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Assessment of Child Marriage in Katsina State, Nigeria: Implications for the Achievement of SDG 4 (Quality Education) and SDG 5 (Gender Equality)

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ABSTRACT: Child marriage remains a major challenge in Northern Nigeria despite existing policies and international commitments aimed at protecting girls and promoting education. This study assessed child marriage in Katsina State, Nigeria, and examined how sustainable education can contribute to achieving Sustainable Development Goal 4 (Quality Education) and Goal 5 (Gender Equality) within the 2016–2026 period. A mixed-methods research design was adopted, covering Katsina, Daura, and Malumfashi Local Government Areas. Data were collected from 150 respondents through structured questionnaires, while 45 participants took part in three focus group discussions. Quantitative data were analysed using descriptive statistics, chi-square tests, Kruskal–Wallis H tests, and binary logistic regression, while qualitative data were examined thematically. The findings revealed that community exposure to child marriage was high at

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79.5%, with higher reported rates in Daura (95.9%) and Malumfashi (93.8%) than in Katsina (49.0%). Cultural practices, lack of education, poverty, and religious beliefs were identified as major contributing factors. Policy awareness significantly reduced the likelihood of child marriage, while perceived educational quality also showed a significant effect in the economic model. The study concludes that child marriage results from the interaction of cultural, economic, educational, and institutional factors. It recommends strengthening girls' education, improving school retention and quality, increasing policy awareness, and implementing community-based interventions to reduce child marriage and advance gender equality in Katsina State.

Keywords: *Child marriage; sustainable education; Katsina State; SDG 4; SDG 5; social norms; human capital; mixed methods.*

Introduction

Child marriage remains a significant social and developmental challenge that affects the rights, education, health, and future opportunities of girls in many parts of the world. It refers to any formal or informal marriage or union in which at least one of the parties is below the age of 18. The practice limits girls' freedom to make decisions about their lives and often exposes them to early pregnancy, health complications, school dropout, economic dependence, and gender discrimination (Magaji et al., 2026). Beyond its effects on individual girls, child marriage contributes to the continuation of poverty, child labour, illiteracy, and inequality across generations (Magaji & Musa, 2015; Jankoli et al., 2025). Despite international commitments and government interventions aimed at protecting children, the practice continues in communities where cultural expectations, economic hardship, and limited educational opportunities influence family decisions.

Globally, child marriage remains a major obstacle to achieving sustainable development, particularly in countries where girls have limited access to quality education and equal opportunities. The United Nations Sustainable Development Goals (SDGs), adopted in 2015, provide an important framework for addressing this challenge. SDG 4 seeks to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all, while SDG 5 focuses on achieving gender equality and empowering women and girls. These goals are closely connected because education helps girls gain

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knowledge, build confidence, understand their rights, and improve their chances of economic independence (Musa et al., 2023). When girls are encouraged to remain in school and complete their education, they are more likely to gain the skills and opportunities needed to make informed decisions about marriage and their future. Consequently, addressing child marriage is essential to achieving both quality education and gender equality.

In Nigeria, child marriage remains a major concern, particularly in the northern part of the country, where the practice is associated with poverty, traditional beliefs, gender expectations, and limited access to education for girls. In some communities, marriage at an early age is influenced by family expectations, concerns about family honour, and beliefs about the appropriate roles of women and girls. Economic difficulties may also encourage some parents to prioritise marriage over continued schooling. Amid insecurity and poverty, these circumstances can prevent girls from completing their education and reduce their opportunities for personal development and participation in economic activities (Omar et al., 2025). Although Nigeria has introduced policies and strategies to protect children and promote girls' education, the persistence of child marriage indicates the need to assess the effectiveness of existing measures and identify approaches that address the underlying causes of the practice.

Katsina State, located in the north-western geopolitical zone of Nigeria, provides an important context for examining child marriage and its implications for educational development and gender equality. The state faces challenges associated with poverty, low female literacy in some communities, inadequate educational facilities, and traditional expectations regarding marriage and family responsibilities. In certain communities, girls are expected to marry and assume domestic responsibilities at an early age, sometimes before completing basic or secondary education. Early marriage can therefore interrupt schooling, restrict access to further educational opportunities, and limit girls' ability to acquire the knowledge and skills necessary for independent living. These challenges raise important questions about the extent to which child marriage affects the educational development and empowerment of girls in Katsina State.

The implications of child marriage for SDG 4 (Quality Education) are evident in its potential to increase school dropout rates, reduce educational attainment, and limit girls'

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participation in lifelong learning. Girls who marry early may experience difficulties returning to school because of pregnancy, childcare responsibilities, financial constraints, and family expectations. Similarly, child marriage undermines SDG 5 (Gender Equality) by restricting girls' autonomy, limiting their participation in decision-making, and reinforcing unequal relationships between men and women. These consequences demonstrate that the achievement of quality education and gender equality requires more than increasing school enrolment; it also requires creating an environment in which girls can remain in school, complete their education, exercise their rights, and participate meaningfully in society.

Against this background, this study assesses child marriage in Katsina State, Nigeria, with particular emphasis on its prevalence, contributing factors, and implications for achieving SDG 4 and SDG 5. It examines the relationship between child marriage, educational opportunities, cultural practices, economic conditions, and gender inequality. The study also considers how access to quality education, community awareness, effective policies, and institutional support can contribute to reducing the practice. By examining these issues, the research seeks to provide a clearer understanding of child marriage in Katsina State and generate findings that can support policies and interventions aimed at protecting girls' rights, improving educational outcomes, promoting gender equality, and advancing the achievement of the Sustainable Development Goals.

Literature Review

Conceptual Review

The Concept of Child Marriage

The conceptualisation of child marriage has evolved significantly over recent decades, moving from a culturally relative understanding to one grounded in international human rights frameworks. UNICEF (2023) defines child marriage as "a formal marriage or informal union before age 18," a definition that recognises both legally registered marriages and customary or religious unions that may not be formally documented. This inclusive definition is essential in contexts like Northern Nigeria where customary and religious marriages predominate and may not be captured by official statistics.

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The definition encompasses several critical dimensions. First, it recognises marriage as a process rather than a single event, encompassing the period from betrothal through cohabitation and consummation. This temporal dimension is important because girls may be considered "married" from betrothal even if cohabitation occurs later. Second, the definition acknowledges that child marriage affects both boys and girls but disproportionately impacts girls, who constitute the vast majority of those married under age 18 globally. Third, the definition recognises that marriage may be formal or informal, capturing unions that may not be legally registered but function as marriages in practice.

International human rights frameworks provide the normative foundation for understanding child marriage as a rights violation. The Universal Declaration of Human Rights (1948) establishes that "marriage shall be entered into only with the free and full consent of the intending parties," a condition that minors are legally incapable of fulfilling. The Convention on the Rights of the Child (1989) recognises the right of children to protection from all forms of exploitation and harmful practices, establishing 18 as the age of majority. The Convention on the Elimination of All Forms of Discrimination Against Women (1979) affirms the right to free choice of spouse and equal rights in marriage.

