

Shifts toward equitable gender attitudes among adolescents and their impact

Evidence from
the UDAYA Longitudinal Study in
Uttar Pradesh, India



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Background

Gender role attitudes adopted by adolescent boys and girls affect behaviours and practices related to their development, health, and well-being, not only during adolescence but also in adulthood (Marston and King, 2006; WHO, 2012). Although the influence of gender norms and the assumption of gender roles begin in childhood, gender attitudes undergo heterogeneous changes in adolescence and during the transition to adulthood (Fan and Marini, 2000; Moors, 2003; Cunningham et al., 2005). Despite the significance of the construct, many questions remain regarding the development and mutability of gender role attitudes among young people in low- and middle-income countries such as India.

Drawing on data from the Uttar Pradesh component of the UDAYA study (Understanding the lives of adolescents and young adults in Bihar and Uttar Pradesh), this policy brief explores:

- Girls' and boys' gender role attitudes and how these attitudes shift over time;
- Differentials in the attitudes of those who experienced transitions such as exit from school, entry into paid work, and entry into marriage;
- Factors that help adolescents form gender egalitarian attitudes;
- The association between adoption of egalitarian gender attitudes and incidence of selected outcomes related to marriage and sexual and reproductive health.

The UDAYA Study

The UDAYA study—a longitudinal study of adolescent boys and girls in Bihar and Uttar Pradesh—conducted by the Population Council in 2015–16 and 2018–19, with the support of the Bill and Melinda Gates Foundation and the David and Lucile Packard Foundation, offers a unique opportunity to examine adolescents' gender role attitudes, whether and how these attitudes change, and their influence during adolescents' transition to adulthood.

UDAYA sought to explore the situation and needs of younger (10–14 years) and older (15–19 years) adolescents and assess factors that determine the nature of their transition from adolescence to young adulthood (see www.projectudaya.in for more details about the study).

Key Findings

- Girls' and boys' gender role attitudes became more egalitarian as they transitioned from early to late adolescence.
- Gender role attitudes hardly improved over time among older adolescents.
- Gender role attitudes were more egalitarian among boys who remained in school and who transitioned to economic activity than those who did not; however, girls' attitudes were not associated with transition-related experiences.
- Education and exposure to digital media helped adolescents develop gender egalitarian attitudes.
- Young women who expressed gender egalitarian attitudes in adolescence were less likely than others to experience spousal violence and more likely to use contraception.

A total of **10,161** boys and girls were interviewed at wave 1 in 2015–16 and **7,825** of these boys and girls were re-interviewed at wave 2 in 2018–19 (see Population Council, 2020 for more details). The main reasons for loss to follow-up were migration of the participant (11% for boys and 6% for girls), and refusal by the participant or his/her parent or guardian for an interview (5% for boys and 3% for girls).

Findings presented in this brief draw on data from respondents who were interviewed at both waves (N=7,825). We note that the wave 1 characteristics of those who were re-interviewed and those who were not at wave 2 differed; a larger proportion of respondents who were re-interviewed were enrolled in school, resided in rural areas, and belonged to disadvantaged castes and the Hindu religion, compared with respondents who were not re-interviewed.

Five context- and age-appropriate questions were posed to respondents to assess their gender role attitudes at both waves of the survey (see Annexure 1 for questions). We created an additive index that summarised participants' responses to these questions with the value of the index ranging from 0 indicating inequitable views to 5 indicating adherence to highly egalitarian attitudes ($\alpha=0.54$).¹

¹We acknowledge that the Cronbach's alpha is not very strong; it may be partially due to the small number of questions available for constructing the index.

Our analysis consists of a comparison of gender role attitudes scores at wave 1 and wave 2 for adolescents who were interviewed in both waves; we also conducted bivariate analysis, Chi-square test, and McNemar tests.² We also fitted a fixed effects model with age, engagement in paid work, household wealth index, current enrolment in school, years of schooling completed, marital status, membership in adolescent groups, participation in political activities, participation in adolescent programmes, having future aspirations, parent-adolescent communication, experience of discriminatory practices at home, having a role model, interaction with frontline workers, access to digital media, and size of peer network. We used the analytical sample of adolescents who were aged 15–19 and unmarried at wave 1 and interviewed at both waves in the fixed effects regression models.

