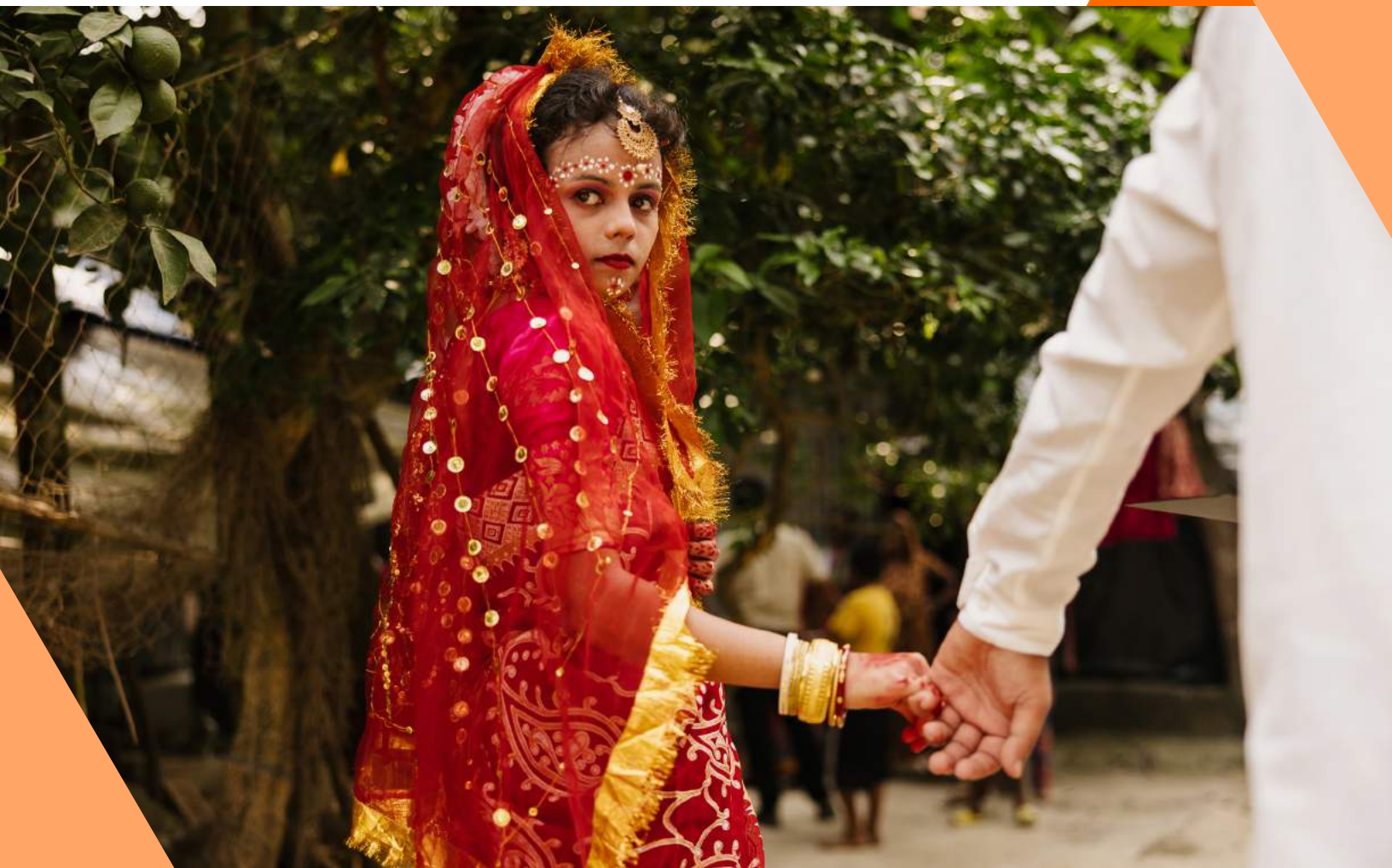


Listening to Child Brides: Research Report



Young and Married: Understanding the experiences, needs, and agency of adolescent girls and young women in Bangladesh, Mauritania, Nepal, and Tanzania



Our child safeguarding policy prevents us from showing the faces of any girls affected by child marriage. The photos on the cover page and on page 11 are of a mock wedding; the 15-year-old adolescent girl and her family were involved in the photo shoot as an act of advocacy to speak out against child marriage. All images of adolescent girls were taken with permission and are not linked to stories in this report.

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ACRONYMS

AGYW	Adolescent girls and young women
ANC	Antenatal care
ASC	Age at School Completion
FGD	Focus group discussion(s)
LTCB	Listening to Child Brides
IPV	Intimate partner violence
KIIs	Key Informant Interviews
OR	Odds Ratio
PNC	Postnatal care
MOH	Ministry of Health
SRH	Sexual and reproductive health
WVI	World Vision International



EXECUTIVE SUMMARY

Background

Child marriage, defined as any formal or informal union between a child under 18 years and another person (1), is linked with numerous undesirable health and well-being outcomes for adolescent girls and young women (AGYW), including increased risk for depression, sexually transmitted infections, cervical cancer, and maternal mortality. Given this, global health and international development campaigns focus heavily on preventing such marriages under the assumption that delays to marriage will help foster greater empowerment, health, and economic and educational opportunities for AGYW. A recent (October 2021) review of the literature on child marriage conducted by a team at World Vision International (WVI) indicated that while focusing on preventing child marriages is essential, it is also necessary to understand the experiences and needs of AGYW who are already married. Studies capitalising on the generalisability of quantitative research and the transferability of qualitative research are needed.

In response, an interdisciplinary approach was taken to develop the 'Listening to Child Brides' research study using a cross-sectional convergent mixed-methods design. The study was carried out in Bangladesh, Mauritania, Nepal, and Tanzania with the overarching aim of identifying the experiences and needs of married AGYW to inform World Vision's global advocacy, programming, and policy recommendations on child marriage. This study had four key objectives:

1. Describe the marriage processes, including its context, for AGYW.
2. Among married girls, assess how age at marriage and context of marriage are linked to outcomes.
3. Identify key challenges faced by AGYW in accessing services and education, and identify viable strategies/opportunities to overcome these challenges.
4. Compare outcomes — physical and mental health, education, access to protection services, and agency — among married and unmarried AGYW of the same age.

Methods

This study used a cross-sectional convergent mixed-method design with two main components: a survey of married and unmarried AGYW aged 12 to 24 years; and focus group discussions with married and unmarried AGYW between 16 and 18 years old. Participating countries included Bangladesh, Nepal, Mauritania, and Tanzania.

Conclusions based on findings

Multivariate analyses identified factors independently related to key outcomes

- Married AGYW were nearly 70% more likely to have a higher empowerment score.
- Married AGYW were 25% less likely to experience physical violence but more than five times more likely to experience sexual violence perpetrated by their husbands compared to unmarried women reporting incidents of violence perpetrated by a family member or partner.
- Married AGYW were 17% more likely to report feeling sad or worthless.
- Higher empowerment score is associated with a 30% increase in the odds of favourable health yet also with a 32% increase in the odds of feeling sad or worthless.
- Employment outside the home was associated with 27% higher odds of feeling sad or worthless for married AGYW.

Marriage is linked to changes in agency

AGYW commonly reported both positive and negative changes to their level of agency following marriage.

- Agency improved with respect to access to sexual and reproductive health (SRH) and antenatal care (ANC) services and perceiving greater status in the community was evident in all countries.
- Agency worsened with respect to access to school or to work outside of the home in all countries.

Marriage and age differentiate risk

- In all countries, married AGYW indicated that they had greater control in the general decision to marry as age at first marriage increased.
- In Mauritania, older age at first marriage was linked with improved agency in multiple domains, but older age was not consistently linked to improved agency in other countries.
- For married women, less agency was seen at younger ages in marriage.
- Report of physical violence tended to be lower in married AGYW; the opposite was true for report of sexual violence. The greatest difference between unmarried and married AGYW was seen in Tanzania, where 5% of unmarried AGYW reported sexual violence in the past year, whereas 29% of married women did. The sociocultural context of violence, especially sexual violence, was not captured by this study and may potentially affect the approach to defining, measuring, and interpreting the experience of sexual violence.
- The frequency of reporting being 'sad or worthless' was higher for married AGYW compared to unmarried AGYW in Bangladesh, Mauritania and Tanzania. The potential link between this phenomenon and the violence results above remains to be explored.

Context matters

A limited number of vulnerability characteristics were widespread across countries. For example, among those AGYW who have left school, the mean age of school exit for 18- to 24-year-olds was around age 15 in all countries. These findings, however, highlight that the sociocultural environment surrounding early or delayed marriage for AGYW is context dependent. Vulnerability characteristics of AGYW that varied most significantly among countries include:

- A markedly larger age gap between older husbands and AGYW was seen for Mauritania.
- Tanzanian married and unmarried AGYW reported the highest levels of autonomy over choosing when and whom to marry. The levels were considerably lower in other countries, especially among those in the youngest age group.
- In Mauritania and Tanzania, unmarried AGYW were unemployed more often than married women, but in Bangladesh this was more often true for married versus unmarried women.
- The contextual meaning of 'violence measures' is a gap in understanding in this study's results.

Policy and programming implications

Decipher the marriage decision-making process

The way that agency operates in the set of decisions related to marriage is highly context-specific and varies by age. Understanding the factors that influence or drive a marriage decision and subsequent factors that enable or constrain autonomy following marriage is critical. These dynamics are complex and require a careful neutral assessment to identify aspects amenable to intervention to achieve AGYW well-being.

Understand how AGYWs judge the merits of education or forms of employment

Situational assessments related to child marriage could unpack the dynamics relating to continuing education opportunities in each context and suggest concrete steps to mitigate education system challenges. In these analyses, employment was independently associated with increased odds of feeling sad or worthless, which suggests that assessments should investigate the possible benefits and costs arising from employment options for women in this age group.

Unpack age-related vulnerability to tailor programming

This study, as have many before it, highlights the elevated vulnerability of adolescent girls. For younger AGYW, a focus on boosting empowerment, increasing awareness of SRH, and preventing physical violence seems a priority given these findings. Prevention of sexual violence, poorer general health, and increased psychosocial well-being (including coping skills and resilience) may be best targeted at older AGYW.

Contextualise the notion of agency

Agency should be considered a dynamic response to constrained decisions made by AGYW. For some, complete autonomy may be undesirable and risky, especially if the broader environment they function in does not support complete autonomy. Supporting an AGYW's relative autonomy may make sense while addressing the institutions that restrict their freedoms.

Violence-prevention services

Findings clearly highlight the elevated vulnerability faced particularly by adolescent women as they enter a marriage. While violence-prevention services were available in most communities (except Mauritania), AGYW experienced barriers to accessing these services.



1. BACKGROUND

Child marriage, defined as a formal or informal union where at least one of the parties is under the age of 18, disproportionately affects girls (1). The term ‘child marriage’ is used here to refer to early and forced child marriage — terminology used for the Sustainable Development Goals. Worldwide, one in five girls is married before age 18 (2), and one in three girls in low- to middle-income countries is married before age 15 (3). The practice of child marriage is correlated with a higher risk of experiencing violence, lower educational attainment, gender inequality, and worse health or well-being for girls and their children (4).

While the causal relationships between child marriages and outcomes are complicated and vary by context, World Vision and other development organisations are working to delay and eliminate child marriage, guided by the assumption that delaying marriages will improve outcomes for adolescent girls and young women (AGYW). These prevention efforts generally prioritise criminalisation of marriage under 18 years and programmes to promote girls’ education and empowerment (5–7); other programmes focus on community engagement and economic support (6). Evidence of how effective these strategies are is varied (5,7–10), suggesting that there may be a need for better understanding of the complexities and variation in AGYW’s experiences of marriage. For example, laws banning marriage before 18 years have been challenged in some settings.

With ongoing programmes aimed at ending child marriage, World Vision International (WVI) conducted a literature review in October 2021 to summarise the state of the literature and identify research gaps. The review focused on links between child marriage and (a) agency of AGYW, and access to (b) education, (c) health care and (d) services for those experiencing violence (11). The review also suggested several ways that research could identify better approaches to address child marriage in AGYW. Firstly, while focusing on preventing child marriages is essential, **there is a need to more fully understand the experiences and needs of AGYW who are already married, an evident gap in the evidence base** (12–14). Identification of girls’ needs will help guide interventions and programmes aimed at supporting both married and unmarried girls where they are.

Secondly, concepts of agency — ‘the ability to define one’s goals and act on them’ (15) — underlie all discussions of child marriage, from how marriages are entered to how married AGYW experience their marriages and their various outcomes.

Understanding the complexities around how AGYW exercise agency within or outside marriage is essential for identifying ways to support AGYW.

Narratives surrounding child marriage often reinforce the idea that girls entering or in these marriages do not have full agency, and legal constructs that differentiate childhood from adulthood reinforce this idea (16,17). However, the literature review highlighted the considerable variation in AGYW's levels of agency entering and existing in their marriages. **Understanding the complexities around how AGYW exercise agency within or outside marriage is essential for identifying ways to support AGYW** (18–20). By better understanding girls' agency, policymakers and programme implementers can craft creative ways to (a) ensure that unmarried AGYW are able to achieve their aims through alternatives to marriage and (b) support already married AGYW to meet their needs and achieve their dreams (20,21).

Finally, there is a growing acknowledgement in global health and international development circles that approaches to preventing child marriage and supporting married AGYW need to be tailored to specific contexts (22). Existing research, while pivotal in building understandings of child marriage — its causes and consequences — falls short in trying to capture findings that are both more generalisable and, to some degree, transferrable across settings. On one hand, large, nationally representative studies (e.g., Demographic and Health Survey data) have demonstrated clear links between marrying under 18 and undesirable outcomes: poor health, experience of violence, and low education. Yet these studies fall short in assessing potential individual, social, community, or structural determinants of child marriage or identifying the needs of married AGYW that can reduce the likelihood of other adverse outcomes. On the other hand, while qualitative research on child marriage has highlighted that marrying early is often a rational response to constrained choices and the best available option for AGYW (20,23–25), these studies often lack the rigour needed to design contextualised interventions. Further, these studies tend to raise questions about causal relationships between child marriage and outcomes identified in quantitative studies (e.g., education and child marriage) (26). Findings from these studies are by nature less instrumental in identifying wider patterns and trends that can inform policy, advocacy, and programming agendas. **Comparative, mixed-methods studies (which are currently lacking) would be well placed to move forward with designing context-appropriate programmes and interventions to support AGYW throughout the world.** Using a comparative, mixed-methods approach to understanding child marriage capitalises on the generalisability of quantitative research and the nuanced explanatory power of qualitative research.

2. RESEARCH AIM, OBJECTIVES, AND QUESTIONS

To address gaps in understanding identified by the WVI literature review and with the overall aim of identifying the experiences and needs of married AGYW to inform World Vision’s global advocacy, programming, and policy recommendations on child marriage, a team of researchers from WVI conducted a mixed-method, multi-country research project in Tanzania, Mauritania, Nepal, and Bangladesh. The research has four objectives:

RESEARCH AIM

To identify the experiences and needs of married AGYW to inform World Vision’s global advocacy, programming, and policy recommendations on child marriage.

BOX 2.1: Overview of research objectives and questions

OBJECTIVE 1: Describe the marriage process, including its context, for adolescent girls and young women (AGYW).

Research questions:

- 1a.** What are AGYW’s aspirations? Do they differ for married versus unmarried AGYW of the same age groups? What are challenges and facilitators to achieving their aspirations?
- 1b.** What options are realistically available for girls other than marriage? Do viable opportunities differ between married AGYW versus unmarried AGYW of the same age groups? What are challenges and facilitators to achieving these options?
- 1c.** How do AGYW enter marriages? (e.g., who decides when it is time to marry? Who decides an AGYW will marry? What motivates AGYW/parents/others to decide an AGYW should marry?)

OBJECTIVE 2: Compare well-being outcomes among married and unmarried AGYW.

Research questions:

- 2a.** Among girls of the same age, what is the relationship between marital status and:
 - i. Health (mental and physical, including sexual and reproductive)
 - ii. Experience of violence (e.g., Intimate partner violence (IPV) and/or sexual violence)
 - iii. Education (current enrolment, age at exit, and current access to)
 - iv. Access to education, health services, and violence-protection services
 - v. Agency (household decision-making, health decision-making, etc.).

OBJECTIVE 3: Compare well-being outcomes for married AGYW by age at marriage and context of marriage.

Research questions:

- 3a.** What is the relationship between age at marriage and:
 - i. Health (mental and physical, including sexual and reproductive)
 - ii. Experience of violence (e.g., IPV and/or sexual violence)

OBJECTIVE 4: Identify key challenges married and unmarried AGYW face in these areas: access to education, health services, and support for experiencing violence. Identify viable strategies/opportunities to overcome these challenges. For each area:

Research questions:

- 4a.** What challenges do married AGYW face compared to unmarried AGYW of the same age groups?

<ul style="list-style-type: none"> iii. Education (current enrolment, age at exit, and current access to) iv. Access to education, health services, and violence-protection services v. Agency in marriage (household decision-making, health decision-making, etc.) vi. Agency entering marriage. 3b. How does agency change after marriage among married AGYW? 3c. How does level of agency exercised in entering marriage compare to level of agency exercised within a marriage? 	<ul style="list-style-type: none"> 4b. What are the barriers to accessing support/services for married AGYW compared to unmarried AGYW of the same age group? 4c. What would help them the most to overcome the challenges and barriers married AGYW face compared to unmarried AGYW of the same age group?
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The notion of agency underlies all objectives to help us better understand how AGYW enter and experience their marriages, and to identify trends around AGYW’s access to and use of different support services. Further, the multi-country design of the study allows us to consider how variations in laws and cultures may relate to AGYW’s experiences.

3. METHODS OVERVIEW

This study used a cross-sectional convergent mixed-method design with two main components: a survey of married and unmarried AGYW aged 12 to 24 years, and focus group discussions with married and unmarried AGYW between 16 and 18 years old. Participating countries included Bangladesh, Nepal, Mauritania, and Tanzania. See Appendix A for a more detailed description of study methods.

