

Gender and Adolescence

Why understanding
adolescent capabilities,
change strategies and
contexts matters

GAGE Consortium

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Acronyms

CSO	Civil Society Organisation
FGM	Female Genital Mutilation
GAGE	Gender and Adolescence: Global Evidence
GBV	Gender Based Violence
HIV	Human Immunodeficiency Virus
HTP	Harmful Traditional Practice
ILO	International Labour Organisation
NGO	Non Governmental Organisation
SDG	Sustainable Development Goal
SRH	Sexual and Reproductive Health
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WHO	World Health Organisation

Why a focus on gendered adolescence matters

Adolescence has powerful impacts on children's capabilities. This is in part because of the physical transformations wrought by puberty, which are considered second only to those experienced in infancy and early childhood in terms of their scope and speed, and in part because of how children's place in the family and broader community shifts as they approach maturity (Viner et al., 2015; Steinberg, 2015; Patton et al., 2012; UNICEF, 2011a). Given these pivotal life changes – and with a global adolescent population of more than 1.2 billion (UNICEF, 2011) – it is increasingly recognised by development community actors that adolescence represents a very important and unique opportunity to reap a triple dividend for adolescents now, for their adult trajectories and those of their children. Indeed, the years between 10 and 19 are increasingly seen as a critical window during which to accelerate progress against the effects of poverty, inequity and discrimination and to

foster positive development trajectories (Sheehan et al., 2017; USAID 2016) (see also Box 1.1).

Adolescent transitions shape both girls' and boys' lives, but often in highly gendered ways. Advancing understanding of these gendered dimensions of adolescent experiences is a core aim of The Gender and Adolescence: Global Evidence (GAGE) research programme. While our research will involve both girls and boys, we place a particular focus on the experiences and capability outcomes of girls because of the ways adolescent transitions more sharply curtail their capabilities. Over the course of the second decade of life, with timing and speed that not only varies between girls but also can be markedly asynchronous, even within individuals, girls are transformed by the production of sex hormones. In addition to the very obvious maturation their bodies undergo, as they grow taller and heavier, develop breasts and begin menstruating, the unseen cascade of

Box 1.1. The SDGs and adolescents

The Sustainable Development Goals (SDGs), building on the success of the Millennium Development Goals (MDGs), aim to direct nations' and donors' policy priorities between now and 2030, and drive the allocation of global financial and human resources. It is increasingly recognised that the SDGs will not be realised without critical interventions to support today's generation of adolescents (WHO, 2017; UNFPA, 2016). Whether or not we are able to achieve the goals will depend on how we impact the lives of adolescents today, and in turn, how they navigate this crucial life-stage between now and 2030, the target year for the goals.

The Goals have a number of adolescent-focused targets. For example:

- addressing the nutritional needs of adolescent girls (Target 2.2)
- ensuring universal access to sexual and reproductive health-care services (Target 3.7)
- ensuring that all girls and boys complete free, equitable and quality primary and secondary education (Target 4.1)
- eliminating all forms of violence against all girls (Target 5.2), including all harmful traditional practices (Target 5.3)
- ensuring sanitation and hygiene for girls (Target 6.2)
- achieving decent work for all young people (Target 8.5)
- providing access to safe and public spaces (Target 11.7)
- ensuring equal access to justice for all (Target 16.3) (UNSD, 2016).

While the SDGs, as compared to the MDGs, better reflect the rights and needs of adolescent girls, this alone is not enough to ensure that adolescents are adequately visibilised. GAGE is poised to make contributions to monitoring progress towards the Goals, ensuring that their 'leave no one behind' focus becomes reality. While the 17 Goals and 169 targets are now linked to 230 individual indicators, over half of those indicators lack 'acceptable country coverage, agreed-up methodologies, or both'. As the development of cutting-edge tools is one of GAGE's primary foci, the programme can help identify methodologies for measuring progress for girls.

hormones changes the way their brains function – not only moving them towards a greater capacity for analytic rather than concrete thought and making it possible for them to take on the perspectives of others but also making them evaluate risks differently and value their peers' opinions over those of adults (Crone and Dahl, 2012; Steinberg, 2015; WHO, 2014a; Goddings et al., 2014; Spear, 2013; Blakemore and Robbins, 2012; Romer, 2012; Breinbauer and Maddaleno, 2005). Within the confines of their cultural environments, they also begin to assert their autonomy and independence from their families (Zimmer-Gembeck and Collins, 2008; Fleming, 2005).

