poorer households, despite recognising the returns, cannot afford to educate their children due to binding liquidity constraints. However, the literature also shows why education cannot be treated as a clean bargaining variable.

A second stream evaluates whether mothers' influence over spending and resource allocation changes children's time use. Collective model applications and expenditure-based studies show that when women's bargaining position improves, budget shares can shift toward children's schooling, with some evidence of reduced gender bias in education spending. Lancaster et al. (2006) estimated endogenous bargaining weights and demonstrated that bargaining power affects budget shares nonlinearly, with balanced power protecting household welfare. Park et al. (2011) developed a bargaining power index and found that women's bargaining power positively affects education spending, with the effect moderated by household income. These results align with the hypothesis that mothers place relatively greater weight on child welfare and that bargaining affects the marginal allocation of scarce resources. Still, findings vary with context. Where women's reported decision-making is symbolic rather than backed by enforceable control over assets, measured autonomy may not translate into changed allocations. Goodburn (2020) found, through qualitative interviews, that increased maternal autonomy post-migration does not consistently improve children's educational outcomes due to structural constraints on poverty. Lin and Wollni (2024) found that joint decision-making in dairy production increases investments in girls' education, while sole female decision-making unexpectedly reduces investments, highlighting that empowerment requires supportive institutional contexts. Moreover, some studies find nonlinear or heterogeneous effects, suggesting that partial empowerment may be insufficient when patriarchal constraints remain strong, whereas stronger controls can shift allocations more decisively.

Work exploiting reforms to inheritance and property rights has been influential because it treats women's rights as a distribution factor that changes threat points and outside options. Evidence from India suggests that strengthening women's legal claims can raise investments in girls' education and improve child outcomes, consistent with bargaining models in which rights reshape intrafamily allocations. Kerr (2019) used difference-in-differences across states to demonstrate that inheritance law reform reduced child labour and increased educational attainment, especially for girls. Sapkal (2016) similarly found that equal inheritance property laws reform improved female labour supply and daughters' educational attainment. Agarwal and Katewa (2024) evaluated a maternity cash transfer programme and found that the transfer improved women's household position and positively affected primary education for female children. The contribution of this stream is methodological as much as substantive: it reduces concerns that empowered women come from households that already value education. At the same time, legal reforms are not automatically binding for all families. Effects can be muted when enforcement is weak, when social norms prevent women from claiming rights, or when asset holding is limited among the poorest households. This points to an important interpretation: legal change can be a necessary condition for empowerment, but its translation into bargaining power depends on local institutions and the costs women face when asserting claims.

The relationship between maternal work and child labour is theoretically ambiguous. Higher maternal earnings can relax constraints and reduce the need for children's income. However, maternal work can also raise the demand for children's domestic labour if care and household production must be covered. Evidence reflects this tension. Some studies show improved schooling time when women's labour market participation rises through programme access or employment expansion. Afridi et al. (2016) used panel fixed effects with rainfall shocks as instruments. They found that mothers' employment under NREGA increases children's school attendance and grade progression, operating through greater household decision-making power. Others find complementarity in which daughters, in particular, step in to household tasks or market work when mothers work longer hours, especially in contexts of low childcare availability and rigid gender norms (Self, 2011; Francavilla & Giannelli, 2010). Fuwa et al.

(2006a) found that when mothers work outside the home, child labour burdens shift, often to daughters. Li and Sekhri (2020) used difference-in-differences and event study designs. They found that NREGA employment expansion unexpectedly increased child labour and decreased school enrolment in treated districts. Francavilla et al. (2013) found negative correlation between mothers' employment and children's school attendance at the aggregate level. A key lesson is that maternal employment should not be treated as a uniform measure of empowerment. Whether it empowers or merely signals distress depends on job quality, predictability of hours, control over earnings, and whether public services reduce the household production burden.

Finally, a growing body of work stresses that norms and local institutions mediate the distribution of bargaining power. In settings with strong son preference or restrictive gender norms, girls may face heavier domestic workloads that remain partially invisible in standard labour measures, so improvements in schooling can coexist with persistent time burdens (Lin & Adsera, 2013). Regional variation in women's status and labour markets also shapes how empowerment translates into child outcomes, helping explain why similar empowerment indicators yield different estimates across Indian states and rural-urban contexts (Kambhampati, 2009; Kingdon, 2005). Yan and Chen (2024) employed latent class analysis and found that maternal empowerment significantly shapes adolescent children's gender beliefs, suggesting intergenerational transmission of bargaining norms. Singh, Turner, and Ashworth (2025) found, through thematic analysis, that mothers bear the bulk of childcare responsibilities but are often excluded from decision-making, highlighting the gap between responsibility and authority. Nath and Das (2025) found that women's empowerment positively impacts child well-being, but various contextual factors moderate the effects. Sahoo (2021) confirmed that poverty, caste, and gender significantly influence child labour participation patterns, underscoring the need for intersectional analysis.

An important limitation in the existing literature relates to how child labour is defined and measured across studies. Many empirical analyses focus primarily on market work or wage employment, while others include unpaid family work and domestic responsibilities. This distinction is particularly important in the Indian context, where girls often bear a disproportionate share of household and care-related tasks that remain partially invisible in standard labour statistics (Lin & Adsera, 2013). As a result, studies that rely on narrower definitions may underestimate the total work burden experienced by children, especially for girls, and may overstate improvements in schooling if domestic work is not accounted for. These differences in measurement complicate direct comparison across studies and highlight the need to interpret results within a broader understanding of children’s time allocation (Ray, 2000).

By consolidating insights from these diverse studies, the following table synthesizes the principal research streams on maternal bargaining power and child labour in India, highlighting their theoretical foundations, key empirical findings, prevailing contexts, limitations in existing research, and how this review addresses the gaps. Table A1 (refer to Appendix) lists the 32 peer-reviewed studies included in this synthesis, and Table A2 (refer to Appendix) summarises each study's data source, sample, measures, identification strategy, and key findings.

Table 1: Synthesis of Literature on Maternal Bargaining Power and Child Labour in India

Literature Stream	Theoretical Orientation	Selected Empirical Evidence	Dominant Contexts	Key Insights	Limitations in Existing Research	Focus of Present Review
Maternal Education and Empowerment	Maternal education enhances women's decision-making power and awareness, strengthening child welfare (Katz, 2007).	Kambhampati (2009); Mukherjee & Das (2008)	Household surveys across multiple Indian states (e.g., NSS, NFHS data)	Higher maternal education is generally associated with reduced child labour and increased school enrollment, especially for daughters.	Maternal education often serves as a proxy for empowerment; it is difficult to isolate its effect from overall socio-economic status.	Synthesises evidence on maternal schooling as a protective factor against child labour.
Household Decision-Making Power and Resource Control	Collective bargaining models (Chiappori, 1992) posit that who controls resources influences household outcomes.	Lancaster et al. (2008). Kingdon (2005)	National surveys and expenditure studies in diverse regions	Mothers with greater say in household finances allocate more resources to children's education, correlating with lower child labour incidence.	Decision-making power is often inferred indirectly; various proxy measures yield inconsistent results and potential endogeneity.	Aggregates findings from studies using differing bargaining power measures to identify consistent patterns.
Legal and Policy Reforms	Exogenous shifts (e.g., changes in inheritance law) in women's property rights increase their bargaining power.	Sapkal (2016)	Natural experiments exploiting state-level legal variations	Strengthening women's legal rights (property, inheritance) tends to improve children's education outcomes and can reduce reliance on child labour.	Effects may be context-specific and primarily benefit families able to leverage new rights; limited impact on the most marginalised without enforcement.	Includes evidence from policy-driven changes to bolster causal inference on maternal power impacts.
Maternal Employment and Labour Supply	Household time-allocation models (Becker, 1965) weigh mothers' labour participation against child-care needs.	Self (2011); Afridi et al. (2016)	Rural low-income settings; public works programs (e.g., NREGA)	Maternal employment raises household income, which can reduce child labour, but in some cases, daughters' work burden increases as they substitute for mothers at home.	Difficult to distinguish income effects from substitution effects; mothers often join the workforce out of necessity, coinciding with conditions that foster child labour.	Examines nuanced evidence on when maternal workforce participation complements or substitutes child labour.