Study locations

This study took place in four countries that were selected based on a combination of practical and research considerations: the prevalence of marriage before 18 years (prioritising countries with relatively high prevalence), the capacity of field offices to conduct the research, and funding availability. Based on this, the study was conducted in Bangladesh, Mauritania, Nepal, and Tanzania. In Bangladesh, the study was conducted in Dinajpur, Barishal, Bandorban, Sunamgonj, Dhaka, Rajshahi, Bagerhat, Cumilla, Mymensingh, and Sylhet Districts. In Mauritania, the study was conducted in Nouakchott-South, Brakna, Gorgol and Assaba Districts. In Nepal, the study was conducted in Jumla, Bajhang, Doti, Achham, Mahottari, and Rautahat Districts. In Tanzania, the study was conducted in Handeni, Korogwe, Mkinga, Kilindi, Itilima, Maswa, Kishapu, Buhigwe, Kakonko and Kasulu Districts.

Data collection

Quantitative sampling and questionnaire

For the quantitative component, the sample size estimated to be 2,544 AGYW per country, aged 12 to 24 years, split evenly into six groups based on current marital status (married versus unmarried) and three age categories (12 to 14, 15 to 17, 18 to 24), with each group having a target sample size of 424. Sample sizes were calculated to allow each age group to be compared to any other group in the same or different country at 90% power and evaluate 10-point differences, so a confidence interval of +5 would be obtained. For example, married girls aged 15 to 17 in country X may be compared to unmarried girls aged 15 to 17 within the same country or a

different country, and a 10-point difference detected. Likewise, married girls aged 15 to 17 in country X may be compared to married girls aged 18 to 24 in country X. The sample size calculations were performed to require the largest sample, and then 10% was added to build in a non-response rate of 10% to allow for the desired margin of error despite a slightly lower sample size.

Of the 10,176 total AGYW, data collection was completed among 9,469 survey participants (5,410 unmarried and 4,059 married). Table 3.1 details the sample size for each country by age and marital status. The total sample size was less than projected because, in all countries, fewer married AGYW aged 12 to 14 years were available in the setting, which limits some findings, especially for Nepal and Tanzania (Table 3.1, highlighted in blue).

Table 3.1: Sample size overview

Country	Unmarried				Married			
	12–14 years	15–17 years	18–24 years	Total unmarried	12–14 years	15–17 years	18–24 years	Total married
Bangladesh	435	435	415	1,285	279	356	655	1,290
Mauritania	477	428	399	1,304	143	194	528	865
Nepal	427	441	430	1,298	0	424	448	872
Tanzania	558	571	394	1,523	25	191	816	1,032
TOTAL	1,897	1,875	1,638	5,410	447	1,165	2,447	4,059

Qualitative sampling and questionnaire

A series of four focus group discussions (FGDs) per country were conducted with AGYW aged 16 to 18 years (half married and half never married). The surveys and FGDs covered topics including AGYW’s future dreams and expectations, experiences of and plans for marriage, key health outcomes, experiences accessing health and social services, and sociodemographic details. Findings from two of the four countries are presented here. Details of data collection and analytic methods can be found in Appendix A.

We used purposive, stratified sampling to select AGYW to participate in FGDs in each country. Four FGDs were conducted in the fall of 2022 with 6 to 10 AGYW between 16 and 18 years; half of the FGDs were with married AGYW and the other half with unmarried AGYW. FGD participants were selected using snowballing methods following the identification of one eligible AGYW. The ‘seed’ person could be identified from among survey participants or with the aid of local village leaders. In the latter case, recruiters were instructed to avoid selecting a ‘seed’ participant related to the village leader or their family.

Interviewers underwent virtual training covering how to use the FGD guide and ethical issues, including child safeguarding. The FGD guide had three main sections: aspirations and opportunities, marriage process and agency, and challenges surrounding accessing services in the AGYW’s area. Discussion guides were translated into French (Mauritania), Swahili (Tanzania), Nepali (Nepal), and Bengali (Bangladesh). For each FGD, data collectors also filled out a contextual questionnaire about the area in which the FGD participants lived and an FGD Participant Characteristic Form to gather basic demographic information about discussion participants.

Data analysis

Quantitative

Survey data were analysed in EPI Info version 7 and Stata 15. Frequencies and means were assessed for all variables in the survey for each country separately and with a pooled data set. Differences between groups (e.g., married versus unmarried, by age at marriage) were assessed using chi-squared tests or regressions as appropriate for the variable types. The Empowerment Scale was computed following defined methods for this [validated scale](#).

Qualitative

Focus group transcripts were translated from each respective language into English. Translated focus group transcripts were coded and analysed using NVivo 12 for Mac. Qualitative codes were developed deductively using categorisations based on research questions and the structure of the FGD guide. As analysis progressed using this initial version of the codebook, new codes were developed inductively to accommodate emerging themes. Once codes were applied to excerpts from the transcripts, horizontal analysis was performed to find emerging themes and sub-themes across all transcripts. Although the target of holding four FGDs per country was met, unfortunately, the quality of the data from Nepal and Mauritania was inferior, leading to the omission of qualitative data from these two countries from the analysis.

Study limitations

The strength of this cross-sectional study is its mixed-methods approach, where quantitative results highlight the links between attributes of AGYW and how unmarried versus married situations may affect their well-being, and qualitative findings illustrate the mechanisms at play. Lacking a prospective observation time element (pre- post- or time-series), the study cannot definitively speak to a set of causal relationships between these phenomena. With qualitative information usable in only two countries and collected from AGYW aged 16 to 18, there is a limited body of contextualisation information and no representation of the voices of AGYW aged 12 to 15 or 19 to 24. The empowerment score derived from several survey questionnaire items is a strength of this study as it is based on a validated measure; however, this is not true for other key variables. Most importantly, the 'feeling sad or worthless' measure cannot be taken to reflect psychological distress, anxiety, or depression. However, given the existing breadth and depth of information, this study offers helpful guidance on how to support AGYW more effectively both within and outside marriage.

4. FINDINGS

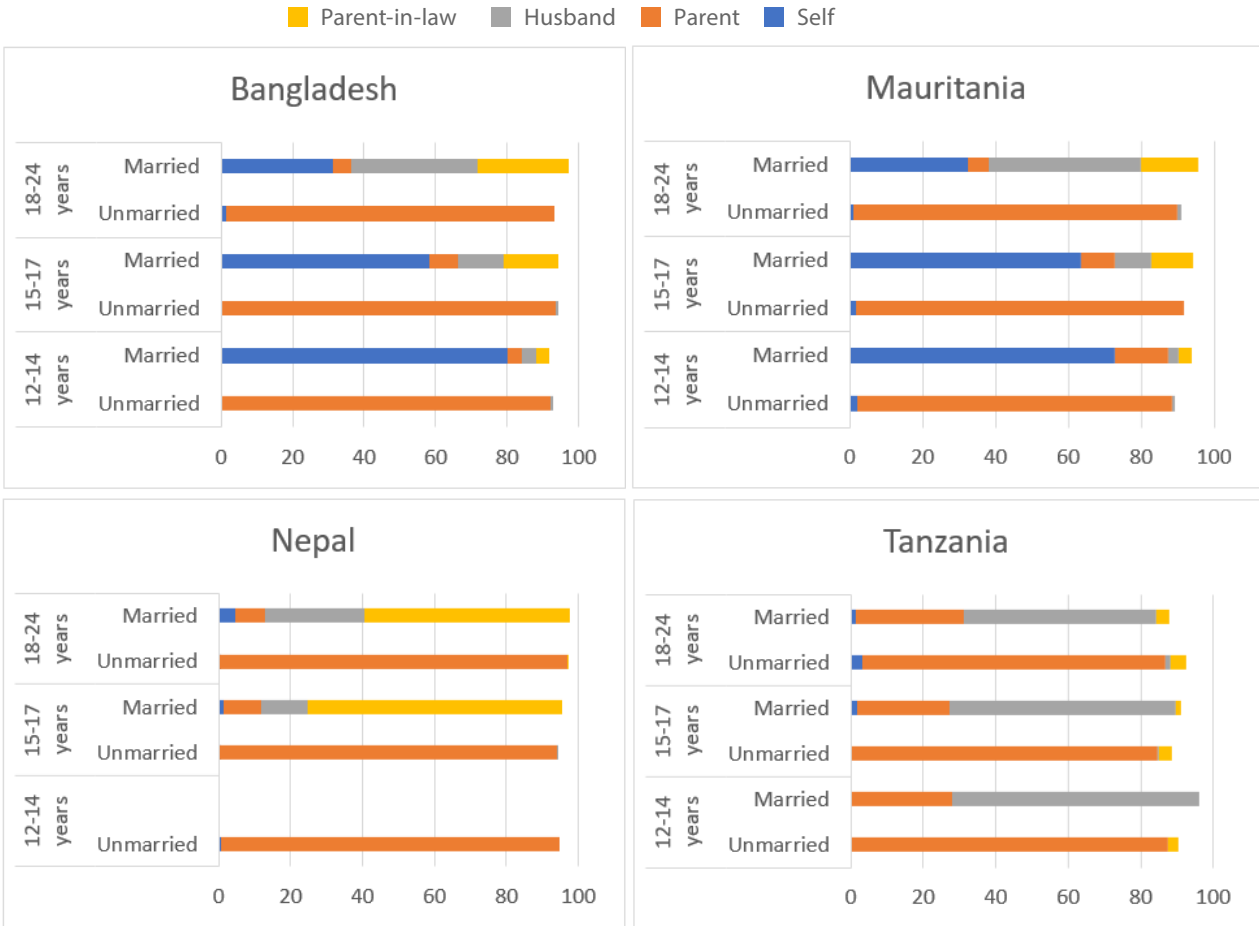
A key element to bear in mind while reading the findings that follow is that there are two distinct age dimensions that come into play. The age of the AGYW respondent at the time of the interview is a familiar dimension. For married AGYW, however, we also have information about their age when they first married sometime prior to the time they were interviewed. For descriptive analyses of married women, both their age at first marriage and current age are used in this report depending on the focus of the analysis. For unmarried AGYW, descriptive analyses only reflect how current age plays a role. The distinction between these age dimensions is clearly called out in the narrative and in figure titles.

4.1. Sociodemographic patterns

Head of household

All respondents were asked to identify the person functioning as head of the household where they live. Among unmarried AGYW, the predominant head of household (>80%) in all four countries was a parent. However, this pattern varied for married women in different countries (Figure 4.1.1).

Figure 4.1.1: Head of household patterns for unmarried and married AGYW (per cent)



NOTE: Differences in the pattern for unmarried and married AGYW were statistically significantly ($p < 0.001$) in all cases except for 12–14-year-olds in Nepal where there were no observations in the married group. Proportions for those who responded 'other' as head of household have been omitted from the graphs hence values sum to less than 100%.

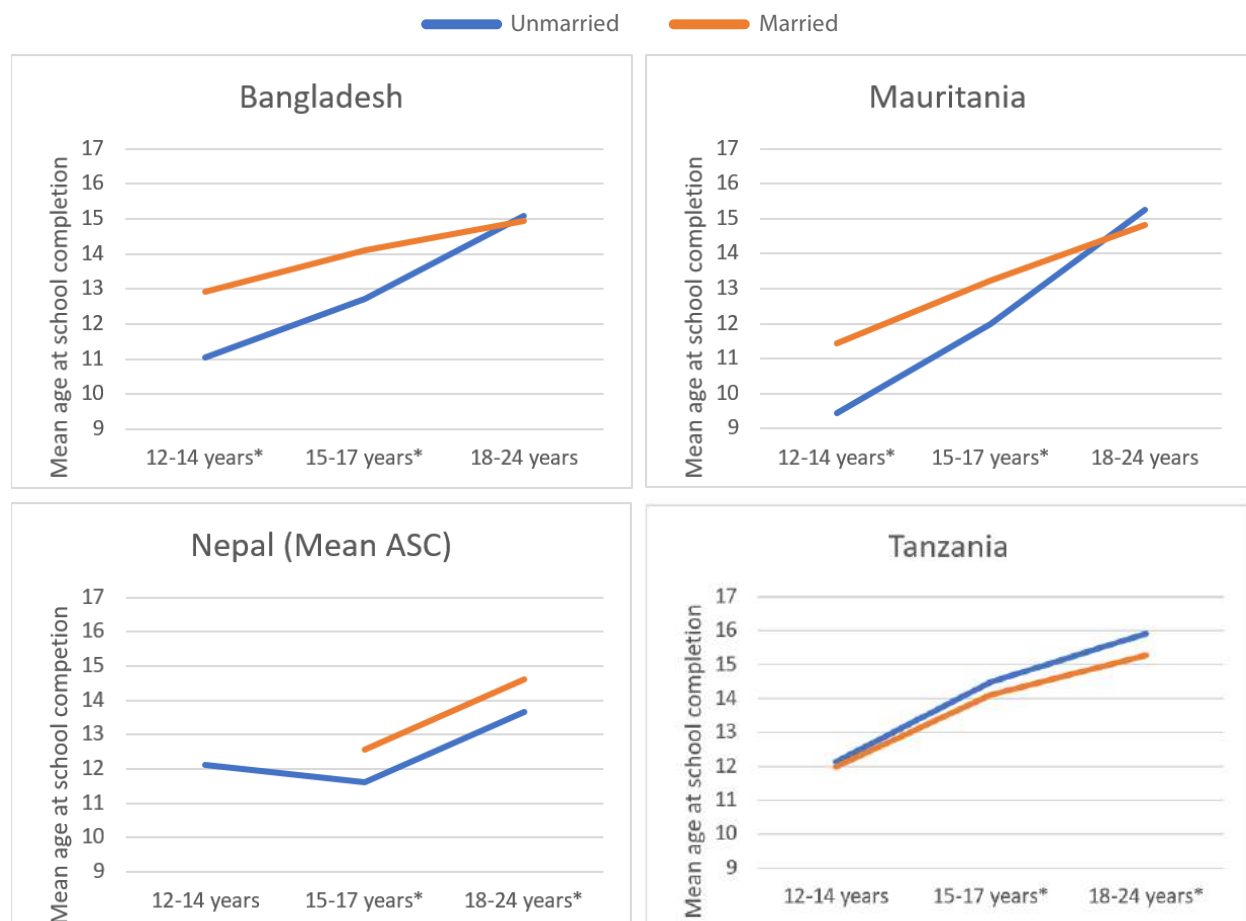
In Tanzania, the predominant pattern for married AGYW was for their husband to be the head of household, and there was little variation across age groups (range: from 53% of 18- to 24-year-olds to 68% of 12- to 14-year-olds). In Bangladesh and Mauritania, married AGYW were much more commonly themselves serving as head of household (range in Bangladesh: from 31% in the oldest to 80% in the youngest age group; range in Mauritania: from 33% in the oldest to 73% in the youngest age group). In both these countries, the husband emerges as most common to be the head of household in the oldest age group only (35% in Bangladesh and 42% in Mauritania), compared to the younger age groups. Likewise, the parent-in-law was reported as head of household second most commonly in the oldest age group (26% in Bangladesh and 16% in Mauritania) and more common than in the other age groups. Finally, in Nepal, the pattern for married women was similar for the two age groups shown but distinct from other countries. Parents-in-law predominated as head of household (57% for 18- to 24-year-olds and 71% for 15- to 17-year-olds) followed by a husband (28% and 13%, respectively). A parent or AGYW herself reported as head of household was uncommon in Nepal (less than 10% for parent and less than 5% for self).



Age at school completion

Another key pattern was the average age of married versus unmarried women who reported completing their education (Figure 4.1.2). In general, the age of school completion increases with older current age, which is to be expected. The important pattern is the comparison between unmarried and married AGYW within each age group. In Bangladesh, Mauritania, and Nepal, married women tended to complete school at an older age than unmarried women. In Bangladesh and Mauritania, this was only significant for the two younger age groups; the difference in the youngest age group is pronounced (a difference between completing school at age 11 versus 13 in Bangladesh and at 9.4 versus 11.4 years of age in Mauritania). In Nepal, this same pattern was significant for the older two age groups but with a smaller gap (about one year) between unmarried and married AGYW. Tanzania is the only country where there is a consistent trend in the two oldest age groups for the reverse pattern, with unmarried AGYW on average reporting having completed their education at a slightly older age (3 to 6 months later) than married women.

Figure 4.1.2: Comparison of unmarried and married AGYW for mean age at school completion (ASC)



NOTE: These figures do not include individuals who were currently attending school. Statistical significantly differences between unmarried and married AGYW within age groups are denoted with an asterisk. In Nepal, there were no observations in the youngest age group for married women.

HOW TO READ THE TABLES

The tables in this report are uniformly color-coded. Lighter colouring of a cell denotes lower values and darker colouring denotes higher values. Pairs of values that are statistically different are highlighted using white letters.

Education experience

The country with the highest overall level of AGYW currently still in school was Mauritania, followed by Bangladesh; however, these two countries also had the highest proportion of younger women in the sample, which would affect this pattern (see methods section). Differences by marital status were stark for all countries except Mauritania (Table 4.1.1). In all remaining countries, the proportion of unmarried AGYW still in school exceeded the proportion among married women, sometimes by a 10-fold difference (unmarried versus married: Bangladesh 43% versus 7%, Nepal 34% versus 9%, and Tanzania 31% versus <1%).

The age AGYW expected to leave school varied between 13 and 15 years old across all countries, but interestingly, there were significant differences between unmarried and married women. In the three countries where a significant difference between unmarried and married women was seen, there was a consistent pattern. On average, married AGYW expected to be able to continue their education to an older age than unmarried women in Bangladesh, Mauritania, and Nepal.

In Bangladesh, Nepal, and Tanzania, a higher proportion of unmarried than married AGYW reported that work conflicted with school. The highest proportion of women indicating that this conflict existed was for unmarried women in Bangladesh (43%), which contrasted starkly with the level of married women (7%). Among unmarried Nepali and Tanzanian women, the proportion of this conflict was moderately high (34% and 31%, respectively). In Mauritania, although there was no difference between unmarried and married AGYW for this conflict (work conflicting with school), the issue was relatively common.