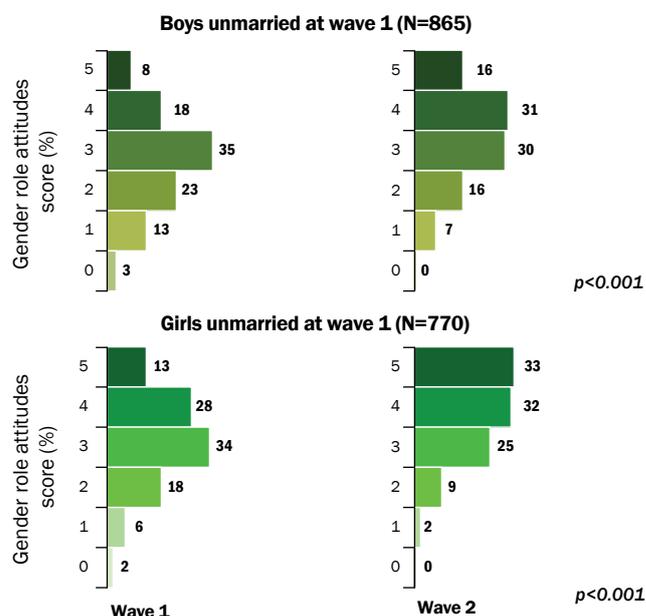
Results

Key Finding 1

Girls' and boys' gender role attitudes became more egalitarian as they transitioned from early to late adolescence

Our analysis shows that gender role attitudes became more egalitarian during the inter-survey period among younger adolescents, that is, boys and girls who were aged 10–14 at wave 1 ($p < 0.001$) (Figure 1A). The proportion of adolescents who scored 4 or 5 on the index of gender role attitudes increased by 21–24 percentage points among boys and girls (from 26% at wave 1 to 47% at wave 2 among boys and from 41% at wave 1 to 65% at wave 2 among girls).

Figure 1A: Bivariate comparison of gender role attitudes score[#] at wave 1 and wave 2 among adolescents aged 10–14 at wave 1 and aged 13–17 at wave 2, Uttar Pradesh, 2015–16 and 2018–19



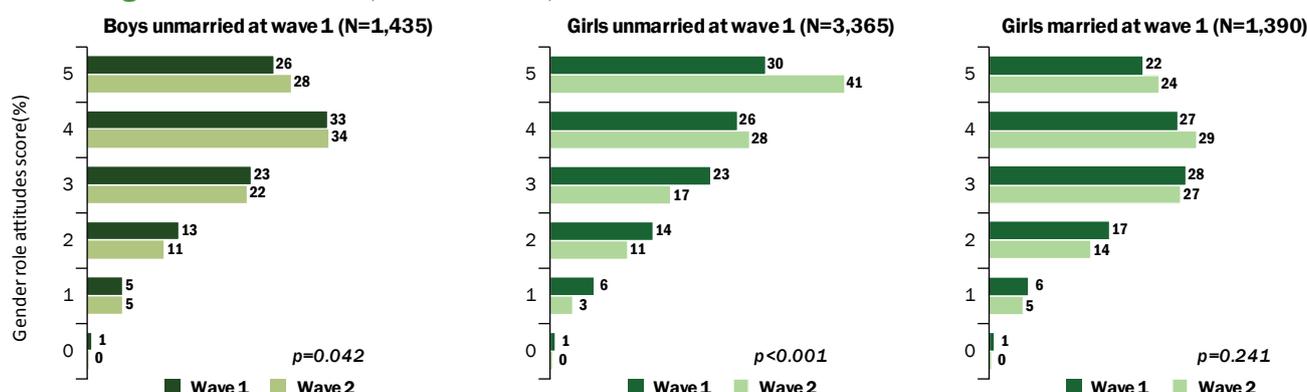
Notes: All Ns are unweighted. [#]The value of the index of gender role attitudes ranged from 0 indicating inequitable views to 5 indicating adherence to highly egalitarian attitudes.

Key Finding 2

Gender role attitudes hardly improved over time among older adolescents

While gender role attitudes of unmarried girls who were aged 15–19 at wave 1 became more egalitarian over time, those of boys and married girls of similar age remained largely stable (Figure 1B). The proportion of boys, for instance, who scored 4 or 5 on the index of gender role attitudes remained similar in both waves—59% at wave 1 and 62% at wave 2.