Socio-Cultural Factors and Norms	Patriarchal norms (e.g., son preference) mediate the translation of maternal agency into child outcomes.	Lin & Adserà (2013); Kingdon (2005)	Comparative analyses across regions with varying gender norms (north vs south; urban vs rural)	Empowerment of mothers yields larger gains in child schooling and labour reduction in traditionally patriarchal or resource-poor contexts; it helps counteract gender biases in child investment.	Many studies do not fully capture cultural heterogeneity; social norms are hard to quantify, making generalisations difficult.	Highlights regional and cultural variability, stressing the need for context-specific policy approaches.

Source: Authors

3. Methodology

This systematic literature review was conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 framework to ensure transparency, replicability, and a clearly auditable trail from search to synthesis (Liberati et al., 2009; Page et al., 2021). The review protocol was specified before screening began and guided the whole workflow: review questions, eligibility criteria, databases and supplementary search steps, screening rules, extraction fields, and the synthesis plan. The empirical scope was restricted to India to maintain institutional and socio-cultural coherence while still allowing meaningful comparison across regions, social groups, and labour market contexts.

3.1 Review Questions and Conceptual Anchoring

The primary review question asked: to what extent does maternal bargaining power, with particular attention to economic decision-making and maternal education, influence child labour and children's schooling outcomes in Indian households? Supporting questions assessed how bargaining power is conceptualised and measured, how child labour and schooling are defined, what identification strategies dominate the evidence base, and where findings converge or diverge by region, gender, caste, and rural or urban setting.

The conceptual framework is grounded in collective household models in which household allocations reflect negotiated outcomes rather than a single pooled utility function (Chiappori, 1992). In this tradition, bargaining power is shaped by distribution factors such as assets, income control, legal rights, and outside options, which alter the credibility of individual threat points and, in turn, resource allocation within families (Lancaster et al., 2006; Doss, 2013). Maternal bargaining power is understood as a multidimensional capacity to influence household decisions regarding consumption, labour supply, and human capital investments. Across the included studies, this capacity is commonly proxied by maternal education, reported participation in household decision-making, and markers of economic control, such as asset ownership or earnings contributions (Kambhampati, 2009; Kingdon, 2005).

Child labour is defined in this review as children’s engagement in productive or time-intensive activities that compromise schooling, health, or age-appropriate development, including wage work, self-employment, unpaid work in family enterprises, and extensive domestic or care work that crowds out study time. This broader definition is adopted because the included studies differ in whether they capture only visible market work or also account for unpaid and domestic forms of labour, which have important implications for comparability and interpretation (Ray, 2000).

3.2 Information Sources and Search Strategy

To enhance transparency and reproducibility, we constructed the search strategy using a structured Boolean framework that combined four conceptual blocks: child labour or schooling outcomes; maternal bargaining power or women's empowerment; household decision-making or intra-household allocation; and the India setting. The search terms were expanded to reflect the diverse terminology used in the literature.

Specifically, the outcome block included "child labour" or "child labor" as well as schooling-related terms such as "school enrolment", "school enrollment", "school attendance", and "education", recognising that many studies analyse child work and schooling jointly (Ray, 2000). The empowerment block included "maternal bargaining power", "women's bargaining power", "women's empowerment", "female empowerment", "maternal decision making", "household decision making", "intra household bargaining", and "control over resources". This breadth was necessary to capture variations in how agency is measured and reported across studies (Doss, 2013). The geographic scope was defined using "India", with additional region-specific studies identified through citation chaining. A representative Boolean search string was:

("child labour" OR "child labor" OR "school enrolment" OR "school enrollment" OR "school attendance" OR "education") AND ("maternal bargaining power" OR "women's bargaining power" OR "women's empowerment" OR "female empowerment" OR "maternal decision making" OR "household decision making" OR "intra household bargaining" OR "control over resources") AND ("India")

This core structure was adapted to the syntax requirements of each database, with field restrictions applied to titles, abstracts, and keywords where possible. The searches were run in Scopus, Web of Science, and EconLit, complemented by targeted Google Scholar searches to reduce the risk of missing relevant journal articles that are inconsistently indexed.

The final search across all databases was completed in March 2025, and no studies published after this date were included in the review. The specific search execution dates were: Scopus (March 15, 2025), Web of Science (March 15, 2025), EconLit (March 16, 2025), and Google Scholar (March 17, 2025). For Google Scholar, we screened the first 200 records sorted by relevance due to platform limitations.

In addition to database searches, we conducted backward and forward citation chaining from five peer-reviewed anchor studies central to the India-focused literature on maternal characteristics, bargaining, and child work or schooling outcomes. These anchor studies were Kurosaki et al. (2006), Mukherjee and Das (2008), Kambhampati (2009), Afridi et al. (2016), and Kingdon (2005). Backward citation chaining (examining reference lists) yielded 65 unique potentially relevant records. Forward citation chaining (using Scopus and Web of Science to identify subsequent publications citing each anchor study) yielded 46 unique records. In total, citation chaining contributed 111 additional records for screening. All records identified through citation chaining were subjected to the same eligibility criteria as database records. These refinements ensure that the search strategy is both comprehensive and replicable, consistent with PRISMA 2020 guidelines for systematic reviews (Page et al., 2021).

3.3 Eligibility criteria

Studies were included if they met all of the following conditions:

1. India was the empirical setting (national or subnational).

2. The study measured maternal bargaining power or closely related constructs such as women's decision-making authority or economic control, including education as a bargaining-relevant endowment.
3. Outcomes included at least one indicator of child labour or schooling.
4. The analysis explicitly linked maternal bargaining measures to child outcomes through econometric estimation, structured qualitative analysis, or mixed methods with an identifiable analytical link.
5. The study was published in a peer-reviewed journal.

For comparative studies that include India alongside one or more additional countries, we included the study only where the India component is reported as a self-contained empirical unit with its own sample, data collection, and analytical interpretation. In such cases, we extracted only the India-specific findings, in line with established guidance for handling multi-site studies in systematic reviews (Higgins et al., 2019; Booth et al., 2021). This protocol was applied to Goodburn (2020), whose Mumbai sample was extracted while observations and inferences referring exclusively to the Shenzhen sample were excluded from the synthesis. We re-audited all 32 included studies against the eligibility criteria and confirmed that all other studies are exclusively India-based at the national or subnational level.

Studies were excluded if they were working papers, dissertations, conference abstracts, preprints, or standalone policy reports, even if methodologically strong, because the review aims to synthesise evidence that has passed peer review. Studies were also excluded when they focused on child labour without any maternal agency measure, or examined women's empowerment only in relation to fertility or child health without schooling or labour outcomes.

3.4 Screening and PRISMA Accounting

The screening process involved two independent reviewers (the authors) who assessed all retrieved records against the eligibility criteria. Both reviewers have expertise in development economics and gender studies. The screening was conducted in three stages: title and abstract screening, full-text retrieval, and full-text eligibility assessment.

Interrater reliability was assessed using two complementary indicators. We report percentage agreement as a transparent descriptor of the raw disagreement rate, and Cohen's kappa as a chance-corrected measure of agreement based on the two reviewers' independent include-or-exclude decisions prior to any discussion. At the title and abstract stage (n = 226), agreement was 96.9 per cent, and Cohen's kappa was $\kappa = 0.908$ (SE = 0.067; 95% CI [0.778, 1.000]), indicating almost perfect agreement beyond chance according to conventional benchmarks (Landis & Koch, 1977). Disagreements were resolved through discussion and consensus, and the consensus decisions were used for the PRISMA accounting and the final included set (Page et al., 2021).