Table 4.1.1: Education experience for unmarried and married AGYW by country (per cent)

	Bangladesh		Mauritania		Nepal		Tanzania	
	unmarried	married	unmarried	married	unmarried	married	unmarried	married
Currently in school	43.3	6.6	36.4	32.8	34.1	8.6	31.4	0.1
Expected exit age	13.8	14.7	13.3	14.5	12.8	13.7	15.1	15.0
Work conflicts with school	43.3	6.6	36.4	32.8	34.1	8.6	31.4	0.1
If not in school, plan to return later	42.2	21.1	99.2	21.5	32.5	15.3	21.6	10.1

Work experience

In Bangladesh, a significantly greater proportion of unmarried AGYW were currently working than were married AGYW, but in Mauritania and Tanzania, the opposite pattern was observed (Table 4.1.2). Among those not currently working, there was a higher proportion wanting to be employed among unmarried compared to married AGYW in Bangladesh and Tanzania, whereas the reverse pattern was seen for Mauritania

Table 4.1.2: Work experience for unmarried and married AGYW by country (per cent)

	Bangladesh		Mauritania		Nepal		Tanzania	
	unmarried	married	unmarried	married	unmarried	married	unmarried	married
Currently employed	13.3	8.5	8.7	14.2	5.2	6.9	12.5	21.5
If not working, desire to be employed	71.3	58.3	32.8	54.5	52.6	56.2	68.2	59.8

Qualitative insights: Work and education

Qualitative findings highlight some of the reasons why unmarried AGYW saw marriage and/or some type of employment as their goal in lieu of education. In Tanzania, a subset of FGD participants dreamt of working in their own businesses as tailors, market vendors, or housekeepers, and for these jobs, further education was not required. Education was viewed as undesirable for several reasons, including no longer understanding lessons, school was too far from their home, or they experienced beatings while at school.

“ I want to start a tomato business because it has a good cash flow and pays you on time, so if you take it seriously, you manage to get your capital back and make a profit. I can no longer return to school to study because I no longer understand the lessons and my thoughts are no longer in school. I’m currently thinking about other aspects of my life, such as starting a business and getting married. ”

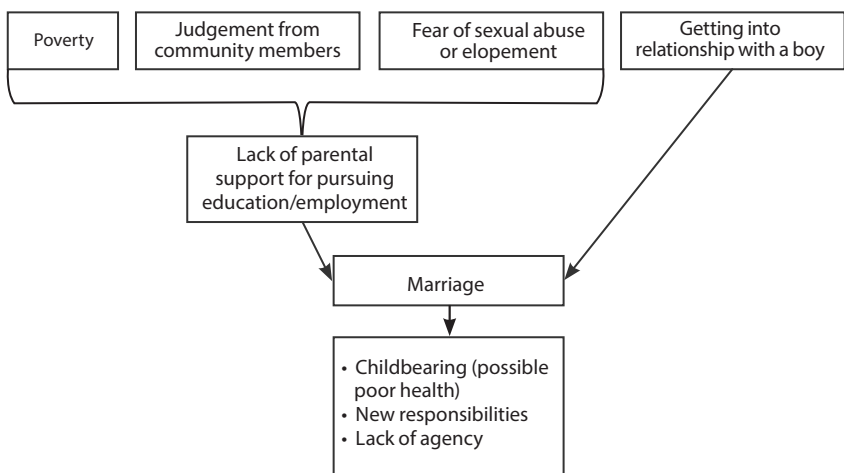
[unmarried, Kigoma, Tanzania]

“ I see the dreams of married people being different from those of those who are not married because, in our village, many girls are involved in small businesses such as vegetables, seafood, selling peanuts and tomatoes, but most of the married people are engaged in agriculture. ”

[unmarried, Kigoma, Tanzania]

In Bangladesh, unmarried AGYW who participated in FGDs were motivated to get an education and a job as a path to self-sufficiency, ‘stand on my own two feet,’ or to gain standing in the community. However, they acknowledged many barriers to achieving this goal, summarised in Figure 4.1.3. Rarely did unmarried Bangladeshi AGYW envision a future as married and with children.

Figure 4.1.3: Key barriers for unmarried AGYW in Bangladesh to achieve the dream of education and employment



“ I want to work after studying. I will do my best and stand by my family. My dream is to work in a good position. And so that everyone in the village sees me well. ”

[unmarried, 17-year-old, Bagerhat, Bangladesh]

4.2. Key characteristics of married AGYW

Marital status and how marriage ended

All respondents were asked to identify the person functioning as head of the household where they live. Among unmarried AGYW, the predominant head of household (>80%) in all four countries was a parent. However, this pattern varied for married women in different countries (Figure 4.1.1).

Marital age gap

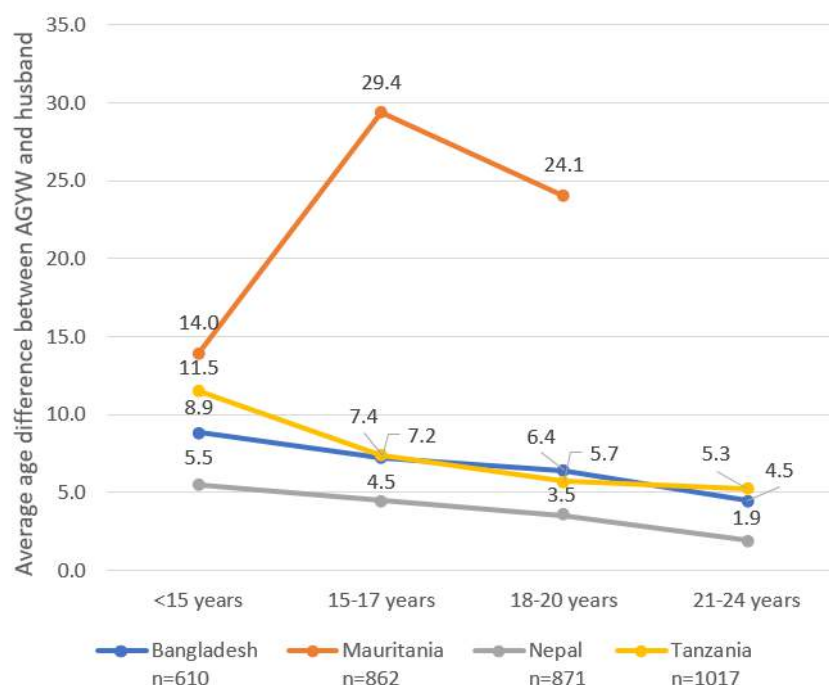
The age gap between married AGYW and their husbands is summarised in Figure 4.2.2). In Nepal, Tanzania, and Nepal, AGYW who first married at a younger age had a larger age gap with their husband than did AGYW who first married at older ages. This trend was statistically significant for all of these countries. In Tanzania, this trend was most pronounced (mean age difference declining from 11.5

to 5.3 years). In Mauritania, the age gap among both 15- to 17-year-olds and 18- to 20-year-olds was considerably greater than was seen for any other country (29.4 and 24.1 years respectively) and overall, Mauritanian AGYW reported the greatest age difference with their husband at all ages (range: average difference of 14.0 to 29.4 years).

Education experience

The patterns for education experience following marriage varied considerably by country (Table 4.2.1). In Bangladesh, the highest proportion of married AGYW said they attended school prior to getting married (74%) but they also ended school because of the marriage at a high rate (84%). In Mauritania and Nepal, around half of AGYW were attending school before marriage, but a high proportion stopped attending due to marriage (70% and 84%, respectively). In Tanzania, it was uncommon for an AGYW to be in school before marriage (12%).

Figure 4.2.2: Trend for average age gap between AGYW and her husband for four groups of AGYW's age at first marriage



NOTE: For ease of interpretation, data points are labelled. Data for the oldest age group in Mauritania was omitted due to sparse data (n=14). For each country except Mauritania, the trend across age at first marriage groups is statistically significant at the p<0.001 level.

Table 4.2.1: School experience by country among married AGYW (per cent)

	Bangladesh	Mauritania	Nepal	Tanzania
Attended school before marriage	74.4	49.2	54.0	11.5
Continued school after marriage	32.9	64.5	43.1	1.7
Ended school because of marriage	83.8	62.0	84.3	27.6

Marriage-related agency

Marriage decision

If we view an AGYW who indicates she took the decision to marry herself (blue bars) as having a higher degree of autonomy, the general pattern in Tanzania stands out as the country where AGYW have high levels of autonomy (57% decided themselves). In Bangladesh, a context where arranged marriages are common, AGYW had low levels of autonomy in the marriage decision (5% decided themselves).

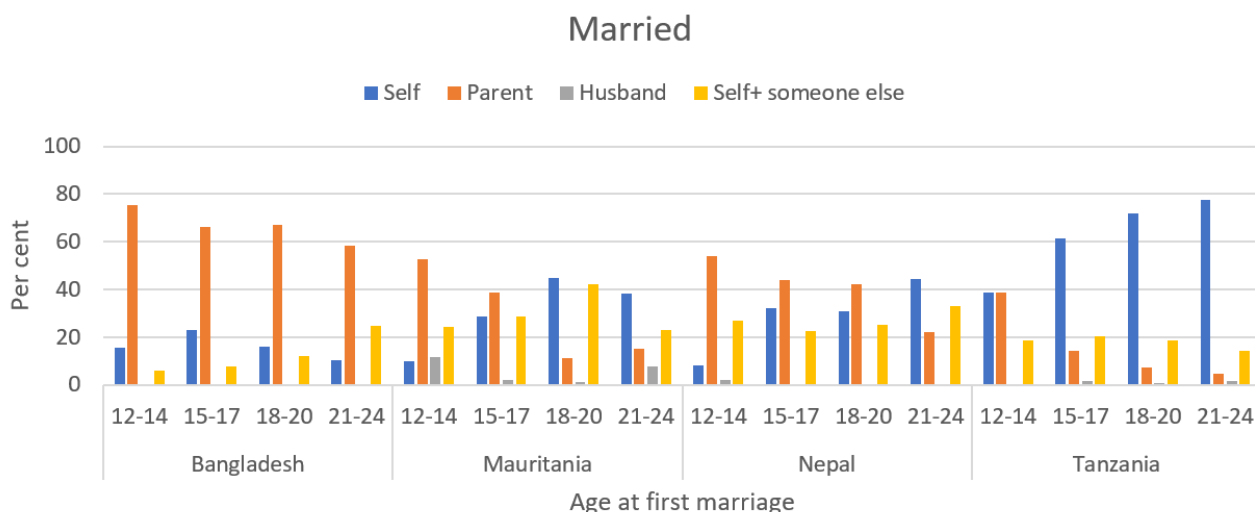
Figure 4.2.3 summarises this same decision-making information by age at AGYW's first marriage. In Bangladesh, the role of a parent as a decision-maker regarding marriage was pronounced, but this was less common at older ages of first marriage. Instead, it was increasingly common for the AGYW in Bangladesh to team up with someone else to make the decision even though the AGYW deciding alone remained relatively uncommon across age at first marriage. Unfortunately, the 'someone else' referred to in this category was left unspecified.

In Mauritania, the parent as decision-maker was very common in the youngest age group but half as common in the next age groups (age at first marriage: 12 to 14 years old – 60%, 15 to 17 years old – 33%, and 18 to 20 years old – 10%). However, the AGYW deciding herself or with someone else was steadily more common as age at first marriage increased (age at first marriage: 12 to 14 years old – 21%, 15 to 17 years old – 36%, and 18 to 20 years old – 46%).

In Tanzania, as age at first marriage increased, AGYW reported taking this decision themselves more often (age at first marriage: 12 to 14 years old – 39%, 15 to 17 years old – 61%, 18 to 20 years old – 65% and 21 to 24 years old – 77%), while only at the youngest age at first marriage did parents emerge as a primary decision maker (39%).

In Nepal, the relationship between age at first marriage and who decided when the AGYW would marry was not statistically significant, but there was a trend toward increasing levels of autonomous decision-making at older age at first marriage.

Figure 4.2.3: Who decided respondent would marry by age at first marriage among married AGYW

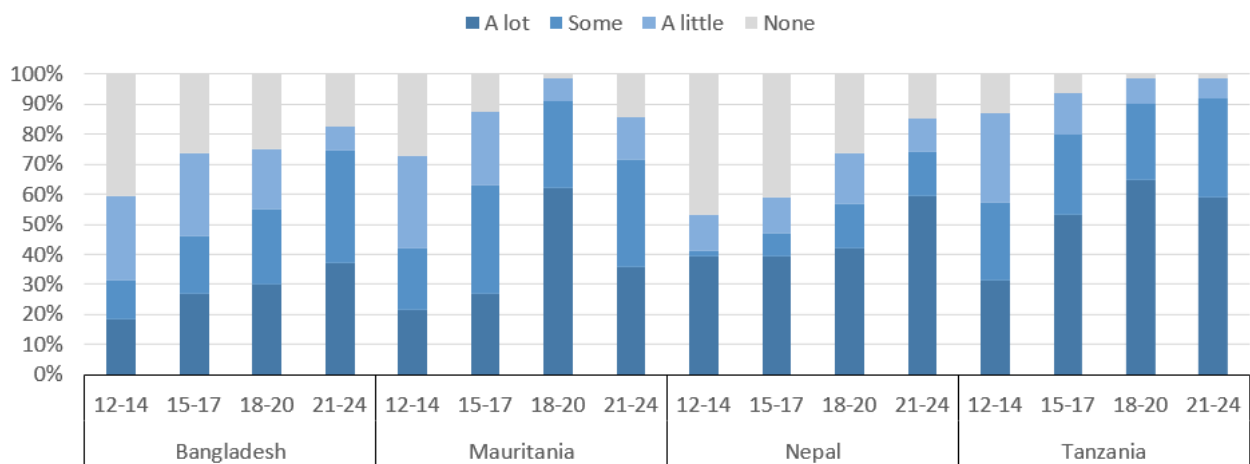


NOTE: For each country except Nepal, the general trend across age at first marriage is statistically significant at the $p < 0.001$ level.

In all four countries, there was a significant trend with proportionately more AGYW indicating that they had greater control in the general decision to marry as age at first marriage increased (Figure 4.2.4). Importantly, the proportion of married AGYW who had **no say in the decision to marry**, called out in the grey bars, is most pronounced at younger ages at first marriage and in Bangladesh and Nepal (for first marriage at age 12 to 14: 41% and 47%, respectively) compared to Mauritania and Tanzania (for first marriage at age 12 to 14: 27% and 13%, respectively).

An interesting comparative finding was that it was most common for married AGYW to report having entered into marriage due to a pregnancy or birth in Mauritania (23%), followed by Tanzania (22%) and Bangladesh (14%), and rarest in Nepal (4%).

Figure 4.2.4: Gradient from **no control** to a **lot of control** over the **marriage decision** within each group of age at first marriage among married AGYW



NOTE: For each country, the trend across age at first marriage is statistically significant at the $p < 0.001$ level.

Agency since marriage

There are a total of six elements that are combined to create the empowerment scale¹ for married AGYW. In all cases, the respondent was asked to describe change in these elements following marriage: **better** or 'more able to...', **no change** 'in my ability,' and **worse** or 'less able to.'

Figure 4.2.5 shows how these six elements are distributed within each country: (1) ability to work outside the home, (2) ability to go to school, (3) access to ANC services, (4) access to SRH services, (5) decision-making power, and (6) access to money. In general, married AGYW viewed their agency following marriage as lower with respect to access to school or to work outside of the home and higher with respect to access to SRH and ANC services and perceiving greater status in the community.² For the remaining components — access to money and decision-making power — the viewpoint following marriage varied among the countries. For access to money, nearly half (46%) reported improvement in Mauritania, followed by Bangladesh (39%). For improved decision-making power, in Mauritania, 48% reported improvement.

¹ The questions used to measure the elements of the empowerment scale are specified in Appendix A.

² Worsened access to school: Bangladesh – 55%, Mauritania – 43%, Nepal – 37%, Tanzania – 22%. Worsened access to work: Bangladesh – 51%, Mauritania – 39%, Nepal – 23%, Tanzania – 53%. Improved access to SRH: Bangladesh – 32%, Mauritania – 48%, Nepal – 21%, Tanzania – 56%. Improved access to ANC: Bangladesh – 49%, Mauritania – 66%, Nepal – 59%, Tanzania – 63%. Greater community status: Bangladesh – 47%, Mauritania – 58%, Nepal – 44%, Tanzania – 58%.

Focusing on the differences between age-at-first-marriage groups, in Bangladesh, at older ages, there was worsening access to money and improved access to schooling following marriage, although even with the oldest age-at-first-marriage group, access to schooling was still somewhat uncommon (17%). In Mauritania, increasing age at first marriage was consistently related to improved agency in multiple domains including: access to money, decision-making power, access to SRH services, employment, and status in the community. In Nepal, older age at first marriage was linked to greater access in schooling and status in the community. In Tanzania, older age at first marriage was clearly linked to antenatal and reproductive health services, decision-making power, and status in the community. In several cases, the relationship between age at first marriage and agency element was more complex. In a few cases, the level of agency was low for both the youngest and oldest age-at-first-marriage groups and highest for the age groups between. This pattern was true for access to money in Nepal and Tanzania. It was also true for access to ANC services in Nepal.

Unfortunately, these patterns were not explored specifically in the qualitative component of the study since the data was collected prior to analysis of the quantitative information.