Figure 1B: Bivariate comparison of gender role attitudes score at wave 1 and wave 2 among adolescents aged 15–19 at wave 1 and aged 18–22 at wave 2, Uttar Pradesh, 2015–16 and 2018–19



Note: All Ns are unweighted.

²All means, medians, and percentages indicated in the tables and figures have been weighted using normalised weights for the total population. However, in order to show the total number of adolescents and young adults interviewed, unweighted numbers of respondents (Ns) are provided. Because numbers are unweighted and percentages are weighted, we caution readers against deriving numbers based on the percentages provided in the tables and figures.

Key Finding 3

Gender role attitudes were more egalitarian among boys who remained in school and who transitioned to economic activity than those who did not; however, girls' attitudes were not associated with transition-related experiences

Previous studies in high-income countries have observed that gender role attitudes are modified by experience of critical life events such as exit from school, entry into work roles, and transition to marriage and parenthood (Grinza et al., 2017; Katz-wise et al., 2010). We examined the association between gender role attitudes and experience of such transitions as exit from school, entry into paid work and marriage, using bivariate and fixed effects regression analyses for those aged 15–19 at wave 1.

Schooling Status

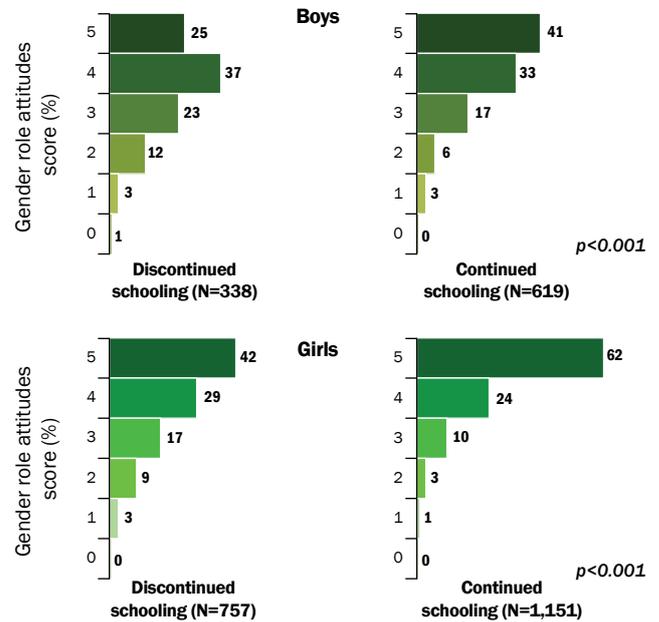
Figure 2A shows findings from the bivariate analysis on the association between schooling status during the inter-survey period and gender role attitudes at wave 2 among adolescents aged 15–19 and enrolled in school at the time of the wave 1 survey. Findings show that boys and girls who discontinued schooling during the inter-survey period were less egalitarian than those who continued schooling (74% versus 62% of boys and 86% versus 71% of girls scored 4–5 on the index of gender role attitudes). The results of the fixed effects regression analysis³ show that boys who remained in school were 16 percentage points more likely to score high on the gender role attitude index than those who discontinued schooling (regression coefficient=0.157, $p=0.047$), but no such association was observed in the fixed effects model for girls.

Transition to Work

Figure 2B shows findings from the bivariate analysis on the association between transition to work during the inter-survey period and gender role attitudes at wave 2 among adolescents aged 15–19 who had never engaged in paid work at the time of the wave 1 survey. The bivariate analysis results show that although gender role attitudes differed between adolescents who transitioned to economic activities during the inter-survey period and those who did not, the relationship varied for boys and girls. Boys who transitioned to paid work during the inter-survey period were