Child marriage is recognised as a form of gender-based violence and a harmful practice that perpetuates gender inequality. It denies girls their right to education, health, and participation in decisions affecting their lives. It exposes them to heightened risks of domestic violence, early pregnancy, and maternal mortality. It limits their economic opportunities and perpetuates intergenerational cycles of poverty and illiteracy (UNICEF, 2021).

SDG 4 and SDG 5: Targets, Indicators, and Interlinkages

Sustainable Development Goal 4 aims to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all." Key targets relevant to this study include Target 4.1, which by 2030 aims to ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes; Target 4.5, which by 2030 aims to eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable; and Target 4.7, which by 2030 aims to ensure that all learners acquire the

 DOI: *10.5281/zenodo.23925631*

knowledge and skills needed to promote sustainable development, including through education for sustainable development, human rights, gender equality, and a culture of peace.

Sustainable Development Goal 5 aims to "achieve gender equality and empower all women and girls." Key targets include Target 5.1, which calls for ending all forms of discrimination against all women and girls everywhere; Target 5.3, which calls for eliminating all harmful practices, such as child, early and forced marriage and female genital mutilation; and Target 5.5, which calls for ensuring women's full and effective participation and equal opportunities for leadership at all levels of decision-making.

The interlinkages between SDG 4 and SDG 5 are particularly significant in the context of child marriage. Education is both a right in itself and an enabler of other rights, including gender equality (Gabdo et al., 2025; Okon et al., 2025; Bello et al., 2025). Conversely, gender equality, including freedom from child marriage, is a precondition for girls' meaningful educational participation. Progress toward either goal reinforces progress toward the other, while failure in one undermines the other (UN Women, 2019).

Theoretical Framework

This study conceptualises child marriage as a multi-level phenomenon requiring a multi-level explanatory framework. The Norm–Economic–Institutional (NEI) Interaction Model, developed in this study, assigns each theoretical perspective a specific analytical role within the causal architecture of child marriage persistence. At the micro-level, Social Learning Theory explains how intergenerational norm transmission generates individual-level expectations and dispositions that sustain child marriage. At the meso-level, Social Norms Theory explains how collective expectations, enforcement mechanisms, and pluralistic ignorance sustain the practice even when individual attitudes begin to shift. At the household level, Human Capital Theory explains the economic investment rationality through which family decision-makers evaluate the relative benefits of early marriage versus girls' continued education. At the structural level, the institutional context determines whether legal frameworks and SDG commitments translate into credible enforcement or remain aspirational rather than operative. Child marriage persistence in Katsina State is therefore understood, within the NEI framework, as the product of

 DOI: *10.5281/zenodo.23925631*

mutually reinforcing normative, economic, and institutional mechanisms rather than the failure of any single factor.

Social Learning Theory

Social Learning Theory, developed primarily by Albert Bandura (1977), posits that individuals learn behaviours, values, and norms through observing and modelling others within their social environment. The theory emphasises that learning occurs within a social context and that observation, imitation, and modelling are central to the acquisition of new behaviours.

At the micro-level, Social Learning Theory offers a precise explanatory lens for understanding how child marriage is transmitted across generations within the NEI framework. Girls in Katsina communities observe their mothers, sisters, and other women marrying early and assuming roles as wives and mothers. These observations are not passive; they constitute an active process of identity formation in which early marriage is progressively internalised as the normatively expected and subjectively desirable life course. Boys similarly observe and internalise expectations about their roles as husbands and providers. This micro-level learning process is the primary mechanism of intergenerational reproduction: each generation of girls socialised into child marriage norms becomes the reference population through whom the next generation learns. At the micro-level, therefore, Social Learning Theory explains the durability of child marriage even in the absence of explicit coercion, because the practice is experienced as normal rather than as imposed.

The theory also addresses mechanisms of reinforcement. Girls who conform to community expectations by marrying early receive social approval and acceptance, while those who resist or delay marriage may face social sanctions, including stigmatisation and reduced marriage prospects. This reinforcement structure maintains the practice by rewarding conformity and punishing deviation.

For this study, Social Learning Theory informs analysis of how child marriage norms are transmitted intergenerationally, the influence of role models and socialisation processes, mechanisms of reinforcement that sustain the practice, and potential intervention points for introducing alternative models. The theory is operationalised through FGD questions

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exploring how girls learn about marriage expectations from observing mothers, sisters, and other women, and through survey questions about family messages regarding appropriate marriage age.

Empirical Review

The global epidemiology of child marriage has been extensively documented through Demographic and Health Surveys, Multiple Indicator Cluster Surveys, and other large-scale data collection efforts. UNICEF (2023) offers the most comprehensive global estimates, drawing on data from over 100 countries. The report indicates that while global prevalence has declined from one in four girls married a decade ago to approximately one in five today, progress is uneven and insufficient to meet SDG targets.

Regionally, South Asia has recorded the most significant declines, with the prevalence of child marriage dropping from nearly 50% to approximately 30% over the past two decades. This progress is attributed to a combination of economic growth, expanded educational opportunities, and targeted interventions (UNICEF, 2023). India, which accounts for one-third of the world's child brides, has seen particular progress, though prevalence remains high in specific states and among marginalised populations.

Sub-Saharan Africa presents a more challenging picture. While some countries have recorded declines, population growth means that the absolute number of child brides continues to increase in many contexts. The region's high fertility rates, persistent poverty, and limited educational infrastructure create conditions that sustain the practice (African Union, 2021).

Global research has consistently identified key risk factors for child marriage. These include poverty, which drives families to marry daughters to reduce economic burden; low educational attainment, both of girls and their parents; rural residence, which limits access to schools and alternative opportunities; and conflict and humanitarian crises, which disrupt social protection systems and increase girls' vulnerability (UNFPA & UNICEF, 2020). Protective factors identified in global research include girls' education, particularly secondary education; laws and policies that set the minimum age of marriage at 18 and are effectively enforced; community-based programmemes that engage families and religious

 DOI: *10.5281/zenodo.23925631*

leaders; and economic empowerment interventions that provide alternatives to marriage (Malhotra et al., 2011).

Sub-Saharan Africa presents the highest child marriage prevalence rates globally, with substantial variation across and within countries. Bolarinwa et al. (2022) conducted a multilevel analysis of female child marriage in Nigeria using the 2018 Demographic and Health Survey, finding that educational attainment, place of residence, and household wealth were the strongest predictors. The study demonstrated significant spatial clustering of child marriage in Northern states, with secondary education emerging as the most consistent protective factor.

Psaki et al. (2021) conducted a longitudinal analysis of child marriage trends in five Sub-Saharan African countries, finding that while prevalence has declined in most settings, progress has been slowest among the poorest households and in rural areas. The study highlighted the importance of addressing structural inequalities alongside individual-level interventions.

Mathur, Greene and Malhotra (2003) provided an early and influential analysis of child marriage as a reproductive health and human rights issue in Sub-Saharan Africa. Their framework emphasised the need to address the multiple drivers of child marriage simultaneously, including poverty, gender inequality, and lack of educational opportunities. This multi-dimensional approach has informed subsequent intervention design and evaluation.

