Shifts toward equitable gender attitudes among adolescents and their impact
Evidence from the UDAYA Longitudinal Study in Bihar, 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 this 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 Bihar 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). A total of 10,433 boys and girls were interviewed at wave 1 in 2015–16 and 8,467 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 (8% for boys and 5% for girls) and refusal by the participant or his/her parent or guardian for an interview (4% each for boys and girls).

Findings presented in this brief draw on data from respondents who were interviewed at both waves (N=8,467). 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 resided in rural areas, 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=0.51).  

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.
- While boys’ gender role attitudes were unrelated to school continuation, entry into paid work, or transition to marriage, girls’ attitudes were associated with school continuation and transition to work.
- Exposure to digital media helped boys and girls develop gender egalitarian attitudes, and interactions with frontline workers and participation in adolescent-focused programmes, additionally, positively influenced girls’ attitudes.
- Young women who expressed gender egalitarian attitudes in adolescence were more likely than others to delay marriage and use modern contraceptive methods, and they were less likely to experience spousal violence.

1 We 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. 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 18 percentage points for both boys and girls (from 26% at wave 1 to 44% at wave 2 among boys and from 46% at wave 1 to 64% at wave 2 among girls).

**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—55 percent at wave 1 and 59 percent at wave 2.
Key Finding 3

While boys’ gender role attitudes were unrelated to school continuation, entry into paid work, or transition to marriage, girls’ attitudes were associated with school continuation and transition to work.

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 years and enrolled in school at the time of the wave 1 survey. Bivariate results show that boys and girls who discontinued schooling during the inter-survey period were less egalitarian than those who continued schooling (50% versus 66% among boys and 65% versus 77%). The fixed effects regression analysis, however, showed a different pattern: surprisingly, girls who continued to be in school were 11 percentage points less likely to score high on the gender role attitude index compared with those who discontinued schooling (regression coefficient = –0.110, p=0.025), while no such association was observed among boys. Although UDAYA did not collect data on classroom dynamics, studies in a variety of settings, including in Bihar, have shown that classroom dynamics, as shaped by the teachers’ attitudes and behaviours, can either reinforce traditional values or can promote new ideas and behaviours (Aikman and Unterhalter, 2013; Chisamya et al., 2012; NRC and Institute of Medicine, 2005; Santhya et al., 2015; Stromquist and Fischman, 2009) and that classroom dynamics was associated with girls’ gender role attitudes and agency more often than boys’ (Santhya et al., 2015).

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 years and unmarried, and enrolled in school at the time of the wave 1 survey.

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.
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 boys who transitioned to paid work during the inter-survey period were somewhat less egalitarian than their non-working counterparts at wave 2 (56% versus 65%). In contrast, girls who transitioned to work were more egalitarian than those who did not transition to work during the inter-survey period (75% versus 65%). The results of the fixed effects regression analysis show that girls who transitioned to work were 13 percentage points more likely to score high on the gender role attitude index than those who did not (regression coefficient=0.132, p=0.041), but no such association was observed in the fixed effects model for boys.

**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 (47% versus 60% among boys and 57% versus 70% among girls), transition to marriage was unrelated to gender role attitudes in the fixed effects regression analysis.

| Key Finding 4 |

Exposure to digital media helped boys and girls develop gender egalitarian attitudes, and interactions with frontline workers and participation in adolescent-focused programmes, additionally, positively influenced girls’ attitudes

Multivariate analysis identified several significant factors that promote gender egalitarian attitudes among boys and girls. Noticeably, older adolescents who were exposed to digital media were significantly more likely to express gender egalitarian attitudes compared with their counterparts who were not exposed to these media (regression coefficient 0.227, p=0.001 for boys and 0.163, p=0.001 for girls). Additionally, older girls who interacted with frontline workers (regression coefficient=0.122, p=0.009) and participated in adolescent-focused programmes (regression coefficient =0.188, p=0.000) were more likely than their respective counterparts to express gender egalitarian attitudes.

| Key Finding 5 |

Young women who expressed gender egalitarian attitudes in adolescence were more likely than others to delay marriage and use modern contraceptive methods, and they were less likely to experience spousal violence

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. Compared with girls who expressed gender inequitable views, those who expressed egalitarian attitudes were 58 percent more likely to delay marriage until 18 years of age; however, no significant effect of gender attitudes was observed on 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

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4While the bivariate analysis was restricted to those who had never engaged in paid work at the time of the wave 1 survey (N=949 for boys and N=2,364 for girls), the fixed effects regression was fitted for all boys and girls interviewed at both waves (N= 2,562 for boys and N=5,606 for girls).

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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.
those who were already married at wave 1. Compared with girls who expressed gender inequitable views, those who expressed egalitarian attitudes were 11 percent more likely to report current use of modern contraceptive methods and 25 percent less likely to report 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 Bihar. 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  Promote adolescent programmes and interactions with frontline workers**

Our findings also provide evidence of the benefits of promoting adolescent programmes and encouraging interactions with frontline workers.

**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.

**D  Pilot test innovative approaches to inculcate gender egalitarian attitudes among boys**

Our findings that most programme-related variables did not influence gender role attitudes of boys emphasise the need for pilot testing innovative approaches to inculcate gender egalitarian attitudes among boys.

**E  Support research exploring how current enrolment in school affects gender attitudes**

Our findings call for further research to understand the pathways through which current enrolment makes gender attitudes among girls more inequitable, but has no effect on boys’ gender attitudes in this context.
References


Annexure

Annexure 1: Questions used to assess gender role attitudes

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