Following the PRISMA 2020 guidelines, the study selection process is documented in Figure 1. A total of 228 candidate records were identified through database searches (n = 117; Web of Science = 38, Scopus = 52, Google Scholar = 10, EconLit = 17) and citation chaining (n = 111). After removing 2 duplicate records, 226 records were screened at the title and abstract level. At this stage, 147 records were excluded for the following reasons: not set in India (n = 38), no measure of maternal bargaining power (n = 52), no child labour or schooling outcome (n = 41), and not peer-reviewed (n = 16). The remaining 79 reports were sought for full-text retrieval, and all were successfully obtained. Full text assessment against the eligibility criteria led to the exclusion of 47 reports for the following reasons: no direct link between maternal bargaining and child outcomes (n = 18), child labour not measured as outcome (n = 12), maternal bargaining not measured directly (n = 9), non-India setting (n = 5), and duplicate publications

(n = 3). This process yielded a final set of 32 peer-reviewed journal articles for inclusion in the qualitative synthesis. All counts in this paragraph are traceable to the screening log retained by the authors and are reproduced consistently in Figure 1.

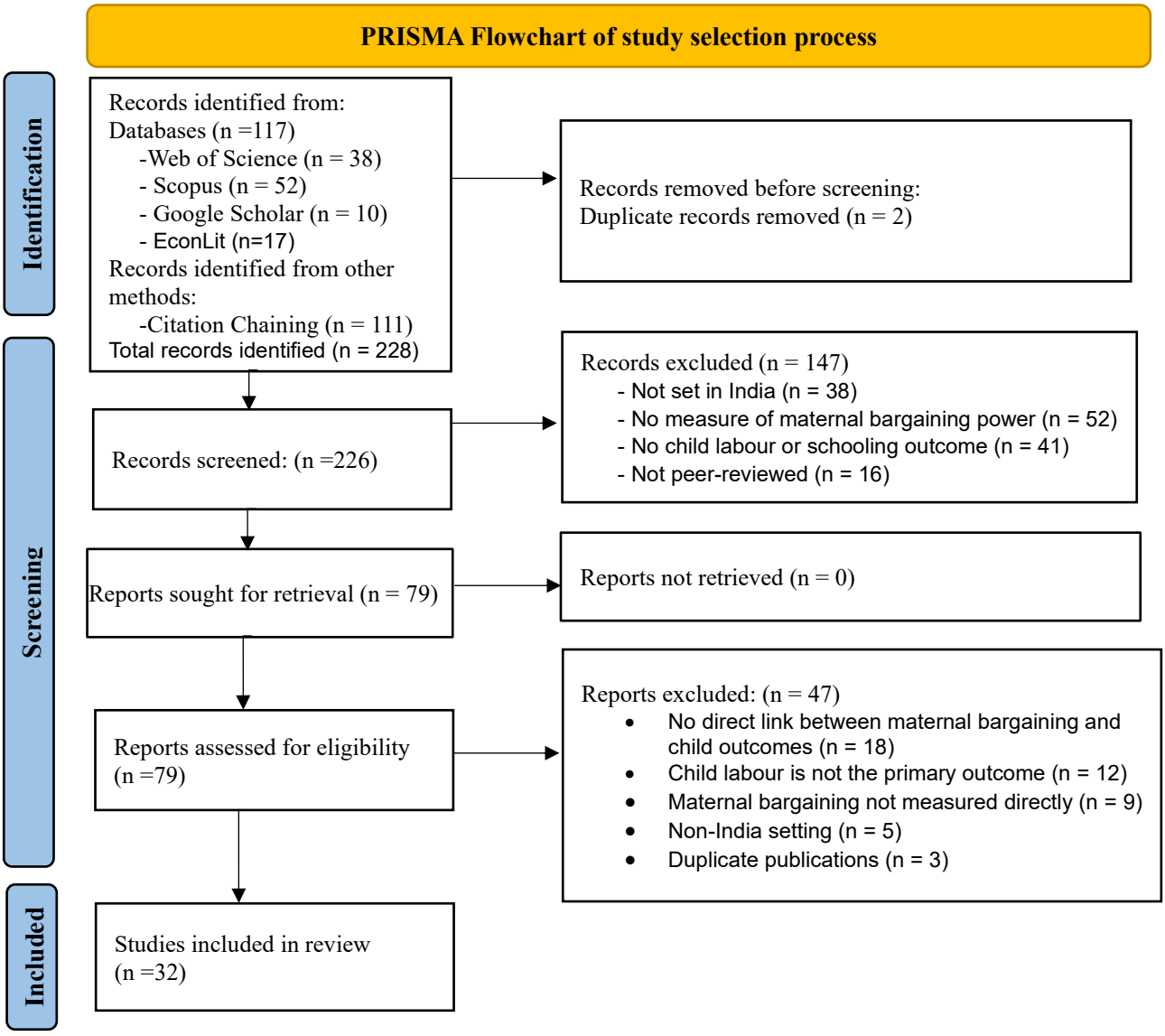

Figure 1. PRISMA 2020 Flow Diagram

Source: (Page et al., 2021) BMJ 2021;372: n160

3.5 Data extraction and quality appraisal

To strengthen transparency and internal consistency in the quality appraisal process, the scoring framework for both quantitative and qualitative studies was refined and explicitly documented. For the quantitative studies, we applied an adapted version of the Newcastle-Ottawa Scale across three domains: selection, comparability, and outcome. Each domain was assessed using clearly specified criteria, and stars were assigned according to whether a study met those criteria in a manner appropriate to the objectives of this review. The total score reported for each study in Appendix Table A3 is the sum of these domain-level assessments, ensuring that the overall rating is directly traceable to its underlying components. The full domain-level scores for quantitative studies are presented in Appendix Table A3, while criterion-level MMAT assessments for qualitative studies are reported in Appendix Table A4.

The 30 quantitative studies included in this review use non-randomised observational designs, including cross-sectional regressions, repeated cross-sections, panel fixed effects with instrumental variables, difference-in-differences specifications exploiting state-level inheritance reforms, event studies, and structural collective household models. The Newcastle Ottawa Scale (Wells et al., 2014) is the most widely used and validated instrument for appraising non-randomised observational research. The Cochrane Handbook recommends such designs (Higgins et al., 2019). We chose NOS over ROBINS I because the latter was developed primarily for non-randomised studies of interventions in clinical or programme evaluation settings and presumes a defined comparator constructed around an intervention. This template does not map cleanly onto observational economic studies of household decision making, where the exposure of interest, maternal bargaining power, is multidimensional and is operationalised differently across studies.

Because the original NOS is calibrated for cohort and case-control studies, we adopted item-level adaptations consistent with published practice for cross-sectional and panel observational research (Herzog et al., 2013; Modesti et al., 2016). Item 1 on representativeness was redefined to assess the included sample against the target population of Indian households with children aged 5 to 14, with one star awarded where representativeness is demonstrated using national or regional sampling frames such as NSS, NFHS, IHDS, or PLFS, or through a primary survey with a clearly justified sampling strategy. Item 2 on the selection of a comparator was redefined for regression-based designs as the adequacy of comparator construction, including the use of plausibly exogenous variation, valid instruments, or matched comparators. Item 3 on exposure ascertainment was redefined to evaluate whether maternal bargaining power is measured through a theoretically grounded index, a validated proxy such as maternal schooling years used within a stated framework, or a policy reform shock, with one star awarded if the measure is conceptually justified rather than treated as a convenience variable. Item 4 on outcome not being present at the start of the study was treated as not applicable for cross-sectional designs and was set to zero across all such studies to preserve comparability. The Comparability domain retained two possible stars, awarded only when the empirical specification adequately controlled for household income or assets, caste, region or state fixed effects, and parental characteristics, with two stars assigned when all four sets are present and one star when at least household income and region are controlled. The Outcome assessment item is awarded one star when child labour or schooling is defined consistently with the underlying time-use construct, and the statistical model is appropriate to the data structure. Follow-up adequacy was applied only to panel and difference-in-differences designs, with cross-sectional designs receiving a score of 0 on this single item. Two authors independently scored each study, and disagreements were resolved through discussion. The totals in Appendix Table A3 are the sums of these domain-level assessments, so the overall rating is directly traceable to its components.