In West Africa specifically, research has emphasised the role of economic factors, cultural norms, and religious beliefs in sustaining child marriage. The region's high poverty rates, limited educational infrastructure, and patriarchal social structures create conditions particularly conducive to early marriage (UNICEF West Africa Regional Office, 2018).

Nigeria's child marriage landscape is characterised by stark regional disparities that reflect the country's broader socio-economic and cultural diversity. The National Population Commission's Demographic and Health Surveys provide the primary data source for understanding these patterns. The 2018 NDHS revealed that nationally, 44% of women aged 20-24 were married before 18, but this figure masks enormous variation, from below 10% in some southern states to over 70% in parts of the north (NPC & ICF, 2019).

 DOI: *10.5281/zenodo.23925631*

Several studies have examined the factors underlying these regional disparities. Bolarinwa et al. (2023) analysed NDHS data to identify predictors of child marriage across Nigeria's six geopolitical zones. The study found that region of residence was the strongest predictor, even after controlling for individual-level factors such as education and household wealth. This finding underscores the importance of contextual factors, including cultural norms, religious institutions, and historical trajectories, in shaping marriage practices.

The legal and policy framework for addressing child marriage in Nigeria has been examined by several scholars. UNICEF (2016) analysed the Child Rights Act 2003 and its reception across Nigerian states, highlighting the tensions between federal legislation and state-level autonomy, particularly regarding matters of custom and religion. The study noted that the Act's requirement for state-level domestication has created a patchwork of legal protections, with girls in non-domesticating states lacking statutory protection from child marriage.

Isiugo-Abanihe, Oyediran and Fayehun (2022) examined differentials in girl-child marriage and high fertility in Nigeria, finding that educational attainment and religious affiliation were significant drivers of variation in child marriage rates across regions. Their analysis demonstrated that women with secondary or higher education were substantially less likely to have been married in childhood, underlining the centrality of education as a protective factor.

Research focusing specifically on Northern Nigeria has identified a complex interplay of factors sustaining child marriage. Mobolaji, Fatusi and Adedini (2020) examined the influence of ethnicity and religious affiliation on girl-child marriage in Nigeria, demonstrating that Hausa/Fulani girls in Northern Nigeria faced substantially higher rates of child marriage and that religious affiliation was a significant independent predictor. Their findings highlighted how patriarchal norms embedded in ethnic and religious identities define girls primarily as wives and mothers.

Evidence reviews and programmeme guidance note that religious and community leaders can strongly influence social norms related to marriage age. In some contexts, conservative interpretations that permit marriage at puberty are cited to justify the practice, making faith

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and community gatekeepers important stakeholders for prevention efforts (Psaki et al., 2021; UNFPA–UNICEF, 2021).

Malhotra, Warner, McGonagle and Lee-Rife (2011) examined the economic roots of child marriage in rural Northern Nigeria, finding that poverty drives families to marry daughters early as a coping strategy. The study documented how bride price practices create economic incentives for early marriage, with younger brides commanding higher payments. This economic logic operates alongside cultural and religious factors, creating a powerful set of drivers that resist simple interventions.

The consequences of child marriage for girls in Northern Nigeria have been extensively documented. UNESCO (2023) examined impacts on education, health, and economic opportunities, finding that married girls are systematically disadvantaged across all domains. The study documented elevated rates of maternal mortality, domestic violence, and poverty among women who married early, as well as intergenerational effects on their children's health and education.

A substantial body of research identifies girls' education as one of the most consistent protective factors against child marriage. Quantitative analyses using Demographic and Health Survey data across multiple African contexts demonstrate a strong inverse relationship between educational attainment and early marriage (Fatusi, Adedini& Mobolaji, 2021). These studies consistently show that girls who complete secondary education are significantly less likely to marry before the age of eighteen. However, while such research establishes strong statistical correlations, it often provides limited insight into the social mechanisms through which education reshapes household decision-making and community expectations regarding marriage.

Psaki et al. (2021) extend this discussion by emphasising the importance of both supply-side and demand-side factors in reducing child marriage. Their findings suggest that expanding school availability alone rarely reduces early marriage unless accompanied by shifts in community norms and household economic incentives. Education therefore operates through multiple pathways simultaneously: delaying marriage through continued schooling, increasing girls' aspirations, and altering the perceived economic returns to girls' education within households.

 DOI: *10.5281/zenodo.23925631*

Research focusing specifically on Northern Nigeria further highlights the complexity of these dynamics. Studies such as Mobolaji, Fatusi and Adedini (2020) demonstrate that cultural expectations, religious interpretations, and household economic pressures interact to sustain early marriage. Yet much of this literature relies either on national datasets or small qualitative samples, limiting the ability to analyse how these mechanisms operate within specific local contexts.

Taken together, the literature suggests that education alone cannot fully explain variations in child marriage prevalence. Existing studies either prioritise large-scale statistical correlations or provide contextual qualitative insights without systematic comparison across communities. This gap highlights the need for an analytical framework capable of examining how normative expectations, economic reasoning, and institutional conditions interact to sustain child marriage within specific local contexts such as Katsina State.

Policy responses to child marriage have evolved from narrow legal approaches to comprehensive strategies addressing multiple drivers. The World Bank (2020) reviewed interventions in Northern Nigeria, identifying promising approaches including girls' scholarship programmemes, community dialogue initiatives, and economic empowerment interventions. The review emphasised the importance of context-specific design and the need for rigorous evaluation to build evidence on what works.

UNICEF (2016) examined the implementation of the Child Rights Act and its impact on child marriage, finding that legal frameworks alone are insufficient without community engagement and enforcement capacity. The study documented how customary and religious laws continue to operate alongside statutory frameworks, often superseding them in practice. This legal pluralism creates challenges for implementation that require nuanced responses.

Evidence on what works to reduce child marriage consistently emphasises engaging men and boys alongside women and girls, including fathers, husbands, and community leaders, to shift norms and support girls' education and agency (Malhotra et al., 2011; UNFPA–UNICEF, 2021). Such engagement is critical because marriage decisions are rarely made by individuals alone but are negotiated within families and communities where male voices often dominate.

 DOI: *10.5281/zenodo.23925631*

The Girls' Education Project, a partnership between UNICEF and the Nigerian government, has been evaluated as a significant intervention in Northern Nigeria. The project combines scholarships, community sensitisation, and school improvement components to increase girls' enrolment and retention. Evaluations have documented positive effects, though challenges with scale and sustainability remain (UNICEF Nigeria, 2020).

Research Gap

The preceding review of empirical literature reveals several significant gaps that this study addresses. Building on the problem identified in Chapter One, this section maps these gaps systematically against the existing literature.

While extensive research has examined child marriage in Northern Nigeria, most studies adopt a broad regional perspective without adequately capturing intra-state variations. For example, Bolarinwa et al. (2023) provide valuable analysis at the zonal level but do not disaggregate to specific states, while NPC & ICF (2019) offer state-level prevalence estimates but limited explanatory analysis of intra-state differences. The specific dynamics within Katsina State's three senatorial districts remain under-researched, limiting the evidence base for state-level policy and programmeming. This study addresses this gap by conducting comparative analysis across three LGAs representing urban, semi-urban, and rural contexts within Katsina.