Figure 4.2.5: Agency patterns in the four participating countries

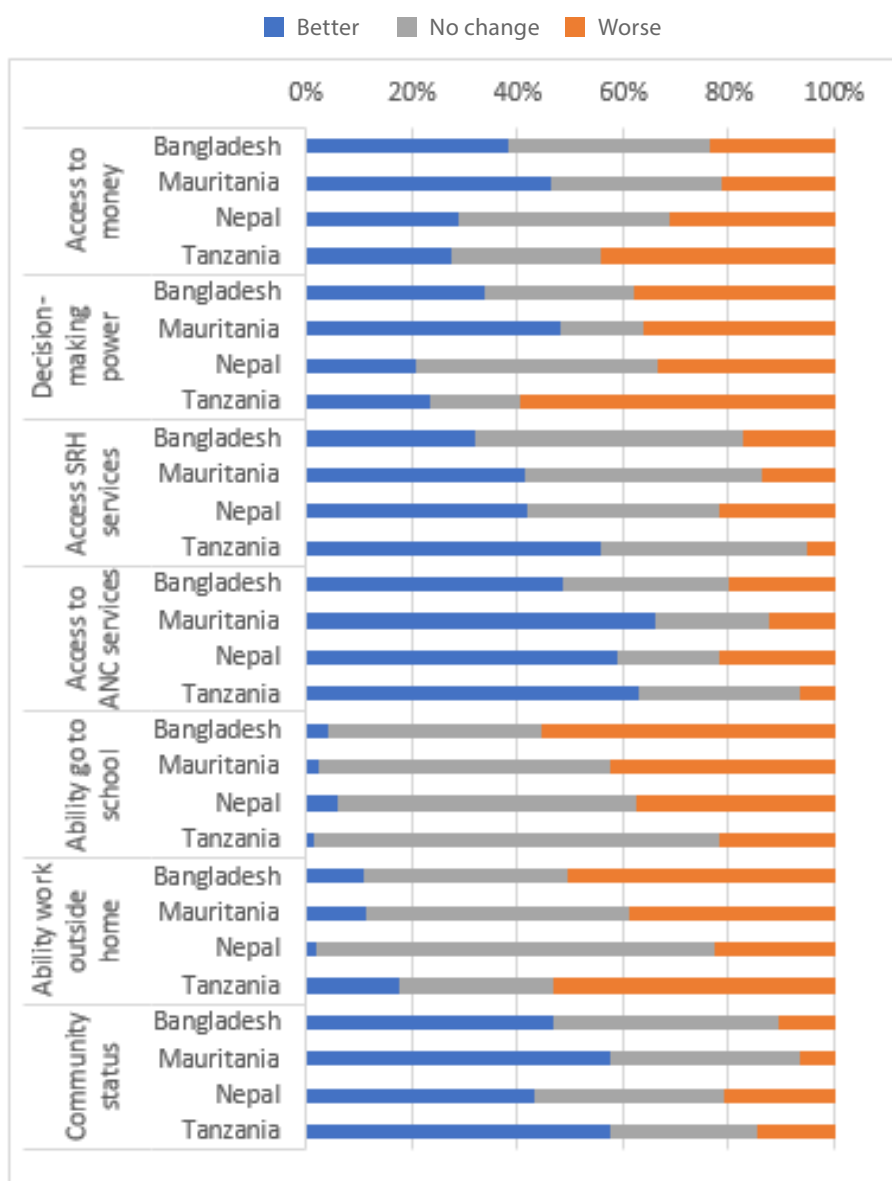
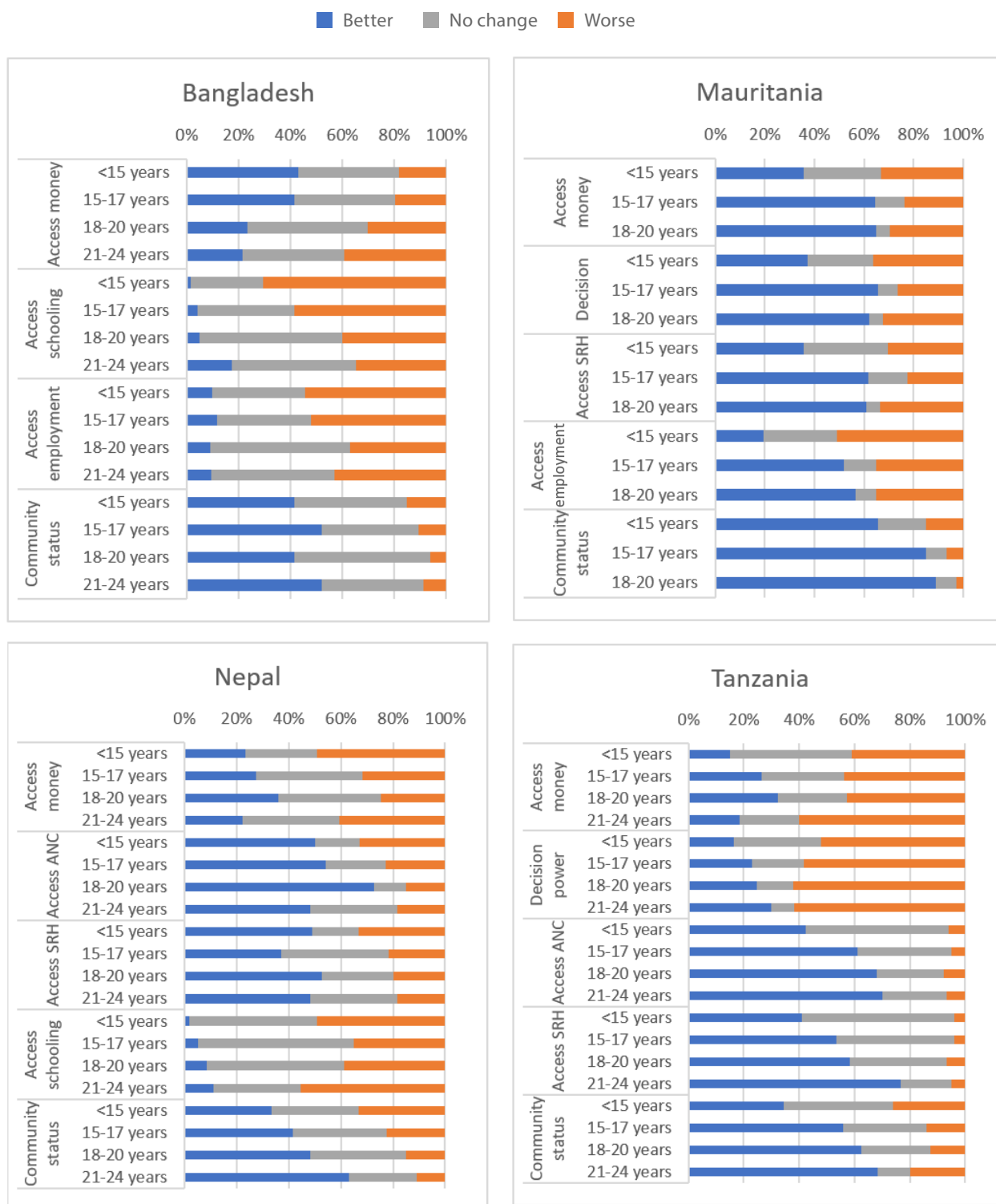


Figure 4.2.6: Differences in agency patterns by age at first marriage



NOTE: All differences between agency patterns and across the age-at-first-marriage groups are statistically significant ($p \leq 0.001$). For Mauritania, data for the 21–24 years old at first marriage group was too sparse to be included and data was unavailable for access to ANC and to school.

4.3. Key characteristics of unmarried AGYW

Future aspirations

To assess how marriage is positioned relative to other primary life situations in how unmarried AGYW view the future, the survey asked them to indicate whether they would like or expect to be in any of six possible situations. Table 4.3.1 includes data from all countries and the six situations are listed on the left. Across all countries, both the top three desired and expected situations were living with parents, in school or university or working in the home. The least desired or expected situation was to be a mother.

Table 4.3.1: Desired vs. expected situations in 2–5 years time among unmarried AGYW (per cent)

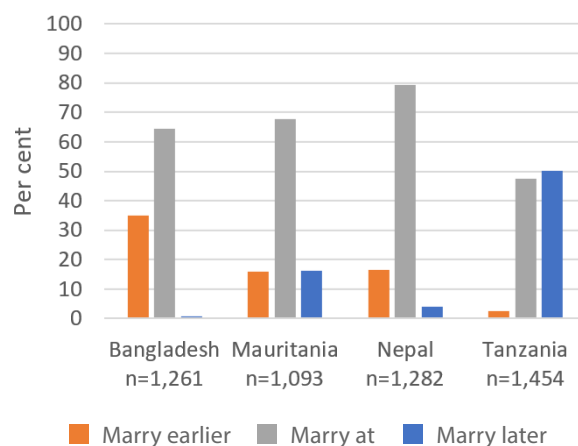
Situation	Bangladesh		Mauritania		Nepal		Tanzania	
	Desired	Expected	Desired	Expected	Desired	Expected	Desired	Expected
In school/university	87.5	72.5	73.8	67.7	81.2	78.2	57.5	51.4
Married/living with partner	19.7	37.2	45.1	47.6	18.5	25.9	37.4	37.8
Being a mother	9.1	13.2	38.6	38.4	13.5	19.3	37.6	38.0
Living with parents	78.6	58.6	66.5	60.3	93.8	91.6	63.6	62.3
Working outside the home	60.7	48.4	62.8	55.1	56.2	50.5	60.3	57.3
Working in the home	46.3	52.6	69.7	66.7	82.7	83.0	47.5	45.2

Among the aspiration–expectation pairs that are significantly different, in Bangladesh, Mauritania, and Tanzania AGYW indicated a higher level of desire to be in school or university than their expectations. The reverse pattern, where expectation significantly exceeds desire, was seen for marriage or cohabitation in Bangladesh and Nepal. A similar pessimistic view is seen for being a mother with expectations significantly exceeding desire in these same two countries. In Bangladesh, Mauritania, and Nepal, unmarried AGYW more often desired than expected to be working outside of the home. In Bangladesh and Mauritania, unmarried AGYW more often desired than expected to live with their parents. In general, the most desired situation was to either be in school or university or live with parents, and the least commonly desired situation was to be in a marriage or cohabitation situation or to be a mother.

Age at marriage

For the four participating countries, ideal versus expected age of marriage is presented in three categories: expect to marry earlier than the respondent felt was ideal, expect to marry at the ideal age, and expect to marry later than the ideal age (Figure 4.3.1). Unmarried AGYW expected to marry at their ideal age, most often in Nepal (79%), followed by Mauritania (68%), Bangladesh (64%), and Tanzania (47%). In Bangladesh, AGYW most frequently reported the belief that they would marry earlier than the ideal age (35%), followed by Nepal (17%) and Mauritania (16%). This view was rare for Tanzania (3%); however, unmarried Tanzanian AGYW most frequently thought they would marry later than the ideal age (50%), followed by Mauritania (16%). This view was shared by less than 5% of unmarried AGYW in Bangladesh and Nepal.

Figure 4.3.1: Expected age at marriage among unmarried AGYW

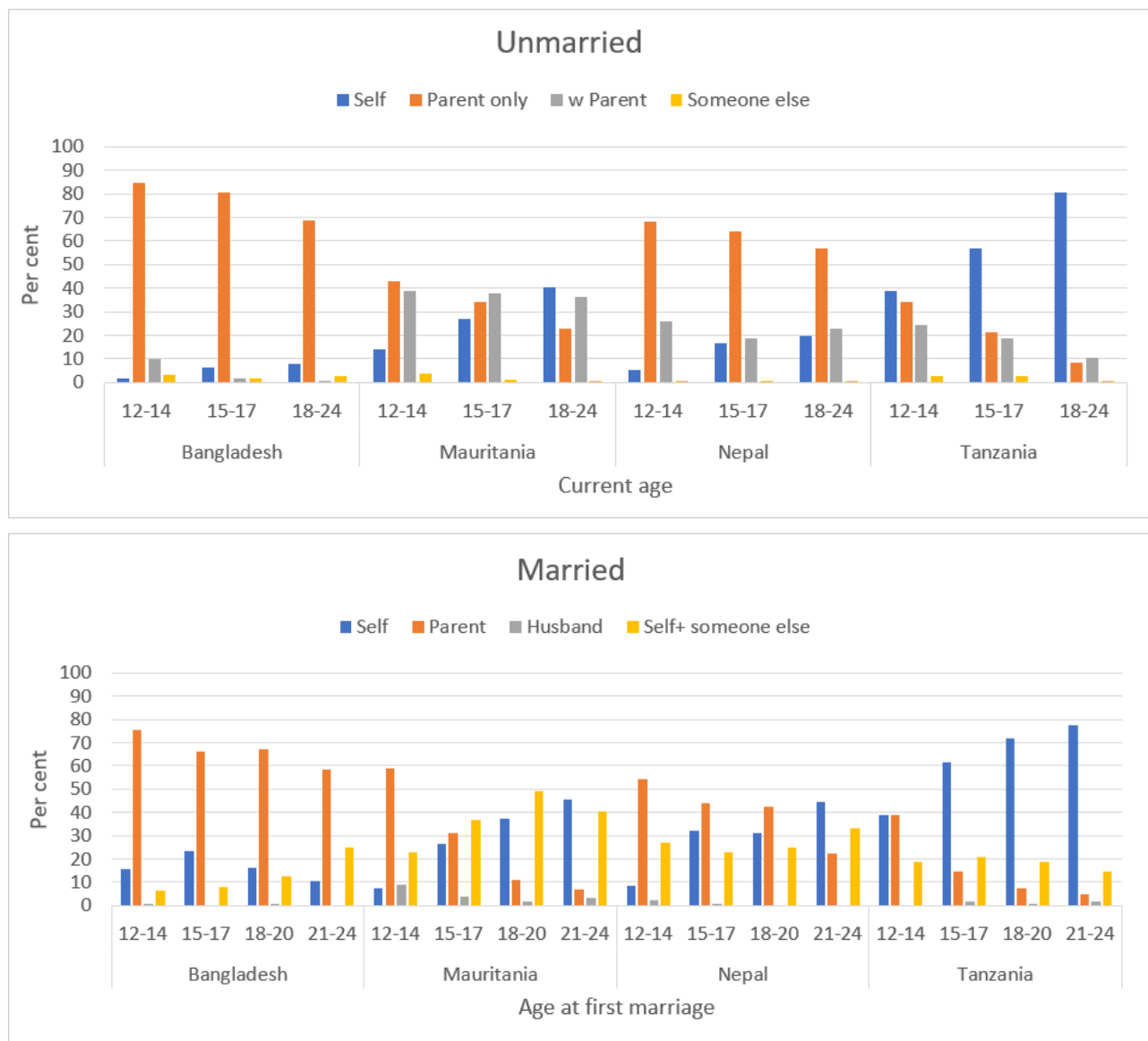


4.4. Comparing agency patterns for unmarried and married AGYW

Marriage decision

Information about who made the marriage decision among married AGYW is shown alongside the corresponding data for unmarried AGYW in Figure 4.4.1. The question is framed as an expectation for unmarried women whereas it captures what married women say happened. The response categories for unmarried and married women were slightly different and are clearly indicated in the legends above each figure. In this summary, two different age metrics are used. For unmarried AGYW, the data is stratified by current age, whereas for married women, the age at first marriage is used to reflect more closely the events around the time this decision was made. All statistical comparisons are for differences across age groups for each country and not comparing unmarried to married women.

Figure 4.4.1: Age patterns for who will decide the respondent will marry



NOTE: For each country, differences across age groups are statistically significant at the $p < 0.001$ level except for married women in Nepal ($p = 0.072$).

With greater autonomy reflected by an indication that the respondent herself would decide when to marry, this view was held most often in Tanzania among both unmarried and married AGYW and was increasingly common at older ages (39%, 57%, and 81%, respectively for unmarried women, and 54% and 68%, respectively for married women).

In Mauritania, the view that the respondent herself would make the decision to marry was increasingly common for older unmarried AGYW (from 14% for 12- to 14-year-olds to 41% for 18- to 24-year-olds), and if we combine this with the pattern for the respondent to decide together with a parent, this is the dominant viewpoint in all age groups. The pattern for married women was similar, with a parent having made the marriage decision reported slightly more often and jointly with a parent slightly less often.

In contrast, the view that a parent alone would make the decision to marry was the dominant viewpoint among unmarried AGYW in Bangladesh and decreased somewhat with age (from 85% for 12- to 14-year-olds to 69% for 18- to 24-year-olds). The pattern for married women was similar, with the marriage decision reported to be made herself occurring somewhat more often (for unmarried and married AGYW: 6% versus 19% for 15- to 17-year-olds and 8% versus 19% for 18- to 24-year-olds).

The greatest contrast between what unmarried AGYW expected and what married AGYW experienced was observed in Nepal. In general, unmarried women expected to make this decision themselves infrequently (5%, 16%, and 20% across the three age groups) and a parent to do so more than half the time. Whereas married AGYW reported taking this decision themselves about twice as often (36% and 27% for 15- to 17- and 18- to 24-year-olds, respectively). Among married AGYW, parents making the marital decision was reported by about 40%.

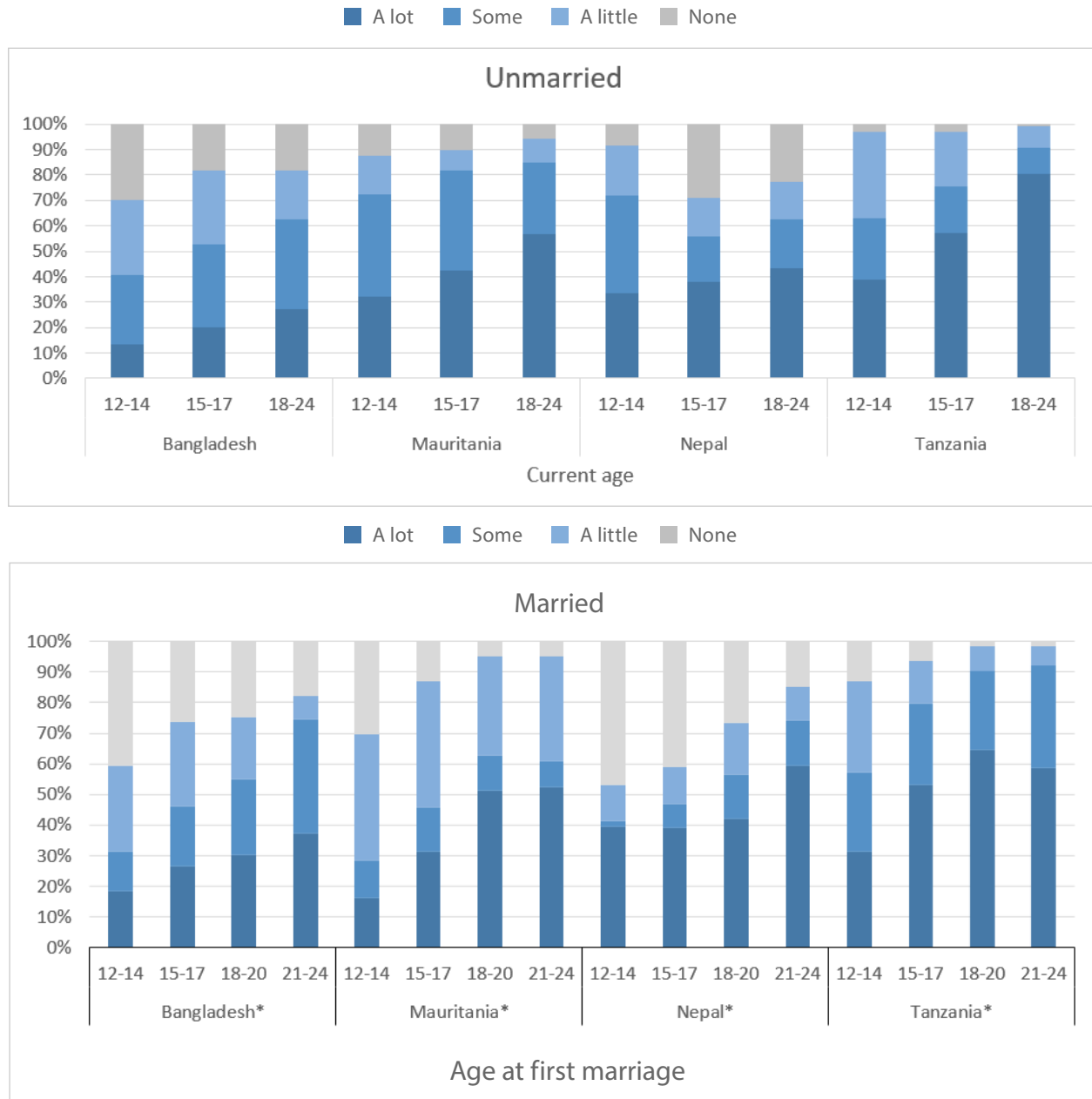
In Figure 4.4.2, the degree of control over the decision to marry is summarised for unmarried and married AGYW. Again, all statistical comparisons are for differences across age groups for each country and not comparing unmarried to married women.