For the two qualitative studies, methodological quality was assessed using the Mixed Methods Appraisal Tool version 2018 (Hong et al., 2018) and reported at the criterion level in Appendix Table A4. MMAT is purpose-built for qualitative and mixed methods designs and has demonstrated inter-rater

reliability in development and social policy reviews (Pace et al., 2012). Reporting at the criterion level rather than via a single summary score keeps the qualitative appraisal transparent and traceable to the underlying judgements.

To clarify how these judgments were made in practice, we provide illustrative examples of item-level scoring. A study received a star for exposure ascertainment when maternal bargaining power was measured using a theoretically grounded indicator, such as an index of decision-making authority or control over resources, or a well-justified proxy such as maternal

education within a clearly articulated analytical framework (Doss, 2013). By contrast, studies relying on narrow or weakly justified proxies, without acknowledging their conceptual limitations, were not awarded this component. Similarly, full comparability scores were assigned only when the empirical specification adequately controlled for key confounders likely to influence both maternal bargaining power and child outcomes, including household income, caste, region, and parental characteristics. Outcome assessment was judged on whether child labour and schooling were defined conceptually appropriately and empirically consistently, and whether the statistical analysis was suitable for the data structure and the research question.

For the qualitative studies, methodological quality was assessed using the Mixed Methods Appraisal Tool at the criterion level (Hong et al., 2018). Rather than relying only on summary ratings, Appendix Table A4 reports each study's performance across core dimensions, including the coherence between the research question and study design, the appropriateness of data collection methods, the adequacy of interpretation, and the extent to which the evidence supported the conclusions. Reporting the MMAT assessment in this way improves transparency and allows readers to judge more clearly how the qualitative studies contribute to the broader synthesis.

These refinements ensure that the quality appraisal process is transparent, internally consistent, and analytically meaningful, and that the reported scores appropriately inform the weighting and interpretation of evidence throughout the review.

3.5.1. Review the Level of Risk of Bias

We complemented the study level appraisal with a transparent self-assessment of risk of bias in the review process itself, using the ROBIS instrument (Whiting et al., 2016). ROBIS was applied across its four domains, namely study eligibility criteria, identification and selection of studies, data collection and study appraisal, and synthesis and findings, followed by an overall judgement in line with the three-phase ROBIS workflow. We did not apply AMSTAR 2 because it is calibrated for systematic reviews of healthcare interventions and contains several items that are not relevant to a narrative synthesis of observational social science evidence (Shea et al., 2017). The ROBIS assessment, summarised in Appendix Table A5, indicates low concern across the first three domains and moderate concern in the synthesis domain, driven primarily by the heterogeneity of outcome measures discussed in Section 3.6 below. The overall judgement is low to moderate risk of bias in the review process, and this limitation is reflected explicitly in the Discussion.

3.6 Synthesis Approach

Because included studies differ materially in outcomes, exposure measures, samples, and estimation methods, statistical pooling was not pursued. Instead, a narrative thematic synthesis was conducted, organised around four evidence clusters: maternal education as a bargaining-relevant endowment; economic decision-making and control over resources; policy or institutional channels that shift women's position within households; and heterogeneity across regions and social groups. The synthesis consistently links empirical patterns back to theoretical expectations from collective household bargaining models, while distinguishing correlation-based findings from results supported by stronger identification designs (Chiappori, 1992; Lancaster et al., 2006; Ray, 2000).

Because the included studies differ in how they operationalise children's work, the synthesis followed three measurement-aware principles drawn from established guidance for narrative synthesis of heterogeneous bodies of evidence (Popay et al., 2006; Lucas et al., 2007). First, evidence was grouped by the margin of children's time use measured, distinguishing market or

wage work, unpaid family work, domestic and care work, schooling, and composite outcomes. Surveys differ in this respect: NSS Employment and Unemployment schedules and PLFS focus on principal activity status, NFHS and IHDS provide richer information on activity participation, and primary surveys often allow the finest disaggregation. Second, where a study reported multiple outcome measures, each was extracted and aligned with the corresponding evidence cluster rather than averaged across margins. Third, the interpretation of direction and magnitude was explicitly conditioned on the outcome margin, so that improvements in schooling were not treated as equivalent to reductions in total children's work. This conservative interpretive rule is particularly relevant for evidence on girls, whose unpaid domestic and care work is incompletely captured in standard labour statistics. To make this strategy visible to readers, Appendix Table A2 now includes an additional column titled 'Child labour margin measured,' coded as market, family, unpaid, domestic, schooling, or composite, for each of the 32 included studies.

3.7 Assessment of publication bias and its implications

A brief assessment of publication bias was undertaken at the review level. The present review restricts inclusion to peer-reviewed journal articles in order to ensure consistency in methodological standards and reporting quality. However, this decision has implications for the completeness of the evidence base.

In particular, the exclusion of grey literature, including working papers, dissertations, conference papers, and policy reports, may lead to an overrepresentation of studies reporting statistically significant or more policy salient findings. Studies with null or mixed results may be less likely to appear in the published record. This concern is widely recognised in the systematic review literature and reflects the broader tendency for publication processes to favour certain types of results (Page et al., 2021).

In the context of this review, the possibility of publication bias suggests that the observed consistency in the association between maternal bargaining power and improved child outcomes should be interpreted with appropriate caution. While the direction of the relationship is broadly supported across studies, the strength and uniformity of the evidence may be influenced by the selective visibility of published findings.

At the same time, a formal statistical assessment of publication bias was not feasible due to substantial heterogeneity across studies in outcome definitions, measures of bargaining power, and empirical strategies. The discussion of results, therefore, incorporates this limitation by emphasising patterns that are robust across contexts while avoiding overgeneralisation.

4. Discussion

The systematic review yields a coherent but carefully qualified account of how maternal bargaining power shapes children's work and schooling outcomes in India. Across a wide range of settings and measures, the direction of the association is consistent with collective household bargaining theory: when mothers hold greater influence through education, secure rights, or greater control over resources, households tend to allocate more to children's human capital and rely less on child labour (Kurosaki et al., 2006; Mukherjee & Das, 2008; Lancaster et al., 2006; Das & Mukherjee, 2007; Kingdon, 2005; Rammohan, 2014; Mehta & Bhattacharya, 2019; Das, 2023). The most persuasive evidence comes from studies that exploit plausibly exogenous shifts in women's bargaining positions, particularly reforms to inheritance and property rights (Kerr, 2019; Sapkal, 2016; Agarwal & Katewa, 2024), because these designs reduce concerns that child outcomes are driving women's agency rather than the other way around. Taken together, the literature suggests that empowerment is not simply correlated with better child outcomes; under specific institutional shocks, it plausibly causes improvements by

changing who can shape household priorities and how resources are distributed within families (Agarwal & Katewa, 2024; Afridi et al., 2016).

Interpreting the evidence through bargaining theory also clarifies the mechanisms that recur across studies. First, bargaining power appears to reweight household preferences toward child welfare in ways that matter for schooling decisions. Mothers often place higher value on children's education and health, and stronger threat points and decision authority increase their ability to translate those preferences into action (Kingdon, 2005; Lancaster et al., 2008; Park et al., 2011; Lin & Wollni, 2024). Second, greater agency can lower the effective cost of schooling by improving access to information, public programmes, and local networks, thereby reducing direct and indirect education expenses (Das, 2023). Third, empowerment can reshape time allocation within the household, particularly by influencing how domestic work is organised and enabling mothers to insist on school attendance even when short-run labour demands rise (Fuwa et al., 2006a; Self, 2011; Lin & Adsera, 2013). These channels help explain why maternal education frequently emerges as a strong predictor: it is both a productive endowment and a bargaining-relevant attribute that improves information, confidence, and the credibility of a mother's influence in household negotiations (Das & Mukherjee, 2007; Kurosaki et al., 2006; Mukherjee & Das, 2008; Mehta & Bhattacharya, 2019).