Existing research in Northern Nigeria is predominantly cross-sectional, providing snapshots at single points in time. Studies such as those by Mobolaji, Fatusi and Adedini (2020) and Isiugo-Abanihe et al. (2022) offer valuable insights but cannot capture how practices evolve over time or in response to major events. The ten-year reference period of this study (2016-2026) enables analysis of trends and changes, including the impacts of major events such as the COVID-19 pandemic and the implementation of national strategies. This temporal dimension is essential for understanding whether and how child marriage practices are evolving.

The majority of existing studies employ either quantitative or qualitative approaches in isolation. Quantitative studies such as those by NPC & ICF (2019) provide prevalence estimates and identify correlates but lack depth in understanding meanings and

 DOI: *10.5281/zenodo.23925631*

motivations. Qualitative studies such as Mobolaji, Fatusi and Adedini (2020) provide rich contextual understanding but cannot establish generalisable patterns. This study's mixed-methods design addresses this gap by integrating both approaches, enabling triangulation of findings and more comprehensive understanding.

Child marriage research in Nigeria has often been atheoretical or has employed single theoretical lenses that cannot capture the phenomenon's complexity. For instance, studies drawing solely on Human Capital Theory (e.g., some economic analyses) explain household decision-making but cannot account for normative persistence, while studies focusing only on Social Norms Theory describe collective expectations but cannot explain how individuals learn and internalise these norms. This study addresses this gap by integrating three complementary theoretical perspectives, namely Social Learning Theory, Social Norms Theory, and Human Capital Theory, within a single analytical framework. This integration enables more comprehensive analysis of how norms are transmitted, why they persist, and how education can interrupt cycles of child marriage.

While the relationship between education and delayed marriage is well-established, the specific mechanisms through which "sustainable education" might operate in Katsina's cultural and religious context remain inadequately understood. Most studies treat education as a binary variable (enrolled vs. not enrolled) rather than examining the dimensions of access, retention, quality, and outcomes that constitute sustainable education. This study addresses this gap by exploring community perspectives on what types of educational interventions are most effective and acceptable, generating evidence that can inform programme design.

Existing research has paid limited attention to community perceptions of policy effectiveness. While studies have examined legal frameworks and program implementation (e.g., UNICEF, 2016; World Bank, 2020), few have captured how affected communities perceive and experience these interventions. This study addresses this gap by including community voices in assessing policy and programmatic responses to child marriage.

 DOI: *10.5281/zenodo.23925631*

Methodology

Research Philosophy and Paradigm

This study adopts a pragmatist research philosophy, which emphasises selecting research methods according to the objectives and questions of the study. Pragmatism recognises that both quantitative and qualitative approaches can be combined to provide a comprehensive understanding of social problems (Creswell & Plano Clark, 2018). This philosophy is suitable for assessing child marriage in Katsina State because the study seeks to measure the patterns and factors associated with the practice while also understanding the cultural beliefs, economic circumstances, and personal experiences that sustain it. The study also incorporates a transformative-emancipatory perspective, which emphasises social change and the empowerment of disadvantaged groups (Mertens, 2010). This perspective is relevant because child marriage affects girls' educational opportunities, personal autonomy, and social development. It therefore encourages the inclusion of different community perspectives and the generation of evidence that can support policies promoting quality education and gender equality.

Research Design

The study employs an exploratory mixed-methods research design using a convergent parallel approach. This design combines quantitative and qualitative methods to examine child marriage and its implications for Sustainable Development Goal 4 (Quality Education) and Sustainable Development Goal 5 (Gender Equality).The quantitative component uses structured questionnaires to collect information on respondents' characteristics, perceptions of child marriage, contributing factors, educational experiences, and awareness of relevant policies. The qualitative component uses focus group discussions to explore community beliefs, family experiences, educational barriers, and perceptions of interventions aimed at reducing child marriage. Both forms of data are collected within the same general fieldwork period, analysed separately, and subsequently integrated during interpretation. This approach enables the researcher to compare findings, identify similarities and differences, and use participants' experiences to explain patterns observed in the survey. It also provides a broader understanding of how cultural, economic, educational, and institutional factors interact to influence child marriage in Katsina State.

 DOI: *10.5281/zenodo.23925631*

Description of the Study Area

The study is conducted in Katsina State, located in the north-western geopolitical zone of Nigeria. The state shares an international boundary with the Republic of Niger to the north and domestic boundaries with Kaduna, Zamfara, Jigawa, and Kano states. It has an estimated population of approximately 7.8 million people, based on projections from the 2006 census, and is predominantly inhabited by Hausa and Fulani communities, with Islam as the dominant religion. A large proportion of the population lives in rural areas and engages in agriculture, animal husbandry, and small-scale trading. Katsina State is divided into 34 Local Government Areas and three senatorial districts: Katsina North, Katsina Central, and Katsina South. Poverty, limited educational opportunities, low female literacy in some communities, and traditional expectations concerning girls' roles are important contextual factors in understanding child marriage in the state (NPC & ICF, 2019).Three Local Government Areas are purposively selected to represent the state's senatorial districts. These are Katsina LGA, Daura LGA, and Malumfashi LGA. Katsina LGA represents the central senatorial district and provides an urban or peri-urban setting with relatively greater access to educational institutions and public services. Daura LGA represents the northern district and offers insight into rural communities, traditional authority structures, and cultural influences. Malumfashi LGA represents the southern district and provides a rural setting where agriculture, traditional social structures, and educational limitations are relevant to the study. The selection of these three LGAs enables the researcher to compare experiences across different settings and identify both shared and location-specific factors contributing to child marriage. The findings are intended to improve understanding of the selected communities rather than provide statistically representative estimates for the entire state.

Population of the Study

The target population comprises residents of Katsina, Daura, and Malumfashi LGAs who meet the study's inclusion criteria. Participants include women who married before the age of 18, unmarried girls aged 13–17, parents, teachers, school administrators, community and religious leaders, and government or non-governmental organisation officials. These categories are selected because they provide different perspectives on the causes and consequences of child marriage, the role of education, and the effectiveness of policies and

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community interventions. Participants must have lived in the selected LGA for at least five years, be aged 13 years or older, be willing to participate, and be able to communicate in Hausa or English. Appropriate parental or guardian consent and the assent of minors are required. Individuals who do not meet the residence requirements or cannot provide informed consent or assent are excluded.

Sample Size Determination

The study uses a total sample of 195 participants, comprising 150 survey respondents and 45 focus group discussion participants.

Survey Sample Size

The quantitative survey consists of 150 respondents, with 50 participants selected from each of the three LGAs. This allocation allows comparisons between the selected communities and is considered feasible within the available time and resources. The sample size is intended to identify patterns and associations within the selected study areas and support the integration of quantitative and qualitative findings. However, it is not designed to provide statistically representative estimates for all residents of Katsina State.