In all four countries, higher levels of expected control over this decision among unmarried AGYW was seen at older ages. Among married AGYW, a similar pattern was only seen strongly in Tanzania. In Bangladesh and Nepal, in general the frequency of having **no control** was the highest compared to Mauritania and Tanzania — both as an expectation among unmarried AGYW and reported experience for married AGYW. However, among Bangladeshi unmarried AGYW, the highest level of no control expected over the marriage decision was seen among 12- to 14-year-old unmarried women (30%), and the level decreased at older ages (18% for both groups). Among married Bangladeshi AGYW, this age-related trend is no longer evident. In Nepal, no control over this decision was rare for the youngest unmarried AGYW (6%) and was distinctly more common at older ages (29% for 15- to 17-year-olds and 23% for 18- to 24-year-olds). Similar to Bangladesh, this trend was no longer evident among married AGYW.

Choosing who to marry

For both unmarried and married AGYW, the patterns for who will choose their husband closely resembled those for those who decided to marry in the first place (see 'Marriage decision' section directly above). The same is true for the degree of control over that decision. It may be that nearly all respondents answered identically to the first set of questions regarding the marriage decision as they did to the second set of questions regarding choosing their husband.

Figure 4.4.2: Gradient from **no control** to a **lot of control** over the marriage decision by age group



NOTE: For each country, differences across age groups are statistically significant at the $p < 0.001$ level except for married AGYW in Bangladesh ($p = 0.114$) and Nepal ($p = 0.004$).

Qualitative insights: Agency before and after marriage

Results from FGDs highlight the varied strategies AGYW use with respect to marriage decision-making. In Bangladesh, parent-led marriage decisions seem to be linked with avoiding social risk (e.g., elopement) or poverty. When the financial situation is a driver, parents seem to optimise a financially secure marriage despite a daughter's young age.

In Bangladesh, some FGD participants described the way marriage can boost AGYW agency.

“ Before marriage, I could not go outside or spend time with friends. I was kind of bound in the house. I faced these barriers from my parents rather than from my husband. I can move freely after marriage, and the most important thing is that he supports me in whatever I wish to do. ”

[married, Dinajpur, Bangladesh]

On the other hand, as expectations change from their role in their natal home to their new role, FGD participants described the increased burden of household maintenance-related work.

“ Before marriage, the [household] work was not compulsory. Parents are happy with whatever I have done for them. But when you're in the house of your husband, you are bound to do whatever they tell you to do. ”

[28 years old, married at 15, one child, Dhaka, Bangladesh]

From the qualitative results, there are many rich descriptions of forms of autonomy and limits on the same faced by unmarried AGYW.

“ When I hang out with friends, I think I have a relationship with them. You can't talk to them [and] if you go out a little, [you] can't talk on the phone. They say that you can't go out. These are our constraints. The people of the village have no end of words. ”

[unmarried, 18-year-old, Bangladesh, Rajshahi]

4.5. Associations with well-being outcomes

This study defined key well-being outcomes as follows:

Domain	Sub-domains
Violence	Any violence* Sexual violence Physical violence
Health	Any violence* Sexual violence Physical violence
Service access	Violence protection Family planning**

* Physical and sexual violence

** Access to contraceptive services is the only service type that applies to both married and unmarried AGYW

Another key metric for the study was the empowerment score which reflects the degree of agency commanded by the participants in the study. Given the study objectives and questions, the empowerment score is thought of both as an outcome itself and as a possible factor linked to the outcomes listed above.

Figure 4.5.1 summarises the pattern for unmarried and married AGYW for this important measure. On first inspection, married AGYW appeared to have higher levels of empowerment than unmarried women in all countries except for Tanzania, where there was a more modest difference between the pattern for unmarried versus married AGYW.

Predicted well-being for married and unmarried within age group

The association between the first five well-being metrics and marital status with each age group is summarised in Table 4.5.1. Significant differences between unmarried and married AGYW are highlighted in the ‘Variance’ column. Darker green colouring indicates a greater difference, with married AGYW having a higher probability of a given outcome than an unmarried AGYW. Orange colouring indicates either a smaller magnitude difference or the reverse pattern — that is that unmarried AGYW have a higher likelihood than married AGYW of experiencing a given outcome.

The empowerment score was consistently likely to be higher for married versus unmarried AGYW in Bangladesh, Mauritania, and Nepal. In Bangladesh and Mauritania, this pattern was consistent for all age groups, and the magnitude of the variance in probability was the largest (range: 27% to 41%, depending on age group).

The probability of physical violence tended to be greater for unmarried versus married AGYW, especially in the youngest age group (variance: 23% in Bangladesh, 25% in Mauritania, and 31% in Tanzania). This probability decreased in the middle age group and switched for the oldest age group (probability higher for married versus unmarried: 6% in Bangladesh and Nepal, and 12% in Tanzania).

The probability of sexual violence among married AGYW was higher than for unmarried women in Tanzania across all age groups (range: 16% to 28%, depending on age group). In Bangladesh and Mauritania, a similar pattern was only seen in the oldest age group (11% and 6% higher probability for married versus unmarried, respectively).

A difference in likelihood of having favourable general health was only seen in Bangladesh for the oldest age group, where married women had an 8% higher chance of favourable health than did unmarried AGYW.

Finally, the only country with a significant difference in the predicted probability of feeling sad or worthless was Mauritania, where married AGYW consistently had higher odds of this unfavourable mental health outcome than did unmarried women (range: 11% to 19%, depending on age group).

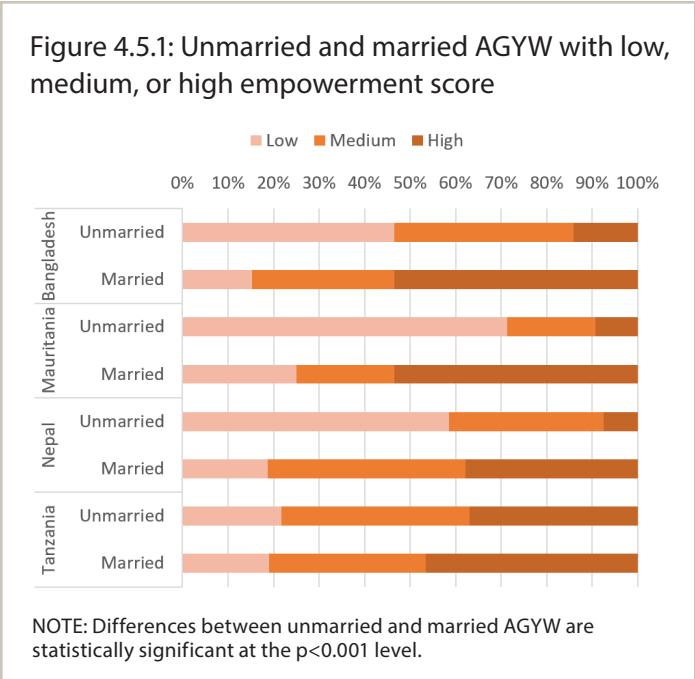


Table 4.5.1: Predicted outcomes disaggregated by unmarried versus married AGYW within each age group

	Age group	Bangladesh			Mauritania			Nepal			Tanzania		
		Unmarried	Married	Variance	Unmarried	Married	Variance	Unmarried	Married	Variance	Unmarried	Married	Variance
Empowerment score (range 1 to 2)	12-14	1.10	1.51	40.8%	1.05	1.44	39.2%	1.07	NE	-	1.35	1.33	-
	15-17	1.16	1.44	27.6%	1.08	1.49	40.8%	1.11	1.30	19.1%	1.34	1.43	8.9%
	18-24	1.24	1.51	26.8%	1.18	1.50	31.9%	1.14	1.47	33.0%	1.43	1.43	-
Physical violence (last year)	12-14	0.26	0.02	-23.4%	0.27	0.02	-24.7%	0.13	NE	-	0.43	0.12	-30.7%
	15-17	0.16	0.09	-6.9%	0.23	0.08	-15.2%	0.08	0.08	-	0.30	0.18	-12.0%
	18-24	0.12	0.18	6.3%	0.14	0.15	-	0.07	0.13	6.2%	0.12	0.24	12.2%
Sexual violence (last year)	12-14	0.00	0.03	-	0.04	0.01	-	0.00	NE	-	0.04	0.32	27.5%
	15-17	0.01	0.06	-	0.06	0.03	-	0.00	0.08	-	0.05	0.21	16.0%
	18-24	0.00	0.11	11.1%	0.03	0.09	6.1%	0.00	0.10	-	0.04	0.30	25.7%
Favourable general health	12-14	0.11	0.11	-	0.18	0.13	-	0.02	NE	-	0.15	0.08	-
	15-17	0.17	0.13	-	0.17	0.24	-	0.06	0.04	-	0.13	0.15	-
	18-24	0.17	0.26	9.7%	0.23	0.21	-	0.10	0.08	-	0.16	0.16	-
Feel sad or worthless (last 4 weeks)	12-14	0.23	0.21	-	0.14	0.25	11.3%	0.05	NE	-	0.10	0.04	-
	15-17	0.24	0.24	-	0.13	0.32	19.4%	0.06	0.04	-	0.10	0.12	-
	18-24	0.38	0.38	-	0.17	0.35	17.7%	0.11	0.09	-	0.11	0.13	-

Differences in well-being for married versus unmarried AGYW

The overall prevalence of the different primary outcomes of interest are summarised in Tables 4.5.2 and 4.5.3. The data in both tables are percentages. The darker colouring highlights higher per cent values, and the numbers in white highlight statistically significant differences between married and unmarried AGYW.

In both cases, the final column shows the per cent of participants who reported that relevant services were available in their community.

Violence

Levels-of-violence outcomes in the four participating countries varied considerably (Table 4.5.2). The measures were captured with a high degree of specificity, then combined into the categories shown here. Violence was reported to be least frequent in Nepal (range: .03% to 15%) and most frequent in Tanzania (range: 4.8% to 37%). However, access to violence-protection services was generally high and only fell below 90% for unmarried AGYW in Mauritania (82%).

There were several cases where the difference in frequency of violence among unmarried and married AGYW was striking. For the outcome of any violence — including physical violence, which is a subset of ‘any violence’ — unmarried AGYW reported higher levels of violence than married women in Bangladesh, Mauritania, and Tanzania. In Nepal, the pattern differed, with married AGYW reporting higher levels of any violence.

Table 4.5.2: Unmarried and married AGYW reporting violence- and protection-related outcomes (per cent)

	Any violence		Sexual violence		Physical violence		Violence protection in community	
	Unmarried	Married	Unmarried	Married	Unmarried	Married	Unmarried	Married
Bangladesh	17.9	14.7	0.4	7.8	17.9	12.3	95.2	96.2
Mauritania	22.5	14.9	4.2	6.4	21.6	11.1	82.1	94.9
Nepal	9.6	14.9	0.3	8.9	9.4	10.3	93.8	94.6
Tanzania	31.7	36.9	4.8	28.5	29.8	22.5	92.8	92.8

NOTE: Darker colour denotes higher per cent, and white lettering denotes significant difference between observations for unmarried and married AGYW. In no case did the denominator fall below 700. Sexual violence was defined as responding ‘a few times’ or ‘often’ to a question whether in the past 12 months, how many times an AGYW had sexual intercourse when she did not want to, referring to perpetrator as someone in household or a partner for unmarried and husband for married. Violence protection in the community was defined as responding yes to whether there are places in the AGYW’s community where she could go for help if she experienced violence and was not specified as to type of violence.

Sexual violence, a subset of ‘any violence,’ was rarely reported among unmarried AGYW (from 0.3% in Nepal to 5% in Tanzania) but significantly more commonly reported among married AGYW (from 6% in Mauritania to 29% in Tanzania). This consistency with higher levels of sexual violence reported following marriage in all countries is noteworthy.

More than 90% of both unmarried and married AGYW reported that violence protection existed in their community — except for unmarried women in Mauritania (82%), the only case where there was a significant difference in the level reported by married women (95%). Please note that while violence-protection services existed (availability) within most communities, AGYW can experience barriers to accessing these services, as noted below.

Qualitative insights: Violence

In Bangladesh, following poverty, FGD participants mentioned parental fears of their daughter experiencing sexual violence while unmarried as a motivation to marry early.

Participants also highlighted key barriers to accessing more formal violence prevention and support services, and the importance of alternative informal community-based support from community leaders and family members. While the quantitative data indicates a high availability of services in AGYW's communities, FGDs suggest that AGYW are often concerned with the challenges of accessing services due to fear of stigma and the threat disclosure might bring, as it may impact the social capital of their families, precipitate a marriage decision (for unmarried women), or initiate backlash from their husbands.

“ Many do not go there [violence-protection services] for their dignity. They think if people know about it, it will not be good for me. ”

[16-year-old, never married, Bandarban, Bangladesh]

“ The parents [are a barrier to accessing support for violence]. They think if we dig the thing more, many people will know, more problems will occur, and their status will be diminished. That's why they don't want us to go there. ”

[18-year-old, married with one child, Dinajpur, Bangladesh]

In Tanzania, fear of retaliation emerged in the context of reporting abuse that happens at schools.

“ No, we keep silent. For example, if you go to say that your teacher will be taken into custody, if you go back to school, you will be harassed even more. So, we keep quiet. ”

[unmarried, Kigoma, Tanzania]

Both married and unmarried AGYW described fear of retaliation from family members. For unmarried women, the concern was retaliation from a parent, who even may be the perpetrator. For married women, likewise, there was fear of retaliation from husbands.

“ Some women failed to report violence from their either husbands or relatives because their husbands threaten them: If they report, they will be killed. So due to that fear many of them tend to remain in pain at home. ”

[married, Maswa, Tanzania]

And in relation to marriage, violence may be the response to a variety of 'underperformance' perceptions, some related to increasing autonomy.

“ Most of the time, it is for non-essential reasons [that girls get abused], but in our society, small mistakes like coming home late, not working hard like farming, asking for money for personal use, and a variety of other reasons can result in you being beaten or reprimanded by insulting your parents or even your husband. ”

[17-year-old, married with one child, Kigoma, Tanzania]

Health

Levels of favourable health outcomes in the four countries also varied (Table 4.5.3). Report of having general good health was most common in Nepal (94% for both unmarried and married women) and least common in Mauritania (81% and 79% for unmarried and married, respectively, not statistically different). The pattern for Bangladesh was distinct not only because the level of favourable health status in unmarried and married AGYW is relatively low but also because it is significantly higher for unmarried than for married AGYW (85% and 81%, respectively). It is noteworthy that these patterns do not appear to reflect AGYW's sense of improved agency with respect to accessing ANC and SRH services (see section 4.2). These may not be contradictory findings if the concept of general health status is not driven by reproductive health.

Table 4.5.3: Unmarried and married AGYW reporting health-related favourable outcomes (per cent)

	Positive general health status		NOT feeling sad/worthless		Family planning in community	
	Unmarried	Married	Unmarried	Married	Unmarried	Married
Bangladesh	85.0	80.6	71.6	69.4	87.3	92.7
Mauritania	81.0	79.4	85.3	67.1	80.5	88.8
Nepal	93.9	94.0	92.7	93.3	89.2	99.4
Tanzania	85.7	84.4	89.6	87.0	91.7	96.3

NOTE: Darker colour denotes higher per cent, and white lettering denotes significant difference ($p < 0.05$) between observations for unmarried and married AGYW. In no case did the denominator fall below 600. Positive health status was defined as 'always well' versus 'less than always well'.

A report of NOT feeling sad or worthless was relatively common in all countries. Self-assessment of this construct reflecting positive mental health was lower than the perception of general health in Bangladesh (unmarried: 72% versus 85%; married: 81% versus 69%; not tested for differences) and in Mauritania for unmarried AGYW (79% versus 67%; not tested for differences). A difference between unmarried and married AGYW was only detected in Mauritania (85% versus 67%, respectively) and Tanzania (90% versus 87%, respectively) in both cases, with the degree of sadness or worthlessness being reported higher in married women. It appears that self-assessed positive health status shows a parallel pattern to report of better mental health as they both were measured in this study.

Report of access to family planning services in the community was above 80% in all four countries. This finding aligns with the high levels of self-reported good health in all countries. In Bangladesh, Mauritania, and Tanzania, married women reported having access to family planning services at a significantly higher level than unmarried women.

The qualitative information from Tanzania and Bangladesh did not focus on understanding the link between marriage status and the AGYW's perception of mental and physical health.

Qualitative insights: Health

In Bangladesh, a barrier to seeking health services, in general, is shyness or a fear of sharing personal problems, especially with a male health-care provider. This view was shared by unmarried and married women alike.

“ If I am a woman, I feel shy to talk about the problem to a male doctor. ”

[18-year-old, never married, Rajshahi, Bangladesh]

“ Many early-age girls are unlikely to share their personal issues freely with doctors because of shyness. This is one of the problems they face. And if the doctor is a male, they hesitate even more. They share a bit with the female doctor, but with the male, they don't even share anything. ”

[18-year-old, no children, Dinajpur, Bangladesh]

Distance to health services and the cost of seeking health care were expressed as a concern in both Bangladesh and Tanzania.

“ Girls of our age face difficulty to use these services who are not capable of spending money. ”

[17-year-old, never married, Bandarban, Bangladesh]

Independent association with key outcomes

A multivariate modelling approach was used to elucidate the magnitude of the association between marital status, age, empowerment score, and both health- and violence-related outcomes. Importantly, all models reported below included the four countries. In many models, there were significant differences between countries, which was not the focus of this analysis. Ideally, these models would also have included a measure for school attendance or grade level achieved; however, this information was not consistently available for both unmarried and married AGYW in all countries.

Empowerment score

First, factors associated with a higher empowerment score were assessed and results are summarised in Figure 4.5.2. To facilitate interpretation, the empowerment score was redefined in three levels — low, medium, and high — with roughly one-third of the sample falling into each grouping. It is worth noting that in the lowest level, most were unmarried (range: 62% in Tanzania and 85% in Nepal). All probability estimates represent a change in likelihood to increase from low to medium and from medium to high empowerment scores.