At the same time, the evidence base strongly cautions against treating empowerment as a universal remedy detached from economic context. Several studies indicate that maternal employment is associated with higher child work, particularly when women's entry into paid work reflects distress rather than opportunity and when formal care support is weak (Self, 2011; Li & Sekhri, 2020; Fuwa et al., 2006a; Sawada et al., 2006). In such settings, children may substitute into domestic labour or family enterprise work, with daughters often facing heavier burdens that remain partly invisible in conventional labour measures (Lin & Adsera, 2013; Fuwa et al., 2006a; Self, 2011). The literature also emphasises that patriarchal norms and extended family structures can blunt the translation of women's resources into absolute authority. In these contexts, increases in income or education may be insufficient to shift bargaining outcomes if women's mobility is restricted, if control over earnings is limited, or if decision-making remains concentrated among senior male or elder household members (Singh et al., 2025; Kingdon, 2005; Kambhampati, 2009). A balanced interpretation, therefore, favours bargaining models that accommodate social constraints, joint decision making, and the possibility that empowerment is necessary but not sufficient to change child outcomes (Kambhampati, 2009; Kingdon, 2005).

An additional and important dimension of heterogeneity concerns child gender and the visibility of different forms of work. The evidence reviewed suggests that girls are more likely to be engaged in unpaid domestic and care-related activities, which are often not fully captured in conventional measures of child labour. As a result, improvements in schooling outcomes do not necessarily imply a reduction in total work burdens, particularly for girls, whose time may be reallocated from market work to household production. This pattern is consistent with evidence on gendered time allocation in India, where domestic responsibilities are unevenly distributed within households (Lin & Adsera, 2013). In keeping with this concern, the synthesis reports the protective effects of maternal bargaining power separately for schooling outcomes, market work, and domestic work. It refrains from drawing inferences about the total children's work from studies that measure only one margin. The pattern across the evidence is therefore best read as showing where maternal bargaining power protects which margin of children's time, rather than as a uniform effect on a single aggregate outcome.

These dynamics also help explain variation in the estimated effects of maternal bargaining power and employment. In settings where women's increased economic participation relaxes

household budget constraints, children's involvement in market work may decline. However, in the absence of complementary support structures, such as childcare or labour-saving household technologies, children, especially daughters, may be forced to substitute into domestic roles. This highlights the importance of interpreting child labour not as a single observable activity, but as a broader allocation of time across market work, unpaid family work, and domestic responsibilities (Becker, 1965).

Finally, differences in how studies define and measure child labour have direct implications for comparability across the evidence base. Studies focusing only on wage employment may report greater improvements in child outcomes than those that incorporate unpaid and domestic work. This suggests that part of the variation in findings reflects differences in measurement rather than underlying behavioural responses. A careful synthesis, therefore, requires recognising these definitional differences and interpreting results within a framework that accounts for both visible and less visible forms of children's work (Ray, 2000).

The synthesis points to four design priorities that are both consistent with the evidence and operationally specific. First, enforce existing inheritance rights rather than legislate new ones. The Hindu Succession Amendment Act of 2005 already secures daughters' coparcenary rights. However, the bargaining and child-outcome gains documented by Kerr (2019), Sapkal (2016), and Agarwal and Katewa (2024) materialise only when mothers can credibly claim and retain such rights. State revenue departments should therefore routinely record the names of female heirs at the time of land mutation; legal aid clinics under the National Legal Services Authority should provide dedicated support for women's inheritance claims; and panchayat-level paralegal volunteers should receive targeted training in documenting female ownership. These steps convert formal rights into enforceable claims and strengthen the threat point that underlies the bargaining channel.

Second, expand subsidised, quality-assured childcare. The mixed estimates for maternal employment on children's outcomes (Self, 2011; Fuwa et al., 2006a; Li & Sekhri, 2020; Afridi et al., 2016) indicate that the protective effect of mothers' work materialises only when household care production does not fall to daughters. The Mission Saksham Anganwadi and Poshan 2.0 framework offers an existing delivery channel that can be deepened by extending crèche hours to align with the working day, co-locating crèches at NREGA worksites and urban informal labour clusters, as already piloted under the Palna scheme, and setting minimum quality and worker-to-child ratio standards. Childcare expansion is best treated as a complement to, not a substitute for, women's economic empowerment.

Third, mandate sex- and activity-disaggregated time-use measurement in flagship surveys. The underestimation of girls' domestic work, repeatedly flagged across the synthesis (Lin & Adsera, 2013; Self, 2011; Rammohan, 2014), can be corrected only through the routine collection of time-use diaries. The Time Use Survey conducted by the National Statistical Office in 2019 provides the methodological template. It should be repeated on a triennial cycle; its child module should include children aged 5 to 17; and PLFS and NFHS should embed short-term-use modules that distinguish between market work, unpaid family work, schooling, and domestic work. Without such measurement, policy will continue to be evaluated solely on the schooling margin, masking the gendered redistribution of household work.

Fourth, target the poorest households with bundled instruments. Evidence from Chamarbagwala (2008) and Sahoo (2021) shows that the returns to education and the protective effect of empowerment are muted among liquidity-constrained households. Effective targeting, therefore, requires bundling cash transfers conditional on attendance, fee waivers, and scholarship programmes with women's self-help group membership and with active enrolment drives in the lowest two consumption quintiles, identified through the Socio-Economic and

Caste Census or comparable state-level databases. Single-instrument designs, such as a cash transfer without childcare or without complementary enforcement of school attendance, are likely to underperform. Taken together, these four design features treat the eradication of child labour and the empowerment of mothers as joint policy objectives, aligned with the commitments under Sustainable Development Goal Target 8.7 and consistent with the structural account of household decision making developed in this review.

Methodological limits in the evidence base remain significant and shape how confidently conclusions can be drawn. Many studies rely on cross-sectional data and proxy measures of bargaining power, which make causal interpretation difficult and open the door to omitted-variable bias (Afridi, 2010; Das, 2023). Empowerment indices based on a small number of survey questions may not fully capture agency and may be susceptible to social desirability bias (Park et al., 2011). On the child labour side, narrow definitions that focus on market work can understate total work burdens, particularly for girls engaged in domestic chores and care (Sahoo, 2021; Rammohan, 2014). Stronger designs using policy reforms and quasi-experimental variation exist, such as difference-in-differences studies of legal changes (Kerr, 2019; Sapkal, 2016; Agarwal & Katewa, 2024) and panel data with instrumental variables (Afridi et al., 2016; Lancaster et al., 2006). However, they remain relatively limited in number and often focus on specific pathways, leaving gaps in understanding interactions between empowerment, local labour demand, school quality, and household shocks (Kambhampati, 2009; Kambhampati & Rajan, 2005; Nath & Das, 2025). Future research would benefit from longitudinal data, richer time-use measurement, and mixed-methods approaches that link statistical patterns to household negotiation processes (Yan & Chen, 2024; Sahoo, 2021; Goodburn, 2020).

In conclusion, the review supports a clear overarching inference: stronger maternal bargaining power is generally associated with lower child labour and higher educational participation in India, with the most credible evidence pointing to a causal role when women's rights and control over resources improve. Nevertheless, the literature equally shows that empowerment does not operate in isolation. Its benefits are mediated by poverty, labour market insecurity, care constraints, and social norms that shape whether women's resources translate into decision-making authority and whether children's time is protected from substitution pressures. Policy and research agendas should therefore treat gender equality and the reduction of child labour as joint objectives. Strategies that combine women's legal and economic strengthening with services that reduce care burdens and improve access to schooling offer the best prospect of breaking intergenerational cycles of low education and child labour, while also moving India closer to its commitments on child rights and inclusive development.