Focus Group Discussion Sample Size

The qualitative component consists of three focus group discussions, each involving 15 participants, giving a total of 45 participants. The first discussion takes place in Katsina LGA and includes parents, teachers, community leaders, and religious leaders. The second takes place in Malumfashi and involves married girls, unmarried girls, and young women. The third takes place in Daura and includes parents, married and unmarried girls, and community leaders. The composition of the groups is intended to capture diverse perspectives while providing a suitable environment for discussing the sensitive issue of child marriage. The women-and-girls-only discussion in Malumfashi is designed to encourage participants to express their experiences and opinions more comfortably.

Sampling Techniques and Procedures

The study adopts different sampling techniques for the quantitative and qualitative components. For the survey, a multistage sampling procedure is used. First, the three LGAs

 DOI: *10.5281/zenodo.23925631*

are purposively selected to represent the state's senatorial districts. Second, five communities are randomly selected from each LGA using available community lists. Third, households are randomly selected within the chosen communities. Where complete household lists are unavailable, a random-walk procedure with systematic selection of every fifth household is used. Finally, eligible respondents are selected within households to ensure the inclusion of relevant participant categories, such as parents, teachers, and women who married before age 18. For the focus group discussions, purposive sampling is used to select participants with relevant knowledge or experience of child marriage. Community leaders assist in identifying potential participants, while additional contacts may be obtained through snowball sampling. Multiple entry points are used to reduce excessive dependence on individual gatekeepers. These procedures seek to ensure that the study captures different experiences and perspectives while remaining manageable within the available fieldwork period.

Research Instruments

Two principal instruments are used for data collection: a structured questionnaire and a semi-structured focus group discussion guide.

Structured Questionnaire

The structured questionnaire is designed to collect quantitative data relevant to the study objectives. It is divided into six sections covering respondents' demographic and socio-economic characteristics; the prevalence and causes of child marriage; its effects on education, health, and gender equality; the role of sustainable education; awareness and effectiveness of policies and community interventions; and the influence of social norms and educational empowerment.

The questionnaire includes multiple-choice questions, five-point Likert-scale items, and questions allowing respondents to select more than one answer. It is translated into Hausa and back-translated by independent translators to ensure that the questions retain their intended meaning and are culturally appropriate.

 DOI: *10.5281/zenodo.23925631*

Focus Group Discussion Guide

A semi-structured discussion guide is used to obtain detailed information about community experiences and perceptions of child marriage. It covers the factors encouraging early marriage, its effects on girls' education and well-being, the relationship between education and empowerment, awareness of government policies, and possible community-based solutions. The guide also explores how family expectations, traditional practices, and community attitudes influence decisions about marriage. Participants are encouraged to explain their views and experiences, while the facilitator uses follow-up questions to clarify important issues and explore emerging themes.

Data Collection Procedure

Data collection is organised over six weeks, from March to April 2026. The first week is devoted to obtaining permissions from relevant authorities, engaging community leaders, and finalising the selection of communities. The second week covers survey administration in Katsina LGA, followed by Malumfashi in the third week and Daura in the fourth week. The fifth week is allocated to the three focus group discussions, while the sixth week is used for data quality checks, completion of data entry, and the beginning of transcription. Questionnaires are administered face-to-face by the researcher and trained enumerators. The enumerators receive training on the research objectives, ethical procedures, interview techniques, and data quality requirements. For respondents who cannot read, the questions are read aloud in Hausa and their responses recorded. Each questionnaire takes approximately 30–40 minutes to complete. The focus group discussions are facilitated by the researcher with the assistance of a note-taker. A female facilitator is engaged for the discussion involving women and girls in Malumfashi to encourage participation and comfort. Discussions are conducted in Hausa, audio-recorded with participants' consent, and last approximately 90–120 minutes.

Methods of Data Analysis

The study uses quantitative and qualitative analytical techniques, with both sets of findings integrated to provide a comprehensive understanding of child marriage.

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Quantitative Data Analysis

Quantitative data are analysed using IBM SPSS Statistics. Descriptive statistics, including frequencies, percentages, means, and standard deviations, are used to summarise respondents' characteristics and responses. The chi-square test of independence is employed to examine relationships between categorical variables, such as educational attainment and reported exposure to child marriage. The Kruskal–Wallis H test is used to compare responses to ordinal-scale questions across the three LGAs. Binary logistic regression is also employed to examine the factors associated with reported community exposure to child marriage. The dependent variable indicates whether respondents have witnessed child marriage in their communities. Independent variables are organised into three groups: normative factors, economic and educational factors, and institutional factors.

Normative factors include community expectations, approval of marriage before age 18, and messages about marriage transmitted between generations. Economic and educational factors include household income, perceived educational quality, and the economic opportunities available to educated girls. Institutional factors include awareness of relevant laws and policies, perceptions of enforcement, and differences between the selected LGAs. Age, gender, and educational attainment are included as control variables. The regression analysis examines the contribution of these factors while accounting for other variables in the model. Model performance is assessed using appropriate goodness-of-fit measures, including the Hosmer–Lemeshow test and Nagelkerke R^2. Statistical significance is set at p less than 0.05. Missing observations are handled through listwise deletion in the primary analyses, with sensitivity analyses used to assess possible bias. The hypotheses are tested using the statistical procedures appropriate to their variables, including chi-square tests, Kruskal–Wallis tests, descriptive statistics, and logistic regression.

Qualitative Data Analysis

Qualitative data from the focus group discussions are analysed thematically, following the six-phase framework developed by Braun and Clarke (2006). The process begins with repeated reading of transcripts to develop familiarity with the data. Meaningful statements are then coded, and related codes are grouped into broader themes. The emerging themes

 DOI: *10.5281/zenodo.23925631*

are reviewed against the coded extracts and the complete dataset to ensure that they accurately represent participants' accounts. Each theme is clearly defined and named before the findings are presented with relevant quotations. The analysis focuses on participants' explanations of cultural expectations, economic pressures, educational barriers, gender inequality, and community responses to child marriage. To improve trustworthiness, the study uses triangulation, member checking, an audit trail of analytical decisions, and researcher reflexivity. A subset of transcripts is independently coded by two researchers, with differences resolved through discussion.

Integration of Quantitative and Qualitative Findings

The two datasets are analysed separately before being integrated during interpretation. Joint displays are used to compare statistical findings with qualitative themes for each research question. For instance, survey findings identifying poverty or cultural expectations as contributing factors can be examined alongside participants' explanations of how financial difficulties, family pressures, and social expectations influence marriage decisions. This integration helps identify areas of agreement, differences between reported attitudes and actual practices, and explanations that may not be apparent from numerical data alone. The integrated findings are used to assess how child marriage affects educational attainment and gender equality and to identify approaches that may contribute to the achievement of SDG 4 and SDG 5 in Katsina State.

Ethical Considerations

Ethical principles guide every stage of the research because child marriage is a sensitive subject involving potentially vulnerable participants, including minors. Ethical approval is sought from the University of Abuja Research Ethics Committee, alongside permissions from the Katsina State Government, relevant Local Government Authorities, and community leaders.