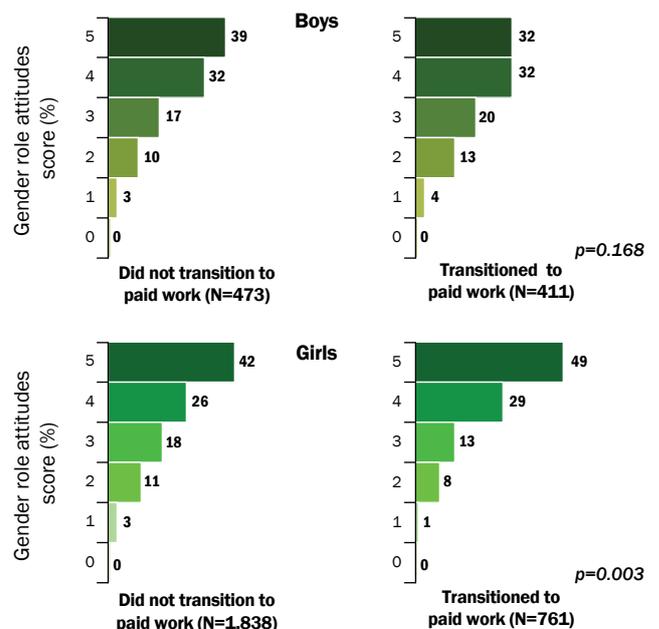
³While the bivariate analysis was restricted to those who were enrolled in school at the time of the wave 1 survey (N=957 for boys and N=1,928 for girls), the fixed effects regression was fitted for all boys and girls interviewed at both waves (N= 1,435 for boys and N=3,365 for girls).

Figure 2A: Bivariate comparison of gender role attitudes score at wave 2 by schooling status during the inter-survey period among adolescents aged 15–19 years¹ at wave 1, Uttar Pradesh, 2018–19



Notes: All Ns are unweighted. ¹The analysis is restricted to boys and girls aged 15–19, unmarried, and enrolled in school at the time of the wave 1 survey.

Figure 2B: Bivariate comparison of gender role attitudes score at wave 2 by transition to paid work during the inter-survey period among adolescents aged 15–19 years¹ at wave 1, Uttar Pradesh, 2018–19



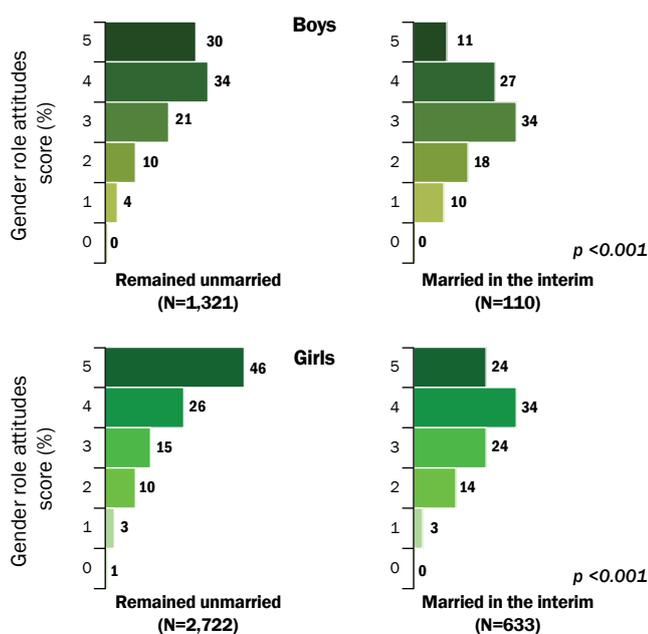
Notes: All Ns are unweighted. ¹The analysis is restricted to boys and girls aged 15–19, unmarried, and had never engaged in paid work at the time of the wave 1 survey.

less gender egalitarian in their attitudes than those who did not transition to paid work (64% versus 71%). In contrast, girls who transitioned to work were more egalitarian than those who did not transition to work during the inter-survey period (78% versus 68%). When other factors are controlled for, however, a different pattern emerges. The results of the fixed effects regression analysis⁴ show that boys who transitioned to work were 19 percentage points more likely to score high on the gender role attitude index than those who did not work (regression coefficient=0.185, p=0.019), but no such association was observed in the fixed effects model for girls.

Marital Status

Figure 2C presents findings from the bivariate analysis on the association between transition to marriage during the inter-survey period and gender role attitudes at wave 2 among adolescents aged 15–19 who were unmarried at the time of the wave 1 survey. While boys and girls who got married during the inter-survey period were less egalitarian than those who did not marry (38% versus 64% among boys and 58% versus 72% among girls), transition to marriage

Figure 2C: Bivariate comparison of gender role attitudes score at wave 2 by transition to marriage during the inter-survey period among adolescents aged 15–19 years¹ at wave 1, Uttar Pradesh, 2018–19



Notes: All Ns are unweighted. ¹The analysis is restricted to boys and girls aged 15–19 and unmarried at the time of the wave 1 survey.