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Appendix

Table A1: Full List of Included Peer-Reviewed Studies

No.	Author(s) (Year)	Title	Journal
1	Afridi (2010)	Women's empowerment and the goal of parity between the sexes in schooling in India	Population Studies
2	Afridi et al. (2016)	Female labor force participation and child education in India: evidence from the National Rural Employment Guarantee Scheme	IZA Journal of Labor & Development
3	Agarwal & Katewa (2024)	Improving Women's Position in the Household: Evidence from a Maternity Cash Transfer Programme in India	European Journal of Development Research
4	Chamarbagwala (2008)	Regional Returns to Education, Child Labour and Schooling in India	The Journal of Development Studies
5	Das (2023)	Examination of Elements Influencing Mothers' Dynamic Capacity and Versatility: A Household-level Analysis	Indian Journal of Human Development
6	Das & Mukherjee (2007)	Role of women in schooling and child labour decision: the case of urban boys in India	Social Indicators Research
7	Francavilla & Giannelli (2010)	The relation between child work and the employment of mothers in India	International Journal of Manpower
8	Francavilla et al. (2013)	Mothers' Employment and their Children's Schooling: A Joint Multilevel Analysis for India	World Development
9	Fuwa et al. (2006a)	Introduction to a study of intrahousehold resource allocation and gender discrimination in rural Andhra Pradesh, India	Developing Economies
10	Fuwa et al. (2006b)	Intrahousehold Resource Allocation, Child Labor, and School Enrollment: Evidence from Rural India	Economic Review
11	Goodburn (2020)	Changing patterns of household decision-making and the education of rural migrant children: comparing Shenzhen and Mumbai	Migration Studies
12	Kambhampati (2009)	Child Schooling and Work Decisions in India: The Role of Household and Regional Gender Equity	Feminist Economics
13	Kambhampati & Rajan (2005)	Does child work decrease with parental income? The luxury axiom revisited in India	European Journal of Development Research
14	Kerr (2019)	Inheritance Laws, Educational Attainment, and Child Labor: Evidence from Indian States	Journal of Human Capital
15	Kingdon (2005)	Where Has All the Bias Gone? Detecting Gender Bias in the Intrahousehold Allocation of Educational Expenditure	Economic Development and Cultural Change
16	Kurosaki et al. (2006)	Child labor and school enrollment in rural India: Whose education matters?	Developing Economies
17	Lancaster et al. (2006)	Endogenous intra-household balance of power and its impact on expenditure patterns: Evidence from India	Economica
18	Lancaster et al. (2008)	Household expenditure patterns and gender bias: Evidence from selected Indian States	Oxford Development Studies
19	Li & Sekhri (2020)	The Spillovers of Employment Guarantee Programs on Child Labor and Education	World Bank Economic Review
20	Lin & Wollni (2024)	Milk, money, and gender: Exploring the link between women's decision-making in dairy production and welfare investments in boys versus girls	Canadian Journal of Agricultural Economics
21	Lin & Adsera (2013)	Son Preference and Children's Housework: The Case of India	Population Research and Policy Review
22	Mehta & Bhattacharya (2019)	What discriminates the welfare outcomes of children in India. A multiple discriminant analysis in selected states	Theoretical and Applied Economics

23	Mukherjee & Das (2008)	Role of Parental Education in Schooling and Child Labour Decision: Urban India in the Last Decade	Social Indicators Research
24	Nath & Das (2025)	Does women empowerment impact child well-being? Evidence from India	Social Science & Medicine
25	Park et al. (2011)	Women's Bargaining Power and Educational Expenditures: Implications for Subsidy Policy	Journal of Policy Studies
26	Rammohan (2014)	The trade-off between child labour and schooling in India	Education Economics
27	Sahoo (2021)	A sociological study of patterns and determinants of child labour in India	Journal of Children's Services
28	Sapkal (2016)	From Mother to Daughter: Does Equal Inheritance Property Laws Reform Improve Female Labor Supply and Educational Attainments in India?	Asian Journal of Law and Economics
29	Sawada et al. (2006)	On the mother and child labor nexus under credit constraints: findings from rural India	The Developing Economies
30	Self (2011)	Market and non-market child labour in rural India: The role of the mother's participation in the labour force	Oxford Development Studies
31	Singh et al. (2025).	Exploring Parental Agency: Lessons Learned from Northern India	Journal of Child & Family Studies
32	Yan & Chen (2024)	Adolescent gender beliefs in India: Does mothers' empowerment matter?	Social Science Research

Source: Authors

Table A2: Summary of Included Studies' Measures, Outcomes, and Identification Strategy

No.	Author(s) (Year)	Data Source	Sample	Maternal Bargaining Power Measure	Child Labour/Schooling Outcome	Child labour margin measured	Identification Strategy	Key Findings
1	Afridi (2010)	Indian Human Development Survey (IHDS), 2004-2005	National sample of households with children aged 6-14	Women's empowerment index constructed from: (1) Decision-making power over household purchases, (2) Freedom of movement, (3) Access to and control over resources, (4) Spousal education difference	Gender gap in children's school enrollment and grade completion	Schooling	OLS regression with household fixed effects; Instrumental variables using spousal age difference and parental education as instruments	Higher women's empowerment significantly reduces the gender gap in schooling; effect is more substantial for older children (11-14 years) and in households where mothers have greater bargaining power relative to fathers
2	Afridi et al. (2016)	Young Lives Study	3,275 children aged 5-14,	Mother's employment status (dummy)	Time spent in school, enrolment,	Schooling	Panel FE with IV (rainfall shocks,	Mother's employment increases children's

		(Andhra Pradesh)	panel 2007-2010		and grade progression		NREGA funds)	school time and grade progression; effect operates through increased household decision-making power.
3	Agarwal & Katewa (2024)	IHDS (2005, 2012)	National, matched sample	Maternity cash transfer exposure	Women's decision-making, female children's education	Schooling	Matched pair difference-in-differences	Cash transfer improved women's household position and positively affected primary education for female children.
4	Chamarbagwala (2008)	NSS, Employment and Unemployment Schedules: 38th (1983-84), 43rd (1987-88), 50th (1993-94), and 55th (1999-2000) Rounds	Children aged 5-14 years across Indian regions (77 regions). Total across rounds is 438,868 children.	The study focuses on regional returns to education (average adult wages by education level).	Child's school attendance; Child labour (market work, household enterprise work, domestic duties).	Composite (market, family unpaid, domestic, schooling)	Bivariate probit model	Higher regional returns to primary education significantly increase school attendance and decrease child labour for children in households where both parents are uneducated. This effect holds only for the top three income quintiles. The relationship is stronger for children aged 10-14 years.
5	Das (2023)	NFHS-4 (2015-16)	National, 18,324 households	Mother's education, age, and residence	examines maternal decision capacity on household education expenditure	Schooling (education expenditure)	Multivariate regression	Higher maternal education and age increase decision-making capacity
6	Das & Mukherjee (2007)	NSS 55th Round (1999-2000)	Urban India, boys aged 5-14	Mother's education	Child labour, schooling	Composite (market work and schooling)	Probit models	Mother's education emerges as very important factor in curbing child labour incidents.
7	Francavilla and Giannelli (2010)	NFHS-2 (1998-99)	National, 51,555 children	Mothers' employment status	Child activity status: studying, market work, family work, inactive	Composite (market, family, unpaid,	Multinomial logit	Children of employed mothers are more likely to work; mothers' preferred choice is not to work and send their children