Informed consent is obtained from adult participants before data collection. For participants who cannot read, consent information is explained in Hausa and verbal consent is documented. Participants below 18 years are required to provide assent alongside parental or guardian consent. Separate permission is obtained for audio recording during focus group discussions. Participation is voluntary, and respondents are informed of

 DOI: *10.5281/zenodo.23925631*

their right to refuse any question or withdraw without penalty. Confidentiality is maintained by removing identifying information and replacing personal details with codes. Research records are stored securely on password-protected devices accessible only to the researcher. Special attention is given to protecting girls who may be vulnerable to emotional distress or other risks. Interviews are conducted in private but safe locations, and information about counselling and legal support services is made available where necessary. Applicable child-protection reporting procedures are followed when ongoing abuse is disclosed. The researcher also respects local cultural practices, accommodates prayer times, and uses female enumerators where preferred by participants.The principle of beneficence guides the research by seeking to generate evidence that can support interventions to reduce child marriage, while non-maleficence requires minimising possible harm. Participants are informed that they may decline to answer questions that make them uncomfortable.

Methodological Limitations

The study recognises several limitations that may affect the interpretation of its findings. First, the survey covers only 150 respondents from three LGAs. Although this allows comparisons across the selected communities, the sample is not statistically representative of the entire state. Consequently, findings should not be generalised to all communities in Katsina State without caution. Second, the study relies partly on self-reported information about a sensitive social issue. Some respondents may provide answers they consider socially acceptable rather than disclose their actual experiences or opinions. The retrospective reference period of 2016–2026 may also introduce recall bias, as participants may not accurately remember past events. Third, the cross-sectional design limits the ability to establish definite cause-and-effect relationships between educational, economic, normative, and institutional factors and child marriage. The statistical analysis can identify associations and examine theoretical explanations, but it cannot conclusively establish causation. Furthermore, the absence of a control group limits the ability to attribute observed changes directly to particular government policies or programmes.Translation between Hausa and English may also affect the interpretation of some expressions, although translation and back-translation procedures are used to minimise this problem. In addition, the researcher's position and possible differences in gender, education, and social

 DOI: *10.5281/zenodo.23925631*

background may influence participants' willingness to share sensitive information. Female facilitators, confidential procedures, and researcher reflexivity are used to address these concerns.Despite these limitations, the combination of survey data and focus group discussions strengthens the study by allowing findings from different sources to be compared and interpreted together.

RESULTS AND DISCUSSION

Quantitative Findings

Demographic Characteristics of Respondents

All 150 questionnaires were returned, giving a response rate of 100%. Table 4.1 summarises selected characteristics of the respondents.

Table 4.1: Demographic Profile of Respondents (N = 150)

Variable	Category	Frequency	Percentage (%)
Gender	Male	87	58.0
	Female	63	42.0
Age	13–17 years	4	2.7
	18–25 years	37	24.7
	26–35 years	49	32.7
	36–45 years	39	26.0
	46–60 years	18	12.0
	61 years and above	3	2.0
Education	None	3	2.0
	Primary	6	4.0
	Secondary	38	25.3
	Tertiary	100	66.7

Source: *Field Survey, 2026.*

The table indicates that males constituted 58.0% of the respondents, while females accounted for 42.0%. The largest age group was 26–35 years, representing 32.7%. Most respondents had tertiary education (66.7%), suggesting that the sample contained a relatively high proportion of educated participants.

Child Marriage Exposure Across the Study Areas

Of the 146 valid responses concerning whether respondents had witnessed child marriage in their communities between 2016 and 2026, 116 (79.5%) answered yes. Table 4.2 presents the distribution across the three study areas.

 DOI: *10.5281/zenodo.23925631*

Table 4.2: Reported Child Marriage Exposure by LGA

Local Government Area	Yes	No	Missing	Percentage Reporting Exposure (%)
Daura	47	2	1	95.9
Katsina	24	25	1	49.0
Malumfashi	45	3	2	93.8
Total	**116**	**30**	**4**	**79.5**

Source: *Field Survey, 2026.* $\chi^2(2, N = 146) = 42.02$, $p < .001$, *Cramér's* $V = .54$.

The results show that reported exposure was highest in Daura (95.9%) and Malumfashi (93.8%), compared with 49.0% in Katsina LGA. The association between location and reported exposure was statistically significant. This indicates substantial differences between the selected study areas, although these figures represent reported community exposure rather than a direct statewide prevalence estimate.

Perceived Causes and Consequences of Child Marriage

Respondents identified several factors contributing to child marriage. Cultural and traditional practices ranked highest, followed by lack of education, poverty, and religious beliefs.

Table 4.3: Perceived Causes of Child Marriage

Perceived Cause	Frequency	Percentage (%)
Cultural and traditional practices	51	34.0
Lack of education	47	31.3
Poverty	38	25.3
Religious beliefs	36	24.0
Early pregnancy	12	8.0
Gender inequality	8	5.3
Other factors	9	6.0

Source: *Field Survey, 2026. Respondents could select more than one answer; percentages therefore do not total 100%.*

The findings suggest that child marriage is influenced by overlapping cultural, educational, economic, and religious factors. Cultural and traditional practices were the most frequently selected cause, while lack of education and poverty were also prominent.

Regarding the consequences, 88.9% of respondents indicated that child marriage affects girls' educational attainment significantly or moderately. Furthermore, 74.6% agreed that girls who marry early are less likely to continue their education. Poor mental health was the most frequently selected health concern (38.0%), followed by increased maternal mortality risk (36.7%) and domestic violence (24.0%).

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These findings demonstrate that child marriage is perceived as a challenge to girls' educational opportunities, health, and overall well-being.

Education, Policy Awareness, and Social Norms

Education was widely considered a means of empowering girls. A total of 80.4% of respondents believed education could empower girls significantly or moderately. However, only 20.5% rated education quality as very good, while 25.6% rated it as poor.

Table 4.4: Selected Findings on Education and Policy Awareness

Indicator	Response	Frequency	Percentage (%)
Education empowers girls	Significantly or moderately	111	80.4
Perceived education quality	Very good	24	20.5
	Moderate	63	53.8
	Poor	30	25.6
Awareness of anti-child-marriage policies	Aware	90	60.4
	Not aware	59	39.6
Perceived programme effectiveness among aware respondents	Moderately effective	81	66.9
	Not effective	17	14.0
	Very effective	23	19.0

Source: *Field Survey, 2026. Percentages are based on valid responses for each question.*

Poverty was the most frequently identified barrier to girls' education (40.7%), followed by early marriage (34.0%) and cultural practices (31.3%). The findings indicate that although respondents generally recognise the importance of education, practical and social barriers continue to restrict girls' opportunities.

Regarding policy awareness, 60.4% knew about anti-child-marriage programmes or policies, while 39.6% were unaware of them. Among those aware of interventions, 66.9% rated them moderately effective. This suggests that awareness exists but that the reach and effectiveness of interventions may require improvement.

Hypothesis Testing and Regression Analysis

The statistical tests examined relationships between education, socio-cultural factors, policy awareness, and reported child marriage exposure.