How to read the figures in this section

The x-axis lists the predictors that were associated with each outcome. The y-axis shows either a relative risk or odds ratio, both of which indicate the likelihood that a predictor was independently associated with an outcome. In other words, this is the likelihood that a person with a given characteristic compared to a person without it will have the outcome while maintaining all other characteristics the same. For example, the likelihood of reporting sexual violence comparing married and unmarried women in the same age group, from the same country, and of the same observed socioeconomic status. A likelihood greater than one indicates higher probability whereas a likelihood less than one indicates lower probability.

Being married was independently associated with a 70% higher probability of an increased empowerment level relative to unmarried AGYW (OR=1.7, 95% CI [1.6, 1.8]). Employment also was associated with a 30% higher probability of increased empowerment level (OR=1.3, 95% CI [1.2, 1.4]). Age was a less pronounced effect, with the only significant difference seen when comparing 18- to 24-year-old AGYWs to 12- to 14-year-old AGYWs, where a modest 12% increased likelihood of higher empowerment was seen (OR=1.1, 95% CI [1.07, 1.2]).

Violence

As summarised in the top graph in Figure 4.5.3, the probability of reporting an experience of physical violence in the last year was 26% lower for married versus unmarried AGYW (OR=0.65, 95% CI [0.56, 0.75]). Older age was also independently associated with a lower probability of physical violence at older ages compared to the 12- to 14-year-old group (OR=0.68, 95% CI [0.59, 0.78]) and OR=0.65 95% CI (0.56,0.75) for the 15 to 17 and 18- to 24-year-old age groups, respectively.

The multivariate model to predict sexual violence yielded results that contrast starkly with the results for physical violence. Here instead of marriage being associated with a lower risk of physical violence, it is associated with a more than five-fold increased risk of sexual violence (OR=5.67, 95% CI [4.43, 7.08]). Women in the oldest age group of 18 to 24 years had a modestly higher risk of sexual violence compared to the youngest age group (OR=1.73, 95% CI [1.26, 2.38]).

Figure 4.5.2: Predictors of higher empowerment score



NOTE: Model is adjusted for country and observed household socioeconomic status.

Figure 4.5.3: Predictors of physical and sexual violence



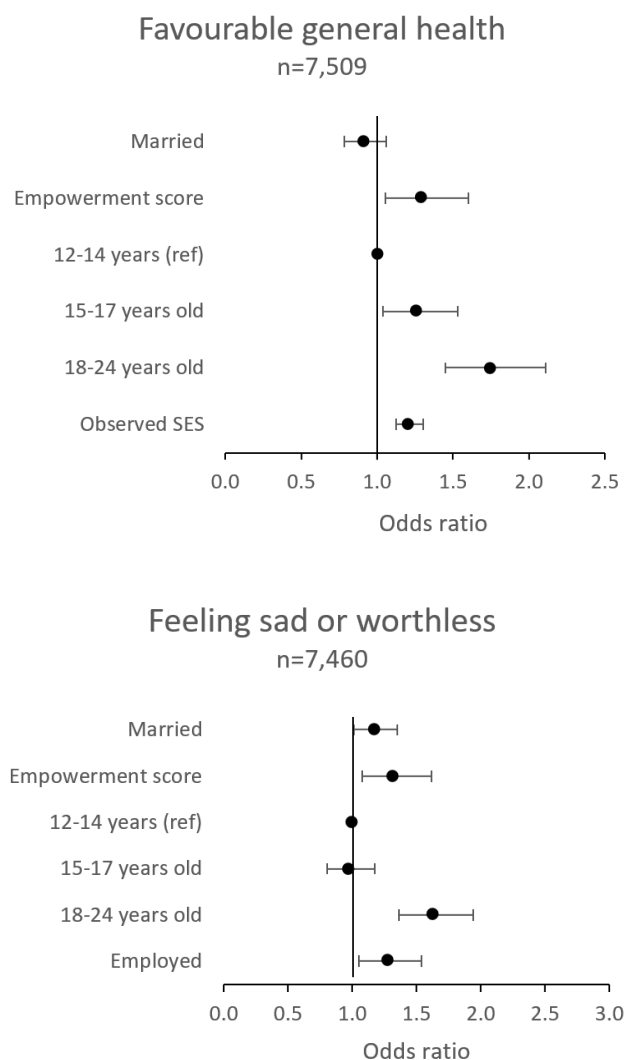
NOTE: Both models are adjusted for country, observed household socioeconomic status. Employment status is included in both models but was not significantly associated with either outcome.

General and mental health

The outcome of general health reflects a participant rating herself 'always' or 'mostly' well compared to 'always' or 'mostly' unwell. By multivariate analysis, marital status was unrelated to a favourable general health rating (OR=0.9, 95% CI [0.8, 1.1]). However, a higher empowerment score was associated with 30% greater odds of favourable health (OR=1.30, 95% CI [1.05, 1.60]). Compared to the youngest age group, AGYW 18 to 24 years old have 60% greater odds of favourable health status (OR=1.75, 95% CI [1.45, 2.11]).

The mental health outcome is framed in the negative: 'feeling sad or worthless'. Odds of this unfavourable mental health outcome were 17% higher for married women (OR=1.17, 95% CI [1.01, 1.35]) and 32% higher for those with higher empowerment scores (OR=1.32, 95% CI [1.08, 1.62]). Only the oldest compared to youngest age group showed an increased reporting of unfavourable mental health (OR=1.62, 95% CI [1.36, 1.94]). Finally, employment was also associated with 27% higher reporting of unfavourable mental health (OR=1.27, 95% CI [1.05, 1.54]).

Figure 4.5.4: Predictors of favourable general health or feeling sad or worthless



NOTE: Both models are adjusted for country. The 'favourable general health' model was also adjusted for employment status. The model for 'feeling sad or worthless' was also adjusted for observed household socioeconomic status.



5. DISCUSSION

5.1 Conclusions based on findings

Independent associations with key outcomes

Marital status strongly differentiated the probability of AGYW reporting several key outcomes. Compared to unmarried AGYW and independent of other key factors, **married women were nearly 70% more likely to have a higher empowerment score**. Although being married was an element of increased empowerment score, other components undoubtedly contribute.

Married women were 25% less likely to experience physical violence but more than five times more likely to experience sexual violence perpetrated by their husband compared to unmarried women reporting incidents of violence perpetrated by a family member or partner. In a parallel fashion, AGYW in the oldest age group (18–24 years) had a 35% lower risk of physical violence but a higher risk (35%) of reporting intimate partner sexual violence. Higher empowerment scores were only associated with a modest decrease in risk of sexual violence.

Compared to unmarried AGYW, **being married was not related to self-report of favourable general health yet was independently linked with a 17% increased likelihood of adverse mental health** measured as 'feeling sad or worthless'. For both favourable general health and adverse mental health, the oldest age group (18–24 years) was at higher risk (75% and 63%, respectively) compared to the youngest age group (12–14 years). A higher **empowerment score was associated with a 30% increase in the odds of favourable health but also a 32% increased odds of feeling sad or worthless**, which merits further exploration. These findings suggest that, for AGYWs in all four country contexts, the factors potentially linked with general health and mental health may operate differently and qualitative exploration of this idea would be helpful.

Employment emerged as an important factor in only one of the multivariate models. **Employment outside the home was associated with 27% higher odds of feeling sad or worthless**. Potentially if women's and girls' employment and empowerment are undervalued or considered to be at odds with their accepted roles in some contexts, adolescent girls and young women may experience backlash and isolation from their communities, which may lead to increased risk of disappointment, discouragement, and anxiety.

Marriage is linked to changes in agency

AGYW commonly reported both positive and negative changes to their level of agency following marriage.

- **Perception of improved agency:** In general, access to SRH and ANC services and perceiving greater status in the community improved in all countries. Those countries with the highest perception of improvement following marriage were Mauritania (48% for SRH and 66% for ANC) and Tanzania (56% for SRH and 63% for ANC).
- **Perception of worsened agency:** In general, access to school or to work outside of the home. Countries with the greatest magnitude of worsened agency were Bangladesh (55% for school and 51% for work access), Tanzania (53% for work access), and Mauritania (43% for school and 39% for work access).
- **Constraints on decision-making:** Qualitative findings (available for Bangladesh and Tanzania only) elucidate a range of constraints to autonomous decision-making that both married and unmarried AGYW experience.

Marriage and age differentiate risk

There were two ways of looking at age in this study: age at first marriage and current age. Age at first marriage was the focus for characteristics of married AGYW, and current age was examined when speaking of either those characteristics in unmarried women or in both married and unmarried women.

- **School exit:** Among AGYW age 17 and younger, married women in Bangladesh and Mauritania reported exiting school about two years earlier than did unmarried women.
- **Decision-making autonomy regarding marriage, both when and who:** In all countries, there was a significant trend with proportionately more married AGYW indicating that they had greater control in the general decision to marry as age at first marriage increased. Importantly, the proportion of married AGYW who had no say in the decision to marry is most pronounced at a younger age at first marriage and in Bangladesh and Nepal (41% and 47%, respectively) compared to Mauritania and Tanzania (30% and 13%, respectively). In all countries, among married AGYW, the youngest age-at-first-marriage groups least often reported having chosen to marry, chose their husband, or felt they had agency over these decisions. Similarly, for unmarried AGYW, younger women more often had the expectation that they would have lower levels of control over these decisions.
- **Age and levels of agency:** While in Mauritania, an older age at first marriage was linked with improved agency in multiple domains, older age was not consistently linked to improved agency in other countries. In Bangladesh and Nepal, the level of agency was lowest for both the youngest and the oldest age groups at first marriage and highest for the intermediate age groups.
- **For married women, less agency with younger age at marriage:** For example, in Nepal, a perception of worsening access to schooling was reported by almost half of women married at 15 years old or younger. Pronounced vulnerability for younger married AGYW was also seen for access to schooling and employment in Bangladesh, for access to employment in Mauritania, and for improved community status in Nepal and Tanzania.
- **Violence:** While report of physical violence in the last year tends to be lower in married versus unmarried AGYW, the opposite was true for report of sexual violence. The greatest difference between unmarried and married AGYW was seen in Tanzania, where **5% of unmarried AGYW reported sexual violence in the past year, whereas 29% of married women did**. Importantly, the question for married women was framed with her husband as the perpetrator, whereas for unmarried women it was framed as ‘someone in the household or a partner’. **The sociocultural context of violence, especially sexual violence, was not captured by this study.** A deeper understanding of how to define, measure, and interpret sexual violence from diverse sociocultural perspectives would help define strategies to improve well-being among AGYW.

- **Mental health:** Although this study did not formally assess a mental health construct, the frequency of reporting being ‘sad or worthless’ was higher for married compared to unmarried AGYW in Bangladesh, Mauritania, and Tanzania. The potential link between this phenomenon and the violence results above remains to be explored.

Context matters

A limited number of vulnerability characteristics were widespread across countries. For example, among those who have left school, the mean age at school exit for 18- to 24-year-olds was around 15 years of age in all countries. These findings, however, highlight that the sociocultural environment surrounding early or delayed marriage for AGYW is context dependent. Vulnerability characteristics of AGYW that varied most significantly among countries include:

- **Marital age gap:** A markedly larger age gap between older husbands and AGYW was seen for Mauritania.
- **Lack of decision-making autonomy regarding marriage, both when and who:** Tanzanian married and unmarried AGYW reported the highest levels of autonomy over choosing when and whom to marry. AGYW in Bangladesh and Nepal, especially those age 17 and younger, had the highest levels of reporting ‘no control’ or ‘little control’ over these decisions. In Mauritania, AGYW frequently had ‘little control’ over these decisions.
- **School exit due to marriage:** Leaving school due to marriage was acknowledged frequently for Bangladeshi and Nepali AGYW but infrequently in Tanzania.
- **Employment:** In Mauritania and Tanzania, unmarried AGYW were unemployed more often than married women but in Bangladesh, this was more often true for married versus unmarried women.
- **Violence:** The set of questions used to assess violence in this study made specific reference to perpetrators for unmarried (household member or partner) and married AGYW (husband), while the qualitative component did not explore how this line of questioning may have been interpreted. The contextual meaning of ‘violence measures’ is a gap in understanding this study’s results.

5.2 Policy and programming implications

Decipher the marriage decision-making process

The way that agency operates in the set of decisions related to marriage is highly context-specific and varies by age. It is critical to understand the factors that influence or drive a marriage decision and subsequent factors that enable or constrain autonomy following marriage. These dynamics are complex and require a careful neutral assessment to identify aspects amenable to intervention to achieve AGYW well-being.

In some contexts, marriage can be a favourable means for AGYW to build autonomy or be viewed as an attractive alternative, particularly when other options, like continuing schooling, are not feasible or carry risk. In such settings, working to enhance the safety of and engagement in an educational environment for girls makes sense. In other settings, financial instability of the family may lead to child marriage, and here livelihood programmes that prioritise economically vulnerable households with adolescent girls present may have an impact.

The way that agency operates in the set of decisions related to marriage is highly context-specific and varies by age.

Understand how AGYWs judge the merits of education or forms of employment

Education has been shown to help delay marriages; however, in some settings, AGYW judge the merits of continuing their education to be marginal. The elements of this judgement may be related to accessibility, education quality, and how safe girls feel in school environments (18,27). The tangible benefit upon completion of education (4) is also an important consideration.

Situation assessments related to child marriage could unpack the dynamics relating to continuing education opportunities in each context and suggest concrete steps to mitigate education system challenges. In the same way, understanding which types of work boost household resources that are perceived as safe and rewarding can help strengthen livelihood programmes, targeting both married and unmarried AGYW. In these analyses, employment was independently associated with an increased odds of feeling sad or worthless, which suggests that **assessments should investigate the possible benefits and costs arising from employment options for women in this age group.**

Unpack age-related vulnerability to tailor programming

This study, as have many before it, highlights the elevated vulnerability of adolescent girls. However, in this study, young age — especially 15 or younger compared to 18- to 24-year-olds — was independently associated with higher risk of low empowerment and physical violence. Older AGYW were at higher risk for numerous poor outcomes as well, including increased odds of sexual violence, poorer general health, and increased reports of feeling sad or worthless.

Contextualise the notion of agency

Agency should be considered a dynamic response to constrained decisions made by AGYW. Programmes need to ensure efforts to increase AGYW agency are complemented by work to address the systems and power relations that limit or expand their agency. Further, programmes need to avoid promoting messages and norms that could result in backlash against adolescent girls and young women who fall outside those norms (e.g., avoid having a baby out of wedlock or a newly married AGYW should live with her husband and his family). AGYW must define when they have agency in each context. Recognise that for some, complete autonomy may be undesirable and risky, especially if the broader environment in which they function does not support their autonomy. Supporting their relative autonomy, while addressing the institutions that restrict their freedoms, may make sense.

Agency should be thought of as a dynamic response to constrained decisions made by adolescent girls and young women.



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APPENDICES

A. Study methods

Appendix A: Study Methods

This study used a cross-sectional convergent mixed-methods design with two main components: (1) a survey of married and unmarried AGYW aged 12 to 24 years, and (2) focus group discussions with married and unmarried AGYW between 16 and 18 years old. Participating countries included Bangladesh, Nepal, Mauritania, and Tanzania.

Study locations

This study took place in four countries, selected based on a combination of practical and research considerations: the prevalence of marriage before 18 years (prioritising countries with relatively high prevalence), the capacity of field offices to conduct the research, and funding availability. Based on this, the study was conducted in Bangladesh, Nepal, Mauritania, and Tanzania.

Prevalence of marriage under 18 among 20- to 24-year-old women ranges from 31% (Tanzania) to 53% (Mauritania) among the countries included in this study. Except for Mauritania, where nearly half of child marriages occur in early adolescence, marriages generally occur in later adolescence (between 15 and 17 years old), and 5% to 18% of marriages taking place before age 15 (Table A1). In all four countries the legal minimum age at marriage for girls is at least 18 years.

Table A1: Proportions of 20–24-year-old women married before age 15 and 18 years in participating countries

Country	20–24-year-old women married*		Minimum legal age at marriage (girls)**
	before 15 years	before 18 years	
Bangladesh	16%	51%	18
Nepal	8%	33%	20
Mauritania	18%	37%	18
Tanzania	5%	31%	18

* Sources: Bangladesh (MICS 2019); Nepal (MICS 2019); Senegal (DHS 2019); Mauritania (MICS 2015); Tanzania (DHS 2015-16)
**In some countries legal ages of marriage are different for boys and girls

Complete documentation of the sampling process is available upon request from Sarah Bauler (sarah_bauler@wvi.org).

Data collection

Quantitative sampling and questionnaire

For the quantitative component, the sample size estimated to be 2,544 AGYW per country, aged 12–24 years, split evenly into six groups based on current marital status (married versus unmarried) and three age categories (12–14, 15–17, 18–24) with each group having a sample size of 424. Sample sizes were calculated to allow each age group to be compared to any other group in the same or different country at 90% power and evaluate 10-point differences, so a confidence interval of +5 would be obtained (for example, married girls aged 15 to 17 in country X may be compared to unmarried girls 15 to 17 within the same country or a different country, and a 10- difference detected.) Likewise, married girls aged 15 to 17 in country X may be compared

to married girls aged 18 to 24 in country X. The sample size calculations were performed to require the largest sample, and then 10% was added to build in a non-response rate of 10% to allow for the desired margin of error despite a slightly lower sample size.

Of the 10,176 AGYW, data collection was completed among 9,469 survey participants (5,410 unmarried and 4,059 married). Table 3.1. details the sample size for each country by age and marital status. The total sample size was less than projected because, in all countries, fewer married AGYW aged 12–14 years were available in the setting, which limits some findings, especially for Nepal and Tanzania (Table 3.1, highlighted in blue).

AGYW were eligible to participate if they fell within the age group of interest (12–24 years) and provided verbal informed consent (see Ethical Approvals section below).

Mobile devices were used to collect all data. A standardised questionnaire was mobile enabled using KOBO. Surveys and focus group guides were translated into French (Mauritania), Swahili (Tanzania), Nepali (Nepal), and Bengali (Bangladesh). The survey tool was standardised and for each local language version required, a team of two field office staff members translated the English version of the questionnaire into the local language. A second set of two different staff members then translated the local language version of the questionnaire back into English. All four staff members then met and discussed any discrepancies in the translated versions so that the final version was as close to the English version as possible. The first round of data collection was conducted between November and December 2022. During data cleaning, it was discovered that unmarried women in Tanzania and Mauritania had not completed the series of agency questions. In these two countries, a second round of data collection was conducted between February and March 2023. This complete data for unmarried women was then used to replace first-round data.