						schooling)		to school; the effect is more potent in rural areas; mothers' education has a larger protective effect than fathers' education.
8	Francavilla et al. (2013).	National Family Health Survey (NFHS-2), 1998-99, India	14,181 mothers & 26,269 children (urban); 33,137 mothers & 65,726 children (rural). Children aged 6-14.	Mother's employment status (worked for family farm/business, self-employed, or for someone else in last 12 months).	Child's school attendance (attending school or not).	Schooling	Multilevel bivariate probit model	The correlation between mothers' employment and children's schooling is negative and significant. The effect is more potent in rural areas. A sensitivity analysis shows that this negative relationship disappears in urban areas and weakens in rural areas for the wealthiest households.
9	Fuwa et al. (2006a)	Primary survey (Andhra Pradesh)	400 households, 32 villages	Maternal labour, credit constraints	Child labour incidence, school enrollment	Composite (market, domestic, schooling)	Village FE logit	Credit-constrained households have higher child labour; maternal labour outside home shifts child labour burden to daughters.
10	Fuwa et al. (2006b).	Primary survey (Andhra Pradesh)	Same as above	Maternal characteristics, household structure	Child time use, school enrollment	Composite (market, family, unpaid, schooling)	Collective household models	Collective models supported over unitary models; maternal characteristics significantly influence child outcomes
11	Goodburn (2020)	Qualitative interviews (Mumbai sub sample extracted from a Shenzhen and Mumbai comparative study)	Mumbai migrant households; Shenzhen component excluded from this review's synthesis	Household decision-making patterns	Child education outcomes	Schooling (qualitative)	Comparative qualitative analysis	Increased maternal autonomy post-migration does not consistently improve educational outcomes due to structural poverty.

12	Kambhampati (2009)	NSS 50th Round (1993-94)	Rural India, 93,825 children	Household and regional gender equity indices	Child schooling and work	Composite (market and schooling)	Bivariate probit	Gender equity at multiple levels influences child outcomes; effects vary by region and child gender.
13	Kambhampati & Rajan (2005)	NSS 50th Round (1993-94)	Rural India, large national sample	Parental wages, education	Child work	Market and family unpaid	OLS, probit	Mothers' wages reduce child work; maternal and paternal education reduce child labour probability.
14	Kerr (2019)	NFHS, NSS	National, multiple rounds	Inheritance rights (HSA reform exposure)	Child labour, educational attainment	Composite (child labour and schooling)	Difference-in-differences	HSA reform reduced child labour and increased education, especially for girls
15	Kingdon (2005)	NSS 50th Round (1993-94)	Rural India, 28,586 households	Parental education, household characteristics	Gender bias in educational expenditure	Schooling (educational expenditure)	OLS, Tobit	Strong pro-male bias in educational spending; bias is mitigated by maternal education
16	Kurosaki et al. (2006)	Primary survey (Andhra Pradesh)	1,000 children aged 5-14	Maternal vs paternal education	Child labour, school enrollment	Composite (market and schooling)	Village FE logit	Maternal education is more protective than paternal; mother's education is equally important for boys and girls.
17	Lancaster et al. (2006)	NSS 50th Round (1993-94)	National, household expenditure data	Endogenous bargaining weights	Household expenditure patterns	Schooling (expenditure share)	Collective model estimation	Bargaining power affects budget shares nonlinearly; balanced power protects household welfare.
18	Lancaster et al. (2008)	NSS 50th Round (1993-94)	Selected Indian states	Women's bargaining power	Gender bias in education spending	Schooling (expenditure share)	Collective model with regional dummies	Women's bargaining power reduces gender bias in education spending; effects vary by region.
19	Li & Sekhri (2020)	NSS, NREGA administrative data	National, district-level panel	NREGA employment (maternal)	Child labour, school enrollment	Composite (child labour and schooling)	Difference-in-differences, event study	NREGA increased child labour and decreased school enrollment in treated districts

20	Lin & Wollni (2024)	Primary survey (Bangalore)	520 dairy farming households	Women's decision-making in dairy production	Education investment by child gender	Schooling (investment by gender)	Multinomial treatment model	Joint decision-making increases investments in girls' education; sole female decision-making reduces investments.
21	Lin & Adsera (2013)	IHDS (2004-05)	National, 41,554 households	Son preference (ideal son proportion)	Children's housework time	Domestic	OLS, household fixed effects	Girls bear a larger share of household work in households with stronger son preference.
22	Mehta & Bhattacharya (2019)	NFHS-3 (2005-06)	Selected states, 10,832 children	Maternal education	Child welfare outcomes	Schooling (child welfare index)	Multiple discriminant analysis	Maternal education is a key discriminator for child welfare outcomes
23	Mukherjee & Das (2008)	NSS 55th and 61st Rounds	Urban India, 25,183 children (1999-2000), 22,106 children (2004-05)	Parental education	School dropout, child labour, manual/harmful work	Composite (market, harmful work, schooling)	Probit models	Mother's education emerges as increasingly important factor in curbing child labour over time.
24	Nath & Das (2025)	Primary survey (Assam)	375 households	Women's empowerment index (exploratory factor analysis)	Child well-being index (education, health)	Composite (child wellbeing index)	OLS, moderation analysis	Women's empowerment positively impacts child well-being, but various factors moderate its effects.
25	Park et al. (2011).	IHDS (2004-05)	National, 14,523 households	Bargaining power index	Educational expenditure	Schooling (educational expenditure)	OLS, 2SLS	Women's bargaining power positively affects education spending; effect is moderated by income.
26	Rammohan (2014)	NSS 55th Round (1999-2000)	National, 52,381 households	Parental education, land ownership	Child labour-schooling trade-off	Composite (child labour and schooling)	Bivariate probit	Boys are more likely to be full-time students; girls are more likely to be working; parental education reduces child labour.
27	Sahoo (2021)	Census, NSS	National	Socioeconomic background	Child labour patterns	Composite (child	Descriptive, regression	Poverty, caste, and gender influence child labour participation

						labour patterns)		
28	Sapkal (2016)	NFHS, NSS	National, multiple rounds	Inheritance rights (HSA reform exposure)	Female labour supply, daughters' education	Schooling (daughters' educational attainment)	Difference-in-differences	HSA reform improved female labour supply and daughters' educational attainment
29	Self (2011)	NSS 55th Round (1999-2000)	Rural India	Mother's labour force participation	Market and non-market child labour	Market and domestic	OLS, probit	Maternal labour complements child labour, especially the daughters' domestic work burden.
30	Singh et al. (2025)	Qualitative interviews (Uttar Pradesh, Uttarakhand)	27 parents	Parental agency, decision-making	Child education, behaviour	Schooling (qualitative)	Thematic analysis	Mothers bear the bulk of childcare responsibilities but are often excluded from decision-making.
31	Sawada et al. (2006).	Primary survey conducted in rural Andhra Pradesh, India.	400 households from 32 villages in rural Andhra Pradesh.	Mother's employment status (whether she works outside the home).	Children's time allocation: child labour (market work and domestic duties) and its effect on school enrollment.	Composite (market, domestic, schooling)	Endogenous switching regression model and Village fixed-effects logit	Mothers in credit-constrained households are more likely to work. When mothers work outside, elder daughters bear an increased domestic work burden. Findings support collective household models over unitary models.
32	Yan & Chen (2024)	IHDS (2011-12)	National, 1,422 adolescents	Six-class empowerment typology (education, employment, decision-making)	Adolescent gender beliefs	Schooling and gender beliefs	Latent class analysis	Maternal empowerment significantly shapes adolescent children's gender beliefs.