 DOI: *10.5281/zenodo.23925631*

Table 4.5: Summary of Selected Hypothesis Tests

Relationship Tested	Test Result	p-value	Decision
Education level and child marriage exposure	$\chi^2(3) = 1.60$	.660	Not significant
Cultural practices and differences across LGAs	$\chi^2(2) = 35.47$	< .001	Significant
Lack of education as a perceived cause across LGAs	$\chi^2(2) = 13.08$	.001	Significant
Religious beliefs as a perceived cause across LGAs	$\chi^2(2) = 13.82$	.001	Significant
Education level and personal views on child marriage	$\chi^2(12) = 36.80$	< .001	Significant
Education level and recognition of gender inequality	$\chi^2(12) = 27.75$	.006	Significant
Education level and belief in education's empowering potential	$\chi^2(6) = 5.11$	.530	Not significant
Policy awareness and child marriage exposure, bivariate test	$\chi^2(1) = 3.02$	.082	Not significant

Source: *Field Survey, 2026.*

The results show that education level was not significantly associated with reported community exposure to child marriage. However, significant differences existed across the study areas in respondents' attribution of child marriage to cultural practices, lack of education, and religious beliefs. Education level was also associated with personal views on child marriage and recognition of its relationship with gender inequality. Policy awareness was not statistically significant in the bivariate test, although reported exposure was lower among respondents who were aware of relevant policies than among those who were unaware. The full logistic regression model was statistically significant, χ^2 (12, N = 76) = 21.51, p = .043, with a Nagelkerke R^2 of .391. Policy awareness was the only predictor within the normative, economic, and institutional domains that reached statistical significance in the full model (OR = 0.372, p = .041). Perceived education quality was significant in an earlier model block (OR = 0.383, p = .005), but its association weakened after additional variables were introduced. These findings suggest that policy awareness and education quality deserve further attention, although the cross-sectional design does not establish causation.

Qualitative Findings

The focus group discussions provided explanations for the patterns observed in the survey. Six main themes emerged.

Normalisation of Child Marriage

Participants in Daura and Malumfashi described early marriage as a familiar and socially accepted practice associated with family honour, tradition, and expectations about girls'

 DOI: *10.5281/zenodo.23925631*

roles. Families could face criticism when daughters remained unmarried beyond the age considered appropriate by the community. In Katsina LGA, participants more frequently discussed the disadvantages of early marriage and described encouraging girls to complete their education.

Economic and Cultural Influences

Poverty emerged as a major influence on household decisions. Participants explained that school fees, uniforms, books, and other educational expenses placed pressure on low-income families. In some rural accounts, bride price was described as an immediate financial benefit. Cultural and religious explanations also overlapped, reinforcing the belief that early marriage was a normal part of family life. However, some participants in Katsina LGA described education as a long-term investment that could help daughters obtain employment and support their families. This suggests that economic hardship may contribute to early marriage where families lack realistic and accessible alternatives.

Educational Barriers and Aspirations

Participants identified long distances to school, transportation costs, poor facilities, teacher absenteeism, and social pressure as barriers to girls' education. In Daura, distance and concerns about girls staying away from home discouraged continued schooling. In Malumfashi, puberty was frequently described as a point at which girls faced pressure to leave school. Participants in Katsina LGA expressed stronger aspirations for girls' education and employment. These findings suggest that school enrolment alone is insufficient. Girls also require safe access, quality teaching, financial assistance, and support to complete their education.

Policy Awareness and Intergenerational Norms

Participants in Katsina LGA demonstrated greater awareness of child-protection initiatives and described sharing information with others. In rural areas, participants preferred practical support, such as nearby schools, uniforms, and financial assistance, over occasional sensitisation visits. Low literacy and limited follow-up were also identified as barriers to effective programme implementation. The discussions further revealed that mothers and grandmothers often transmit marriage expectations to younger generations. In

 DOI: *10.5281/zenodo.23925631*

Malumfashi, some participants expected their daughters to marry at ages similar to their own. In Katsina LGA, some mothers who had married early encouraged their daughters to complete school and delay marriage. An important finding was that Malumfashi respondents expressed support for marriage after 18 in the survey, while focus group accounts showed continued acceptance of early marriage. This suggests an **expressed–enacted norm gap:** people may repeat messages supporting delayed marriage without changing the community expectations that influence actual behaviour.

Integration and Discussion of Findings

The quantitative and qualitative findings generally supported one another. Both identified cultural expectations, educational disadvantage, and economic vulnerability as important factors associated with child marriage. The discussions explained how poverty can intensify existing cultural expectations when families struggle to meet school expenses and view marriage as a means of reducing household pressure. Both datasets also highlighted the educational and health consequences of child marriage. The survey documented widespread recognition of its effects on schooling, while the focus groups explained how school distance, poor teaching quality, financial constraints, and social pressure contribute to girls leaving education. The findings further suggest that education is more likely to provide an alternative to early marriage when it is accessible and of sufficient quality to offer credible future opportunities. Policy awareness was associated with lower odds of reporting child marriage exposure in the full regression model, but the qualitative findings indicate that information must be supported by continuous community engagement and practical assistance.The expressed–enacted norm gap in Malumfashi is particularly important. It demonstrates that favourable survey responses do not necessarily indicate changes in behaviour. Programmes therefore need to address community expectations and social pressures as well as individual knowledge.

Conclusion and Recommendations

Conclusion

Child marriage in Katsina State persists neither because communities lack information about its consequences, nor because poverty, religion, culture, or educational disadvantage acts independently. It persists because multiple mechanisms converge to render early

 DOI: *10.5281/zenodo.23925631*

marriage simultaneously familiar, socially legitimate, economically intelligible, and institutionally difficult to disrupt. The strength of these mechanisms varies across place, producing the pronounced urban–rural differences the study documents.

Three implications follow. Sustainable education is among the most powerful available points of intervention, but its significance lies in far more than attendance: education becomes transformative where it is accessible, safe, retained through secondary level, of sufficient quality to generate visible returns, and connected to expanded future possibility. Institutions matter in ways that aggregate policy analysis tends to obscure, since policy becomes meaningful only where communities can understand it, trust its messengers, access its services, and observe that it supports viable alternatives. And normative transformation cannot be inferred from favourable stated attitudes, because communities may acquire a new discourse well before they abandon an established practice.

The NEI Interaction Model supplies a coherent explanation for these findings. Social learning reproduces or transforms models across generations; social norms coordinate collective expectation; human-capital calculation shapes household investment; education alters capabilities and perceived returns; and institutions determine whether alternative choices are supported. No single domain is sufficient. The most plausible pathway to durable change is therefore an integrated one, in which girls can remain in good-quality education, families can bear the short-term costs of that decision, communities increasingly regard later marriage as legitimate, and institutions render the alternative pathway visible and feasible.