Enumerators participated in training via video calls on how to conduct the surveys and ethical issues including safeguarding of children. Supervisors with experience in performing quantitative surveys were identified from field office staff. Enumerators were field office staff, area programme staff, and members of the local communities that had health backgrounds and were familiar with administering surveys.

Training was conducted immediately before the data collection began through in-person learning and video calls. The supervisors and enumerators had four days of training together. All aspects of data collection, which were covered in the training, pertained to both the enumerators and supervisors, and were their mutual responsibility. However, supervisors and enumerators took the lead responsibility for various portions of the survey (indicated below). The topics covered in the training included:

- the importance of each question in the questionnaire as it pertains to the study objectives
- the correct protocols used in defining and choosing clusters, finding the centre of the cluster, and choosing households and then the eligible AGYW for the interviews (supervisors and enumerators together)
- properly receiving and recording consent, maintaining confidentiality, and the safeguarding of children
- the procedures concerning asking the survey questions properly and recording answers precisely and correctly into the KOBO questionnaire form (enumerators)
- the procedures regarding supervising the enumerators in conducting the interview and correcting any answers that may be inaccurate at the time of the interview while the respondent is still available (supervisors)
- the procedures to follow when more than one eligible AGYW is available in a household: It was decided that only one AGYW would be chosen randomly from each household. The exception to this would be if an eligible 12- to 14-year-old married AGYW was available. In that case, still only one AGYW would be interviewed, but it would be the 12- to 14-year-old married AGYW because there were so few married AGYW in this age range, and the sample size was very difficult to reach for this group.
- practice sessions in administering the questionnaire in small groups (enumerators)

- A practice session (field test) was conducted in a community that is similar to the communities that would be surveyed, but not actually in the survey area. This practice included mapping of the community, choosing clusters in the community, finding the centre of each cluster, selecting the first household, selecting the eligible AGYW, administering the questionnaire, and discussing situations that enumerators were likely to encounter.

World Vision teams in each country defined the study areas. In each area, eligible participants were recruited from randomly selected households. The field supervisor oversaw the use of the [‘spin the bottle’ method](#) for household selection as follows:

- 1) Identify the village boundaries. If the village or community is large, find or make a map and sub-divide the village into areas of approximately equal population sizes and identify the boundaries of each subdivision. (Note: Subdivisions should not be selected based on any special characteristics—for example, covering parts of town that are wealthier or have just one ethnic group.) Then select a random number to identify the subdivision from which to sample. An example is dividing a village into four parts and then randomly selecting a number between 1 and 4. This identifies the subdivision.
- 2) Go to the population centre (not necessarily the geographic centre) of the village, as best as you can locate it (seek the help of the village leader, if possible). This allows a more equal chance for any household to be selected into the sample.
- 3) Using a flat surface, spin a pen or bottle. The direction it points is the direction you use to choose the first household.
- 4) Walk along the chosen line, counting all the households along that line (e.g., 3 metres on either side of the line) until you reach the village boundary.
- 5) Choose a random number from 1 through the total number of households you counted, using folded slips of paper, a currency note, etc. Return to the household represented by that random number. This is your first household.
- 6) Selecting subsequent households: After selecting the first household, the next household is the household whose front door is closest to the front door of the house where you are in any direction. If two households seem equidistant, flip a coin to choose between them. If you reach the boundary of the village, turn to the right or left (to the next closest doorway) and continue within the boundary. If all the households in the selected village/cluster site have been visited and the interview team has not fulfilled its quota, the team may continue to the next closest village/cluster site but should ensure that individuals in these households have not been interviewed by other interview teams.

The questionnaire consisted of questions falling into six sections: (1) sociodemographic characteristics; (2) marriage (customised depending on whether a participant was ever or never married); (3) dreams and aspirations; (4) health (mental health, reproductive health, experiences of IPV, and physical health); (5) empowerment and agency; and (6) access for health, social, and educational resources.

Qualitative

Within each country, four FGDs were conducted with 6 to 10 AGYW participants each. Both unmarried and married participants 16–18 years of age were eligible. Two of the FGDs were with married AGYW and the other two with unmarried AGYW. The focus group discussions were conducted in the fall of 2022 using an FGD guide. FGD participants were selected using purposive snowball sampling following identification of one eligible AGYW. The ‘seed’ person could be identified from among survey participants or with the aid of local village leaders. In the latter case, recruiters were instructed to avoid selecting a ‘seed’ participant related to the village leader or their family.

Interviewers underwent virtual training covering how to use the FGD guide and ethical issues, including child safeguarding.

The FGD guide had three main sections: (1) aspirations and opportunities, (2) marriage process and agency, and (3) challenges surrounding accessing services in the AGYW's area. Discussion guides were translated into French (Mauritania), Swahili (Tanzania), Nepali (Nepal), and Bengali (Bangladesh) using the same methods as were used for the quantitative survey (see above). For each FGD, data collectors also filled out a contextual questionnaire about the area in which the FGD participants lived and an FGD participant characteristic form to gather basic demographic information about discussion participants.

Analysis methods

Quantitative

Survey data were analysed in EPI Info version 7 and Stata 15. Frequencies and means were assessed for all variables in the survey for each country separately and with a pooled data set. Differences between groups (e.g., married versus unmarried, by age at marriage) were assessed using chi-square, t-test, or regression as appropriate for the analytic approach.

The Empowerment Scale was computed following defined methods for this validated [scale](#). Questionnaire items used to construct the scale included:

Item wording	Administered to married women	Administered to unmarried women
First, would you tell me which member of your household usually makes decisions about YOUR health care?	x	x
Which member of your household usually makes decisions about your husband's health care?	x	
Which member of your household usually makes decisions about your children's health care?	x	
Which member of your household makes decisions about making large household purchases?	x	x
Which member of your household usually makes decisions about making household purchases for daily needs?	x	x
Which member of your household usually makes decisions about when YOU will visit family/relatives/friends?	x	x
Which member of your household usually makes decisions about when your husband will visit family/relatives/friends?	x	
Which member of your household usually makes decisions about when your whole household will visit family/relatives/friends?	x	x
Which member of your household usually makes decisions about how to use the money that you bring into the household?	x	x
Which member of your household usually makes decisions about how to use the money that your husband brings into the household?	x	
Which member of your household usually makes decisions about when your family will sell a large asset (like a cow)?	x	x
Which member of your household usually makes decisions about when your family will sell a small asset (like a chicken)?	x	x
Which member of your household usually makes decisions about whether YOU can work to earn money?	x	x
Which member of your household usually makes decisions about when you and your husband have sex?	x	
Which member of your household usually makes decisions about whether you and your husband use family planning?	x	

Qualitative

When required, focus group transcripts were translated from the local language into English by a team of two staff members. A second set of two staff members then translated the new English version of the transcripts back into the local language. All four staff members then met and discussed any discrepancies in the translated versions so that the final English version was as close to the local language version as possible.

Translated focus group transcripts were coded and analysed using NVivo 12 for Mac by an experienced qualitative researcher [SB]. Qualitative codes were developed deductively using categorisations based on research questions and the structure of the FGD guide. As analysis progressed using this initial version of the codebook, new codes were developed inductively to accommodate emerging themes. Once codes were applied to excerpts from the transcripts, horizontal analysis was performed to find emerging themes and sub-themes across all transcripts.

Although the target of holding four FGDs per country was met, unfortunately the quality of the data from Nepal and Mauritania was inferior leading to omission of qualitative data from these two countries from the analysis.

Ethical approvals

Ethical approval for this research was granted by [HML IRB](#) (Study #2017, granted: August 9, 2022). Institutional Review Board (IRB) approval was also granted within each participating country. Local IRBs included the Ministry of Social Action for Infants and Families in Mauritania, the National Institute for Medical Research in Tanzania, the Institute of Health Economics in Bangladesh, and the National Child Rights Council in Nepal.

Parental consent was required for any participant under 18 years of age in Bangladesh, Mauritania and Tanzania. In Nepal parental consent was required for any participant under 20 years of age.



B. Data collection tools

Appendix B: Data Collection Tools

The data collection tool used for the [quantitative survey was created in KOBO Toolbox](#), which allows enumerators to access programmed questionnaire records for each interview using a tablet. The programming reduces errors by incorporating skip patterns and validation rules. The raw data was then transferred into Stata for data cleaning and analysis.

A text version of the questionnaire items follows below. Response categories, skip patterns, and validation rules are not included in this version but are available upon request.

Are you currently in school?

Currently not in school

What is the highest level of education that you completed?

How old were you when you completed your education? Please respond in years.

Do you plan to continue your education at a later date?

Currently in school

What level of school are you currently attending?

How old do you expect to be when you finish your education? Please respond in years.

What level of education would you like to complete ideally? By ideally we mean if there were no barriers to attending school?

What level of education do you expect to complete?

Are you currently employed? By that we mean earning money for work you do.

Currently employed

Who decided that you were going to do paid work? You may select more than one person.

What motivated you to start working outside the home?

What is your current occupation?

Currently not employed

Would you like to be employed outside of the home?

What is preventing you from working? You may select more than one option.

Socio-economic status

OBSERVATION: Please make a qualitative assessment of this family's wealth compared to other households in the rest of the neighbourhood?

In the past four weeks, how often did you or any household member go to sleep at night hungry because there was not enough food?

Marriage status

Have you ever been married?

What is your current marriage status?

How many times have you been married?

Now I would like to ask you about your marriage. If you have been married more than one time, I will ask you about each of your marriages starting with your first husband.

Marriage questions

What is/was your first husband's name?

How old were you when you got married to \${Hus_name}? Please respond in years.

How old was \${Hus_name} when you got married? Please respond in years.

Did \${Hus_name} have (an)other wife at the time you got married? (i.e., was this a polygamous marriage?)

Has \${Hus_name} taken on more wives after you got married? (i.e., did this marriage become polygamous?)

What number wife are/were you for \${Hus_name}? (i.e., wife order)

Are you still married to \${Hus_name}?

How did the marriage end?

Immediately prior to marriage, were you attending school?

After you got married, did you continue attending school?

Why did you end school? You may select more than one reason.

Who decided that you would stop going to school? You may select more than one person.

Did you decide to end school because of your marriage?

Who decided it was the right time for you to get married to \${Hus_name}? You may select more than one person.

How much say did you have in the decision of when to get married?

How strongly did you want to get married at the time you married?

Who decided who you were going to marry? That is, who chose your husband, \${Hus_name}. You may select more than one person.

How much say did you have in the decision about who to marry? That is the decision to marry \${Hus_name}.

How strongly did you want to marry \${Hus_name}?

Never married (NM)

NM marriage decisions

At what age would you like to get married ideally? By ideally, we mean if there were no barriers to doing what you would like to do.

At what age do you think you will get married?

Who will decide when it is the right time to get married? You may select more than one person.

How much say do you think you will have in the decision of when to get married?

Who will decide who you will marry? You may select more than one person.

How much say do you think you will have in the decision of who to marry?

NM aspirations

When you think about your life in 2-5 years, how much would you like to be doing these things?

Being in school or university

Being married/living with your partner

Being a mother

Living with your parents

Working outside the home for money

Taking care of/working in the home

Mental health

In the past four weeks, how often did you feel so sad that nothing could cheer you up?

In the past four weeks, how often did you feel worthless?

Health

Thinking back over the past 12 months, how is your health in general?

How many serious illnesses have you had in your lifetime? By serious we mean that your life was in danger OR you were unable to go to work (or school if you were attending school at that time) for two+ weeks OR you were admitted to the hospital.

When you have been ill, how easy or difficult was it for you to access the health care you needed?

How many children have you given birth to?

Now I am going to ask you questions about each of the children you have had. I will start with your first child.

AGYW who have given birth

What is the child's first name?

How old were you when you gave birth to \${child_name}? Please respond in years.

Were you married when you gave birth to \${child_name}?

Did you get married because you were pregnant or gave birth to \${child_name}?

How old is \${child_name} now? Please respond in years. If less than 1, put 0.

Did you receive antenatal care when you were pregnant with \${child_name}?

How many antenatal visits did you have while pregnant with \${child_name}?

Where did you give birth to \${child_name}?

Who attended to your birth when you delivered \${child_name}?

Who made decisions about seeking the antenatal care during your pregnancy and at your birth? You may select more than one person.

Were you able to access immunisations for \${child_name}?

Violence married

When two people marry or live together, they usually share both good and bad moments. I would now like to ask you some questions about your relationship with your husband and how he treats you. If anyone interrupts us, I will change the topic of conversation. I would like to assure you that your answers will be kept confidential, and that you do not have to answer any questions that you do not want to. May I continue?

In the past 12 months, how many times has your husband slapped you or thrown something at you that could hurt you?

In the past 12 months, how many times has your husband pushed or shoved you?

In the past 12 months, how many times has your husband hit you with a fist or with something else that could hurt you?

In the past 12 months, how many times has your husband kicked, dragged, or beaten you?

In the past 12 months, how many times has your husband physically forced you to have sex when you did not want to?

In the past 12 months, how many times has your husband had sexual intercourse with you when you did not want to because you were afraid to say no because your husband might hurt or leave you?

Violence unmarried

When people live together or are in a relationship, they usually share both good and bad moments. I would now like to ask you some questions about how you are treated within your home. If anyone interrupts us, I will change the topic of conversation. I would like to assure you that your answers will be kept confidential, and that you do not have to answer any questions that you do not want to. May I continue?

In the past 12 months, how many times has someone in your household or a partner slapped you or thrown something at you that could hurt you?

In the past 12 months, how many times has someone in your household or a partner pushed you or shoved you?

In the past 12 months, how many times has someone in your household or a partner hit you with a fist or with something else that could hurt you?

In the past 12 months, how many times has someone in your household or a partner kicked, dragged, or beaten you?

In the past 12 months, how many times has someone in your household or a partner physically forced you to have sex when you did not want to?

In the past 12 months, how many times has someone in your household or a partner had sexual intercourse with you when you did not want to because you were afraid to say no because he might hurt you or leave you?

Agency married

Now I would like to ask you about who usually makes decisions in your household. You can respond: yourself, your husband, you and your husband together, or someone else. May I ask you these questions?

First, would you tell me which member of your household usually makes decisions about YOUR health care?

Which member of your household usually makes decisions about your husband's health care?

Which member of your household usually makes decisions about your children's health care?

Which member of your household makes decisions about making large household purchases?

Which member of your household usually makes decision about making household purchases for daily needs?

Which member of your household usually makes decisions about when YOU will visit family/relatives/friends?

Which member of your household usually makes decisions about when your husband will visit family/relatives/friends?

Which member of your household usually makes decisions about when your whole household will visit family/relatives/friends?

Which member of your household usually makes decisions about how to use the money that you bring into the household?

Which member of your household usually makes decisions about how to use the money that your husband brings into the household?

Which member of your household usually makes decisions about when your family will sell a large asset (like a cow)?

Which member of your household usually makes decisions about when your family will sell a small asset (like a chicken)?

Which member of your household usually makes decisions about whether YOU can work to earn money?

Which member of your household usually makes decisions about when you and your husband have sex?

Which member of your household usually makes decisions about whether you and your husband use family planning?

Decisions unmarried

Now I would like to ask you about who usually makes decisions in your household. You can respond: yourself, your father, your mother, your father and mother together, you with your father and/or mother, or someone else. May I ask you these questions?

First, would you tell me which member of your household usually makes decisions about YOUR health care?

Which member of your household usually makes decisions about making large household purchases?

Which member of your household usually makes decision about making household purchases for daily needs?

Which member of your household usually makes decisions about when YOU will visit family/relatives/friends?

Which member of your household usually makes decisions about when your whole household will visit family/relatives/friends?

Which member of your household usually makes decisions about how to use the money that you bring into the household?

Which member of your household usually makes decisions about when your family will sell a large asset (like a cow)?

Which member of your household usually makes decisions about when your family will sell a small asset (like a chicken)?

Which member of your household usually makes decisions about whether YOU can work to earn money?

Difference pre and post marriage

Now I would like you to think about the household you lived in before you got married for the first time and the household you lived in during your first marriage. I would like to know how your life is/was different in these two homes. May I ask you these questions?

How has your access to money changed since you got married?

How has your power in making decisions within your household changed since getting married? By this we mean things like making decisions about what food or clothing you buy, medical care for yourself, what you wear, etc.

How has your ability to access antenatal care changed since you got married?

How has your ability to access sexual and reproductive health services (e.g., contraception) changed since you got married?

How has your ability to go to school changed since getting married?

How has your ability to go to work outside the home changed since getting married?

How has your status within your community changed since getting married? By that we mean how people in your community respect or treat you.

Now we are going to ask you about some specific types of health care you might receive. We will ask about contraception, antenatal care, accessing skilled birth attendants, and post-birth care. May we ask you these questions?

Contraception services

Do contraception services exist within your community?
Is this service available for girls your age in your community?
Have you needed to use this service?
Were you able to access this service?
Was there anything that made it difficult to access this service?
What made it difficult to access this service? You may select more than one option.
What made it difficult to access this service?

Antenatal care access

Does antenatal care services exist within your community?
Have you needed to use this service?
Were you able to access this service?
Was there anything that made it difficult to access this service?
What made it difficult to access this service? You may select more than one option.
What made it difficult to access this service?

Skilled birth attendance

Do skilled birth attendance services exist within your community?
Is this service available for girls your age in your community?
Have you needed to use this service?
Were you able to access this service?
Was there anything that made it difficult to access this service?
What made it difficult to access this service? You may select more than one option.
What made it difficult to access this service?

PNC services

Do post-natal care services exist within your community?
Is this service available for girls your age in your community?
Have you needed to use this service?
Were you able to access this service?
Was there anything that made it difficult to access this service?
What made it difficult to access this service? You may select more than one option.
What made it difficult to access this service?

Protective services

Are there places within your community you could go for help if you experience violence?

What is the place you would go?

Is this service available for girls your age in your community?

Have you needed to use this service?

Were you able to access it?

Was there anything that made it difficult to access this service?

What made it difficult to access this service? You may select more than one option.

What made it difficult to access this service?



C. Supplemental descriptive analyses

Appendix C: Supplemental Descriptive analyses

Age at first marriage

The sampling method for the study encouraged a target sample size of 424 for each of three defined current age groups. Since age at first marriage is strongly correlated with current age, the distribution of age at first marriage cannot be taken as representative of the underlying distribution for this characteristic in the population in each country.