Source: Authors

Table A3: Newcastle Ottawa Scale (NOS) quality appraisal for included quantitative studies

Study ID	Type of study	Representativeness of sample (exposed cohort or cases)	Selection of comparison group (non-exposed cohort or controls)	Ascertainment and validity of exposure (maternal bargaining proxy)	Baseline outcome absence or appropriate design timing	Overall selection (0-4)	Comparability on design or analysis (0-2)	Outcome assessment appropriateness (child labour or schooling definition)	Same ascertainment method across groups or appropriate modelling	Non-response and missingness handled or follow-up adequacy	Overall outcome (0-3)	Overall NOS (0-9)
Afridi (2010)	Cross-sectional with IV and fixed effects	1	1	1	1	4	2	1	1	0	2	8
Afridi et al. (2016)	Panel fixed effects with IV	1	1	1	1	4	2	1	1	0	2	8
Agarwal & Katewa (2024)	Matched difference-in-differences	1	1	1	1	4	2	1	1	0	2	8
Chamarbagwala (2008)	Repeated cross-sections	1	1	0	1	3	2	1	1	0	2	7
Das (2023)	Cross-sectional	1	0	0	0	1	1	1	0	0	1	3
Das & Mukherjee (2007)	Cross-sectional	1	0	1	0	2	1	1	1	0	2	5
Francavilla & Giannelli (2010)	Cross-sectional multinomial choice	1	0	1	0	2	1	1	1	0	2	5
Francavilla et al. (2013)	Multilevel joint model	1	1	1	0	3	2	1	1	0	2	7
Fuwa et al. (2006a)	Primary survey with village fixed effects	1	1	1	0	3	2	1	1	0	2	7
Fuwa et al. (2006b)	Collective household	1	1	1	0	3	2	1	1	0	2	7

	model, primary survey											
Goodburn (2020)	Qualitative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Kambhampati (2009)	Cross-sectional bivariate probit	1	1	1	0	3	1	1	1	0	2	6
Kambhampati & Rajan (2005)	Cross-sectional with bivariate probit	1	1	1	0	3	2	1	1	0	2	7
Kerr (2019)	Difference-in-differences, triple difference	1	1	1	1	4	2	1	1	0	2	8
Kingdon (2005)	Cross-sectional with robust allocation tests	1	1	1	0	3	2	1	1	0	2	7
Kurosaki et al. (2006).	Primary survey with village fixed effects	1	1	1	0	3	2	1	1	0	2	7
Lancaster et al. (2006)	Cross-sectional collective model	1	1	1	0	3	1	1	1	0	2	6
Lancaster et al. (2008)	Cross-sectional allocation analysis	1	1	1	0	3	1	1	1	0	2	6
Li & Sekhri (2020)	Phased rollout difference-in-differences and event study	1	1	1	1	4	2	1	1	0	2	8
Lin & Wollni (2024)	Cross-sectional with treatm	1	1	1	0	3	1	1	1	0	2	6

	ent effects model											
Lin & Adsera (2013)	Cross-sectional with rich controls and random effects	1	1	1	0	3	2	1	1	0	2	7
Mehta & Bhattacharya (2019)	Cross-sectional discriminant analysis	1	0	0	0	1	0	1	0	0	1	2
Mukherjee & Das (2008)	Repeated cross-sections, probit	1	0	1	0	2	1	1	1	0	2	5
Nath & Das (2025)	Cross-sectional survey, index construction	1	0	1	0	2	1	1	1	0	2	5
Park et al. (2011)	Cross-sectional with 2SLS	1	0	1	0	2	2	1	1	0	2	6
Rammohan (2014)	Cross-sectional with multiple outcome states	1	0	1	0	2	1	1	1	0	2	5
Sahoo (2021)	Cross-sectional secondary data	1	0	0	0	1	1	1	0	0	1	3
Sapkal (2016)	Policy reform difference-in-differences	1	1	1	1	4	2	1	1	0	2	8
Self (2011)	Cross-sectional, market and non-market work	1	0	1	0	2	1	1	1	0	2	5

Sawada et al. (2006)	Primary survey, credit constraint modelling	1	1	1	0	3	2	1	1	0	2	7
Singh et al. (2025)	Qualitative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Yan & Chen (2024)	Cross-sectional, latent class analysis	1	0	1	0	2	1	1	1	0	2	5

Source: Authors

Table A4: Mixed Methods Appraisal Tool (MMAT) assessment for qualitative studies

Study ID	S1. Are there clear research questions?	S2. Do the collected data allow addressing the research questions?	3.1. Are the participants representative of the target population?	3.2. Are measurements appropriate regarding both the outcome and intervention (or exposure)?	3.3. Are there complete outcome data?	3.4. Are the confounders accounted for in the design and analysis?	3.5. During the study period, was the intervention administered (or exposure occurred) as intended?
Singh et al. (2025)	Yes (1)	Yes (1)	Cannot tell (0)	Yes (1)	Yes (1)	Cannot tell (0)	Cannot tell (0)
Goodburn (2020)	Yes (1)	Yes (1)	No (0)	Yes (1)	Cannot tell (0)	Cannot tell (0)	Cannot tell (0)

Source: Authors

Table A5: ROBIS Assessment

Domain	Signalling questions addressed	Judgement	Supporting rationale
Study eligibility criteria	Were the eligibility criteria predefined and aligned with the review question? Were the criteria applied consistently?	Low	Eligibility was specified in a protocol before screening; criteria were mapped directly to PICO-style components; and the comparative study by Goodburn (2020) was handled using a documented partial extraction rule.
Identification and selection of studies	Were searches comprehensive and reproducible? Were selection methods at low risk of bias?	Low	Four databases were searched, supplemented by backward and forward citation chaining from five anchor studies; two reviewers independently screened with high interrater agreement (kappa = 0.908).

Data collection and study appraisal	Were the data extraction and risk of bias assessments at low risk of bias?	Low	Standardised extraction fields were used, and study appraisal followed an adapted NOS for quantitative studies and MMAT for qualitative studies, with independent dual scoring and consensus.
Synthesis and findings	Were all the eligible studies synthesised? Were synthesis methods predefined, and robustness considered?	Moderate	Narrative synthesis was appropriate given heterogeneity in measures of bargaining power and child labour, but measurement heterogeneity in outcome definitions limits direct comparability and is acknowledged explicitly.
Overall	Phase 3 overall judgement of the risk of bias in the review.	Low to moderate	Reflects high transparency in identification, selection, and appraisal, with the principal residual concern arising from heterogeneity in outcome measurement, as discussed in Section 3.6.

Source: Authors, based on Whiting et al. (2016).

Appendix B: PRISMA 2020 Checklist

Section and Topic	Item	Checklist item	Location where item is reported (page)
TITLE			
Title	1	Identify the report as a systematic review.	1
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	1
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	02-Mar
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	3
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	10
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	10-Nov
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	11-Dec

Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and, if applicable, details of automation tools used in the process.	Dec-13
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and, if applicable, details of automation tools used in the process.	13
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	13
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	13
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	13-14
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	Not applicable (narrative synthesis)
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	14
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics or data conversions.	14
	13c	Describe any methods used to tabulate or visually display the results of individual studies and syntheses.	14

	13d	Describe any methods used to synthesise results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	14
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	14
	13f	Describe any sensitivity analyses conducted to assess the robustness of the synthesised results.	14
Reporting bias assessment	14	Describe any methods used to assess the risk of bias due to missing results in a synthesis (arising from reporting biases).	14-15
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	14-15
RESULTS			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	12-13, Figure 1
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	12-13 (exclusion reasons given)
Study characteristics	17	Cite each included study and present its characteristics.	Appendix Table A1
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	Appendix Tables A3 and A4
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	Not applicable (qualitative synthesis)
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	15-18 (Discussion)
	20b	Present the results of all statistical syntheses conducted. If a meta-analysis was done, present, for each, the summary estimate and its precision (e.g., confidence/credible interval), and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	Not applicable

	20c	Present the results of all investigations of possible causes of heterogeneity among study results.	15-18 (Discussion)
	20d	Present the results of all sensitivity analyses conducted to assess the robustness of the synthesised results.	15-18
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	14-15
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	15-18 (Discussion)
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	15
	23b	Discuss any limitations of the evidence included in the review.	16-17
	23c	Discuss any limitations of the review processes used.	16-17
	23d	Discuss implications of the results for practice, policy, and future research.	17-18
OTHER INFORMATION			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	Not registered
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	Protocol specified before screening began; available from authors upon request.
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	None
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	Funding section (no funding)
Competing interests	26	Declare any competing interests of review authors.	Disclosure Statement
Availability of data, code, and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	Available from authors upon reasonable request