As Nigeria approaches 2030, the practical significance of this conclusion is clear. Progress toward SDG 4 and SDG 5 in Katsina State requires movement beyond fragmented projects and aggregate state-level narratives toward locally differentiated, mechanism-based intervention, particularly within high-prevalence rural communities. The task is not simply to persuade families to reject child marriage; it is to transform the educational, economic, normative, and institutional conditions within which families make decisions, so that continued education and later marriage become realistic, valued, and socially supported choices. The thesis therefore closes not with the claim that child marriage can be eliminated through a single policy lever, but with a more demanding and more realistic proposition: durable change requires coordinated movement across the systems that

 DOI: *10.5281/zenodo.23925631*

reproduce the practice. The pathway to SDG 4 and SDG 5 is consequently relational. It lies in changing what girls can learn, what families can afford, what communities expect, what institutions support, and what futures are socially imaginable. When these conditions shift together, the self-reinforcing equilibrium sustaining child marriage can begin to give way to an alternative equilibrium in which girls' education, agency, and delayed marriage operate as mutually reinforcing components of sustainable development.

Recommendations

Reorienting Policy from Enrolment to Retention, Completion, Quality, and Outcomes

The study's operationalisation of sustainable education should be adopted as the organising framework for girls' education policy in high-prevalence LGAs. This requires moving beyond enrolment counts as the principal indicator of progress. The evidence indicates that educational access alone is insufficient: respondents strongly recognised education's empowering potential, yet perceived education quality was frequently only moderate or poor, and qualitative accounts described dropout around puberty, distance-related constraints, and weak perceived returns in rural areas. Education should therefore be evaluated across the four linked dimensions already operationalised in Section 2.2.2: access; retention through secondary level; quality and gender-sensitive learning conditions; and transformative outcomes that enlarge girls' agency and future opportunities. Comparative evidence reinforces the emphasis on the secondary phase in particular, indicating that the protective association between schooling and delayed marriage strengthens markedly once girls progress beyond the primary cycle (Marphatia et al., 2020; Girls Not Brides, 2022).

In operational terms, the Katsina State Ministry of Education should develop a girls' secondary education retention dashboard at LGA and ward levels. The dashboard should track transition from primary to junior secondary and from junior to senior secondary school, termly attendance, dropout, re-entry, completion, and, where feasible, the reasons for exit, with data disaggregated by sex, age, and geography. A child-marriage-sensitive early warning mechanism should flag repeated absence, withdrawal after puberty, engagement or marriage plans reported to teachers, sudden inability to meet education-related costs, and long-distance attendance risks. The purpose of such a mechanism must

 DOI: *10.5281/zenodo.23925631*

be protective referral rather than surveillance or punishment, and its governance should specify explicitly who may access flagged information and for what purpose.

From One-Off Sensitisation to Sustained Norm-Change Platforms

The strongest recommendation arising from the expressed–enacted norm gap is that information provision should not be treated as equivalent to normative transformation. In Malumfashi, survey respondents recorded the strongest endorsement of the position that marriage after 18 is preferable (Q6.4 mean = 1.23, the most favourable of the three LGAs), while the focus group evidence from the same district showed the strongest normative continuity of early-marriage practice. This divergence demonstrates that awareness may change what people say before it changes what they expect others to do, what they believe others approve, or the sanctions attached to non-conformity precisely the configuration that Cialdini and Trost (1998) identify as pluralistic ignorance. Programmes should therefore distinguish knowledge indicators from norm indicators and from behavioural indicators, and should not report the first as evidence of the third.

Each high-prevalence ward should host a sustained community dialogue platform convening repeatedly over an extended cycle rather than relying on single-event sensitisation. Participation should include parents, adolescent girls, men and boys in relevant family roles, teachers, health workers, religious leaders, traditional leaders, women leaders, and respected community members. Dialogue should address perceived expectations, anticipated sanctions, family honour, education, economic security, and locally accepted examples of delayed marriage. Facilitators should be trained to identify pluralistic ignorance: the situation in which many individuals privately favour later marriage yet wrongly believe that the wider community still expects early marriage. Where that misperception is corrected publicly and credibly, the collective action problem sustaining the practice can begin to dissolve without any change in underlying private preference.

Integrating Household Support with Educational and Normative Components

Economic interventions should be integrated with educational retention and community norm change. The study does not support a simple claim that poverty independently causes child marriage. The mixed-methods integration suggests rather that economic stress

 DOI: *10.5281/zenodo.23925631*

activates culturally available marriage responses. Cash or in-kind assistance may consequently reduce pressure without altering the normative logic that makes early marriage a legitimate response to pressure; conversely, norm-change activity may achieve little where families genuinely cannot meet the costs of continued schooling. The two mechanisms are complements, not substitutes.

An integrated household package should therefore combine targeted material support, school retention monitoring, family counselling where risk is identified, and access to community dialogue. In the poorest rural wards, the package could be prioritised for girls approaching the transition to secondary school and for those exhibiting early signs of withdrawal. The intervention logic should be stated explicitly: to reduce the immediate cost of schooling, increase the expected return to schooling, weaken the social expectation of early marriage, and strengthen institutional support for the family's decision to keep the girl in education. Specifying the logic in these terms allows implementation failure to be distinguished from theory failure during evaluation.

Converting Policy Awareness into Institutional Presence

Policy awareness was the only NEI predictor to reach statistical significance in the full model (OR = 0.372, 95% CI [0.14, 0.96], p = .041). The practical implication is not simply that publicity should be increased. The qualitative findings show that awareness is most meaningful where it is sustained, socially diffused, literacy-appropriate, and connected to visible support. Policy should therefore be experienced in communities as an institutional presence rather than as a message encountered occasionally through an NGO visit or a written campaign. Chapter Four's integration further cautions that the measured protective effect is likely concentrated in urban and semi-urban settings; extending it to rural wards requires a materially different delivery model rather than a larger volume of the same communication.

Each LGA should establish a child-marriage and girls' education coordination mechanism linking education, social welfare, health, justice, traditional institutions, religious leadership, and civil society. At ward level, communities should know where to obtain information, educational assistance, counselling, and protection support. Referral pathways should be simple enough to operate in low-literacy settings. Community champions and

 DOI: *10.5281/zenodo.23925631*

schools should have named contact points for escalating cases in which a girl is at risk of withdrawal or marriage, subject to safeguarding, confidentiality, and applicable legal procedures. The state's existing delivery architecture offers a foundation on which such mechanisms can be built rather than constructed afresh: recent reporting indicates that the AGILE programme returned over 42,781 girls to school and raised retention from 48% to 76% during the 2023/2024 session, and that state reforms have reached more than 100,000 girls (Daily Trust, 2024; Edugist, 2025b; The News Nigeria, 2025).

Daura LGA (Katsina North)

Daura recorded the highest reported child marriage exposure among the three study sites. The recommendation for Daura is accordingly an intensive rural retention-and-access package. Priority should attach to reducing distance-related schooling barriers, strengthening safe secondary-school access, improving education quality, and providing targeted support at transition points. Community engagement should involve religious and traditional leaders, parents, female role models, and school personnel, conducted through repeated Hausa-language dialogue rather than short campaigns. The emirate structure that characterises the district is best understood here as an asset for legitimacy rather than an obstacle to reform.

Daura should also prioritise household-level economic support for girls at risk of leaving school. Because the integrated findings suggest that economic stress activates culturally established marriage responses, support should be tied directly to school continuation. Evaluation should test whether combined educational and household assistance produces greater retention than awareness activity alone, allowing Daura to function as a learning site for rural integrated programming

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