⁴While the bivariate analysis was restricted to those who had never engaged in paid work at the time of the wave 1 survey (N=844 for boys and N=2,599 for girls), the fixed effects regression was fitted for all boys and girls interviewed at both waves (N= 1,435 for boys and N=3,365 for girls).

was unrelated to gender role attitudes in the fixed effects regression analysis.

Key Finding 4

Education and exposure to digital media helped adolescents develop gender egalitarian attitudes

Multivariate analysis identified several significant factors that promote or inhibit gender egalitarian attitudes among boys and girls. We highlight two factors that had a positive effect on the gender role attitudes of older adolescents, regardless of sex. Gender role attitudes became more egalitarian with years of schooling completed (regression coefficient 0.058, p=0.045 for boys and 0.035, p=0.051 for girls).

Adolescents who were exposed to digital media were also significantly more likely to express gender egalitarian attitudes compared with their counterparts who were not exposed to these media (regression coefficient 0.174, p=0.012 for boys and 0.107, p=0.023 for girls).

Key Finding 5

Young women who expressed gender egalitarian attitudes in adolescence were less likely than others to experience spousal violence and more likely to use contraception

We examined the relationship between expression of gender egalitarian attitudes at wave 1 and selected outcomes at wave 2, using multivariate distributed lagged regression analyses. Effects on age at marriage and exercise of choice in spouse selection were examined among girls who were aged 15–19 and unmarried at wave 1. We observed no significant effect of gender attitudes on age at marriage or spouse selection. Effects on current use of modern contraceptive methods and experience of marital violence were assessed among girls who were married during the inter-survey period and those who were already married at wave 1. Compared with girls who expressed gender inequitable views, those who expressed egalitarian attitudes were 46 percent more likely to report current use of modern contraceptive methods and 20 percent less likely to experience marital violence at wave 2.

Policy and Programme Recommendations

The UDAYA study provides rigorous evidence on the mutability and effects of equitable gender attitudes among a representative longitudinal cohort of boys and girls in Uttar Pradesh. While more equitable attitudes are arguably important in and of themselves, findings suggest that they may contribute to better health and well-being, and, critically, that they are amenable to change. This latter point aligns with findings from rigorous evaluations in diverse settings that have demonstrated that it is possible to shift the gender attitudes of adolescents—female and male, older and younger (Bandiera et al., 2020; Ozler et al., 2020; Santhya et al., 2019). This means that through programme and policy interventions, we can shift gender attitudes toward greater equity and, in so doing, contribute to improved health and rights.

A Invest in evidence-based programmes that promote gender equitable attitudes

While it may be that gender views are more malleable at younger ages, they do not become immutable at older ages. Evidence from rigorous evaluations demonstrate that programmes can shift gender

attitudes, and evidence from UDAYA demonstrates that such shifts can have multi-sector pay-offs, including girls' increased contraceptive use and decreased experience of intimate partner violence.

B Increase investments to support adolescents' education

Findings that gender role attitudes became more egalitarian as adolescents progressed to higher classes provide more reasons for increasing investments to support adolescents' education. At the same time, further research is needed to understand the pathways through which current enrolment fosters more equitable attitudes among boys, but has no effect on girls' gender attitudes in this context.

C Universalise access to digital media and use digital platforms to promote egalitarian gender norms

The role that digital media seems to play in contributing to more equitable gender attitudes calls for efforts to reduce the digital divide and to use digital platforms to promote egalitarian gender norms. Our findings also call for further research on whether and in what contexts digital media interventions may provide additional benefits.

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Annexure

Annexure 1: Questions used to assess gender role attitudes

Questions	
A.	Is it more important to educate boys than girls?
B.	Should boys do as much domestic work as girls?
C.	Is it wrong for a girl to have male friends?
D.	Do girls like to be teased by boys?
E.	Should girls be allowed to decide when they want to marry?
F.	Are giving the kids a bath and feeding the kids women's responsibility only?
G.	Should father/husband alone/mainly decide how household money is to be spent?



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