Among married AGYW, the age distribution varied by country (Figure A-C1). In Nepal and Tanzania, there tended to be more AGYW who married at older ages and in Mauritania, more who married at younger ages.

In a few cases, the sample size within age groups was quite small. The black alarm sign indicates that there were fewer than 100 AGYW in the sample for that age-at-first-marriage group. The red alarm sign indicates fewer than 50 AGYW in the oldest age-at-first-marriage group for Nepal (n=27). This limited some analyses that breakdown any factor by age at first marriage. Breakdowns based on current age on the other hand, are not problematic with respect to sample size.

Birth experience and child health

Birth experience and child health patterns among married AGYW are summarised by country in Table A-C1. Marriage prior to the birth of the AGYW's first child was high in all countries and nearly universal in Bangladesh (99%). The proportion married prior to a child's birth was lowest in Mauritania (79%) and the proportion reporting getting married due to pregnancy or birth was also the highest in Mauritania (23%). Getting married due to pregnancy or birth was at a comparable level in Tanzania (22%) but lower in Bangladesh (14%) and rare in Nepal (4%).

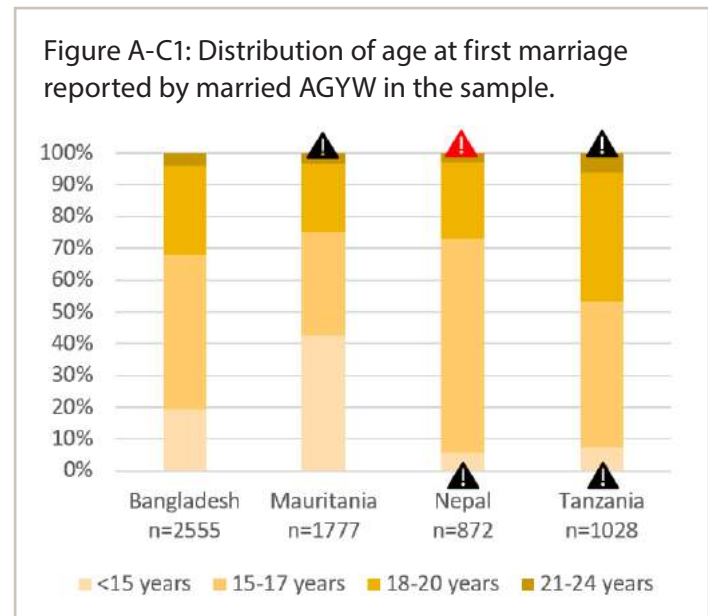


Table A-C1: Birth Experience and child health measures by country among married AGYW (per cent)

	Bangladesh	Mauritania	Nepal	Tanzania
Married at birth	99.2	79.11	97.59	84.57
Married due to pregnancy or birth	14.13	23.29	3.62	21.83
Made at least 4 ANC visits	47.41	57.45	74.19	79.51
Skilled birth attendance	87.94	90.16	78.87	91.25
Accessed child immunisations	98.41	96.5	96.38	98.17

The proportion of married AGYW who made the recommended minimum of four ANC visits was high in Tanzania (80%) and Nepal (74%) and modest in Mauritania (58%) and Bangladesh (47%). Skilled birth attendance was above 75% in all countries and above 90% in Mauritania and Tanzania. Report of having accessed an unspecified set of child immunisations was above 95% in all countries.

Married AGYW reported having married due to pregnancy and childbirth most often in Mauritania (23%), followed by Tanzania (22%), Bangladesh (14%) and rarely in Nepal (4%). When examining whether this pattern was associated with age at first marriage, the link was only observed for Bangladesh with higher levels of marriage due to pregnancy or childbirth seen among AGYW aged <15 years or 15–17 years at first marriage (14% and 17%, respectively, compared to 11% and 0% in the older two age-at-first-marriage groups).

The notion that getting pregnant at a very young or older age was associated with health risks was acknowledged in FGDs.

“ If a girl gets married before 18, many problems are seen like they face weakness and many diseases. And if a girl gets married after being too old, they may not have babies and husband, or wife may die. The age of 18 is good regarding governmental rules and social norms. ”

[unmarried, Bandarban, Bangladesh]

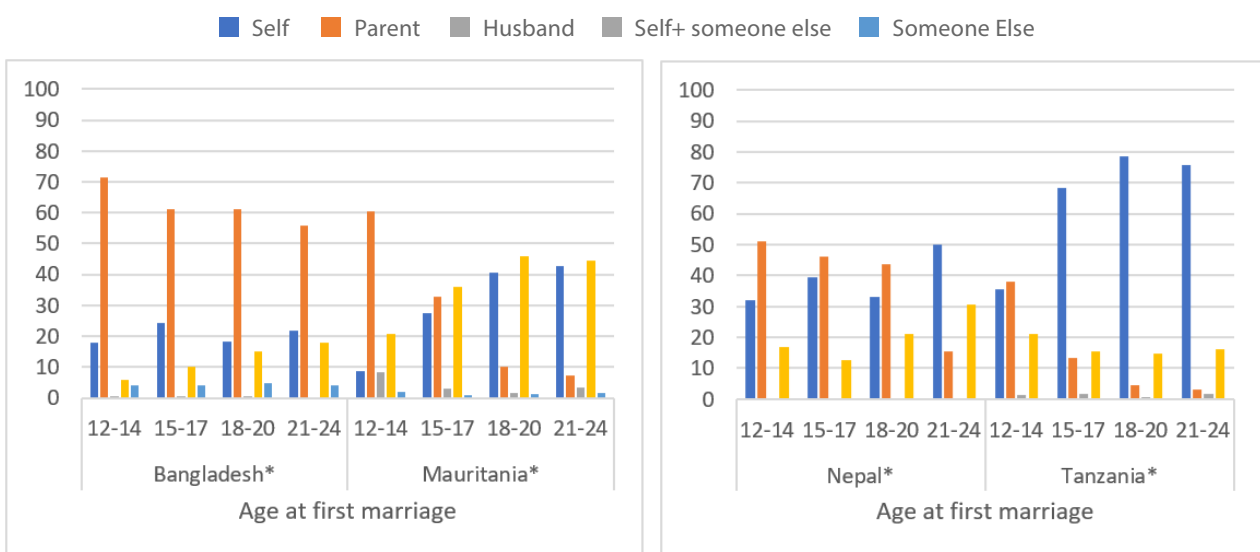
Polygamy

Polygamy was assessed separately under the circumstances that it occurred before or after the respondent got married. This pattern was most common in Mauritania (12.1% prior and 9.8% after) and Tanzania (10.5% prior and 8.3% after) and rare in Bangladesh (3.6% prior and 1.4% after) and Nepal (5.7% prior and 1.5% after). There were no differences in level of polygamy according to either age at first marriage or current age.

Choosing who to marry

This measure was highly correlated with the marriage decision information presented in the main document (see section 4.2 subheading ‘Marriage-related agency’; correlation coefficient = 0.91). Similarly here we presume when an AGYW indicates that she chose a husband herself, she has a higher degree of agency or autonomy. As with the marriage decision, the overall level of AGYW choosing a husband was highest in Tanzania (70%) and lowest in Bangladesh (5%).

Figure A-C2: Who chose respondents’ husbands by age at first marriage among married AGYW



NOTE: For each country except Nepal, the trend across age at first marriage is statistically significant at the $p < 0.001$ level.

When we examine differences within groups of age at first marriage (Figure A-C2), the patterns closely resemble those related to the decision whether to marry.

Degree of control over who to marry

Overall, married AGYW reported having the highest level of either strong or very strong control over the **decision of who to marry** in Tanzania (85%) followed by Nepal (53%), Bangladesh (49%), and Mauritania (43%). When married AGYW were subsequently asked how much they ultimately **wanted to marry their husband**, the pattern shifted with the highest level in Nepal (80%) followed by Tanzania (75%), Mauritania (70%), and Bangladesh (43%). These very general patterns suggest that the setting where AGYW tend to have the highest degree of control over who to marry, considering both of these measures, is Tanzania, and the setting where AGYW tend to have the least control is Bangladesh.

Figure A-C3: Gradient from **no control** to a **lot of control** over the **decision of who to marry** within each group of age at first marriage among married AGYW

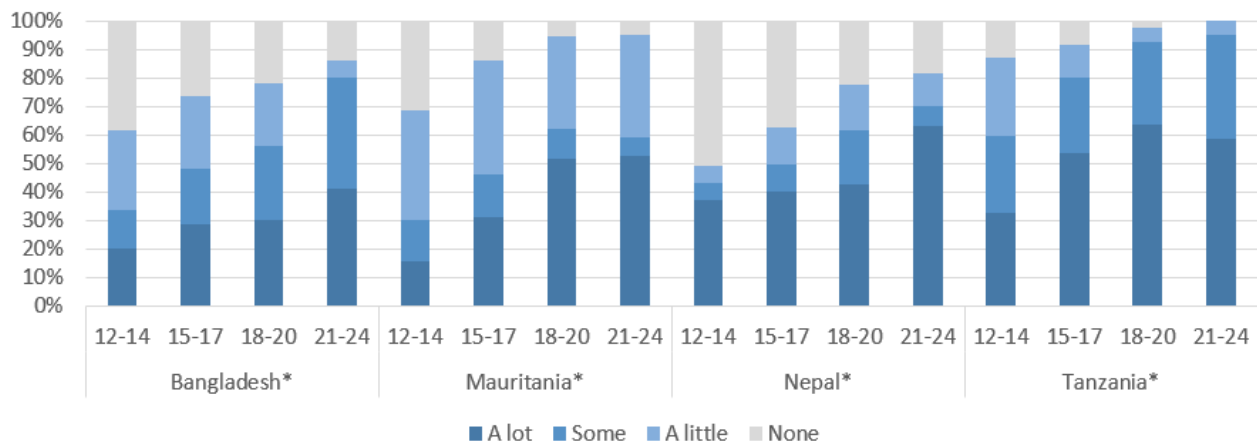
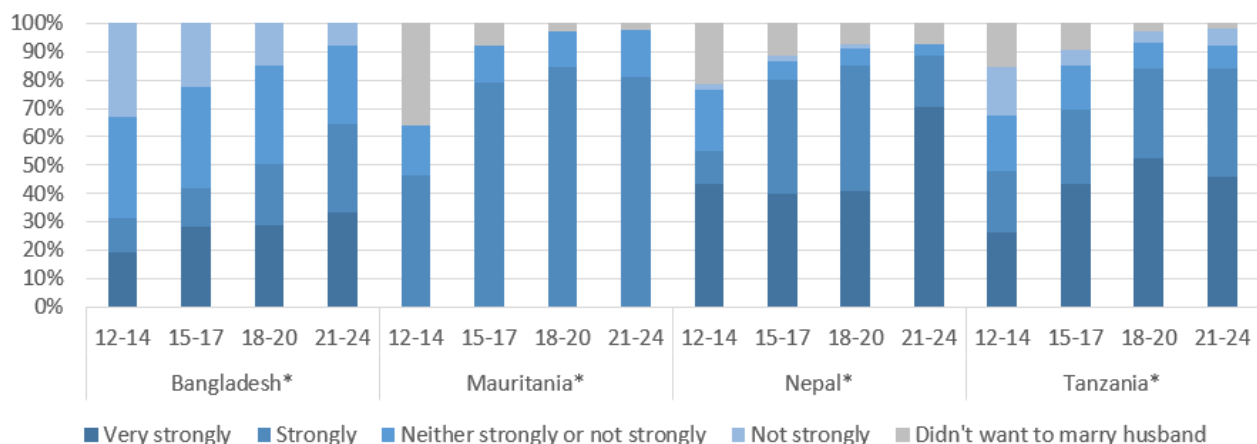


Figure A-C4: Gradient from **didn't want to marry** to **very strongly wanted to marry** the designated husband within each group of age at first marriage among AGYW



NOTE: In both figures and for each country separately, the trend across age at first marriage is statistically significant at the $p < 0.001$ level.

The breakdown by age at first marriage for these two measures is summarised in Figure A-C3 and A-C4. There are a few noteworthy patterns that emerge from these two figures. Firstly, the most strongly negative viewpoint representing either ‘no control over the decision of who to marry’ or ‘didn’t want to marry the designated husband’ was uncommon except for the youngest age at first marriage group — 12–14 years old — in Bangladesh (38%), Mauritania (31%), and Nepal (51%). For the second measure (Figure A-C4), the pattern shifts, highlighting that the AGYW did not want to marry her designated husband emerging as most common in the youngest age-at-first-marriage group in Mauritania (36%) followed by Nepal (22%). Compellingly, the perception that the married AGYW did not want to marry her designated husband fell by half or more in the next oldest age group (to 8% in Mauritania and 11% in Nepal among those who first married at 15 to 17 years of age). A similar but not as dramatic drop-off was seen for Tanzania (15% for 12–14-year-olds and 8% for 15–17-year-olds).

Agency since marriage

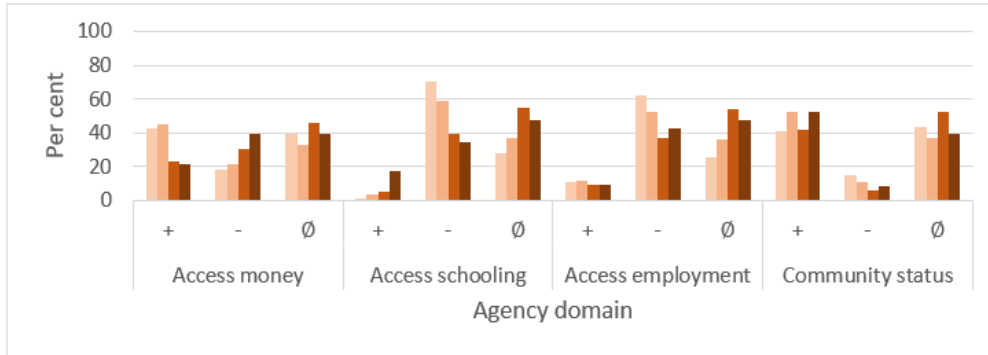
Figure A-C5 is an alternative presentation of the same information summarised in Figure 4.2.6 in the main body of the report.



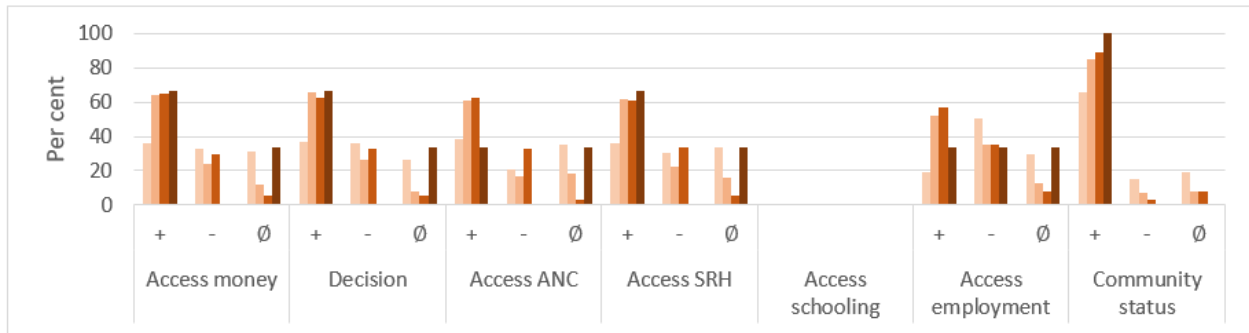
Figure A-C5: Patterns for seven agency-related domains within each age at first marriage among married AGYW

Symbols: + better or 'more able to...' - worse or 'less able to' ∅ no change 'in my ability'

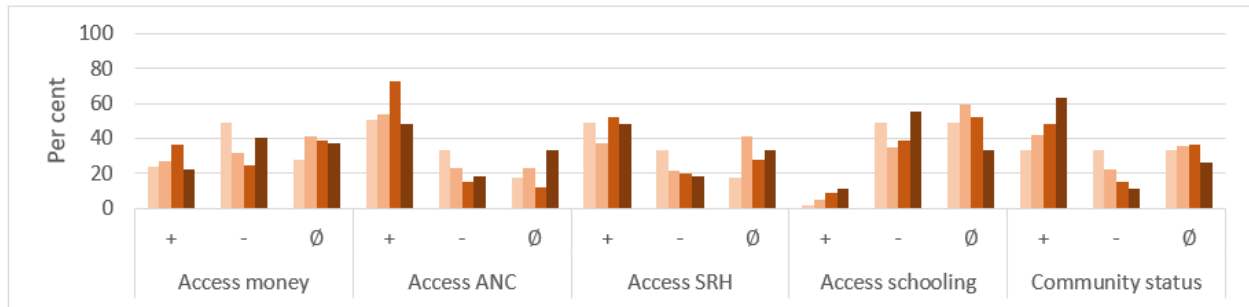
Bangladesh



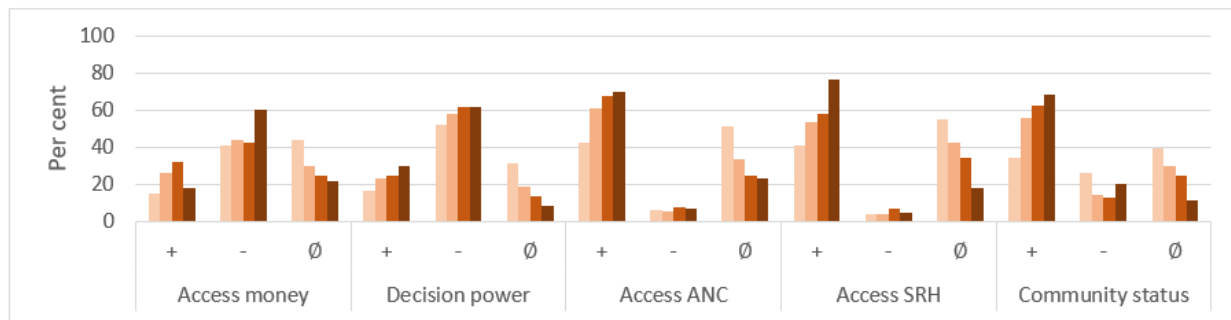
Mauritania



Nepal



Tanzania



Legend: <15 years (lightest orange), 15-17 years (medium orange), 18-20 years (dark orange), 21-24 years (darkest orange)

NOTE: All trends across age at first marriage shown are statistically significant at least at the p<0.05 level.



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