As girls enter and progress through adolescence, the gendered norms of their socio-cultural environments also begin to play a heightened role in shaping their trajectories, with the years of early adolescence found to be especially important because of the ways in which social norms¹ start to become both more rigidly enforced – especially by mothers in some contexts² (Basu and Acharya, 2016; Basu et al., 2016) – and more personally salient (McCarthy et al., 2016; Kågesten et al., 2016; John et al., 2016; Mmari et al., 2016). Indeed, emerging research suggests that the years between 10 and 14 may be a 'sensitive period' for sociocultural processing (Fuhrmann et al., 2015; Blakemore and Mills, 2014; Crone and Dahl, 2012). Critically for girls in the Global South, the years of early adolescence, rather than expanding their worlds – as is common for boys and for girls in the Global North – often see them made smaller as they have to leave comparatively free childhoods and are forced down the gendered adult pathways of their local environments (Marcus and Harper, 2015; Watson, 2015; Watson and Harper, 2013). Girls who have begun to aspire to a world different from those of their mothers and their

grandmothers find as their bodies evidence maturity that they are too often required to leave school and marry, abandoning not only their educational and occupational plans but also mobility and friendships (Kyomuhendo Bantebya et al., 2013, 2014; Ghimire and Samuels, 2013, 2014; Tefera et al., 2013; Jones et al. 2013, 2014a, 2014b, 2015a, 2016b). Pressures related to domestic and care work burdens, sexual purity and family honour and heightened risks of sexual and gender-based violence combine to limit girls' possibilities in ways that often have lifelong consequences (see discussion below).

After decades during which the concept of adolescence was largely seen as a Western luxury with little applicability in the Global South, recent advances in neuroscience (see Box 1.2) have helped generate new ways of thinking about the transition between childhood and adulthood. Not only do we increasingly understand that puberty has impacts that reach far beyond visible sexual characteristics, but also we have come to appreciate that there is more uniformity of experience than we might previously have expected. That said, it is also increasingly clear there are marked differences between ages, contexts and gendered realities that are poorly understood in terms of how they affect the formation of girls' unique identities and capabilities. Focusing on these differences enables the development community (including policymakers, practitioners and communities) to not only better support the immediate needs of adolescents, thus improving their quality of life during a critical phase of life, but also to contribute to shaping girls' capacity to aspire to a better life for the future – which is an investment that global evidence underscores will pay off across generations as girls mature into empowered adult women (e.g. Wodon et al., 2017).

1 Some authors prefer the term 'gender norms' as they believe it better highlights power differentials between women and men and girls and boys. Given the context of GAGE's work, we prefer the more general term 'social norms'.

2 While mothers have been found responsible for enforcing social norms on a day-to-day basis, in some contexts fathers and other male relatives are the ultimate enforcers through acts such as honour killings (Kulczycki and Windle, 2011; Kulwicki, 2009).

Box 1.2. The neuroscience of adolescence

Adolescence has long been viewed as a time during which children effectively lose their minds – engaging in impulsive and risky behaviours at rates far higher than their younger and older peers. Models seeking to explain sensation-seeking behaviour have traditionally focused on the relatively faster maturation of the subcortical affective (emotional) areas of the brain compared with the frontal cortical brain (rational) areas. Recent neuroscience, however, has not born this theory out and has instead begun to concentrate on the interaction of adolescents' cognitive, affective and social processing. It has found, for example, that the threats and rewards that adolescents consider most salient are social and that adolescents who have strong friendships are less sensitive to later experiences of social rejection. There is also evidence that adolescents' brains are uniquely sensitive to memory formation. Taken together, these new insights open possibilities for designing interventions that provide adolescents with relevant learning experiences that help them optimise their development by providing them with the motivation they need to make smart decisions and helping them develop the emotional insulation that can buffer them from future stress.

Sources: Crone and Dahl (2012); Fuhrmann et al. (2015).

GAGE's conceptual framework: The 3 Cs framing

Informed by the emerging evidence base on adolescent wellbeing and development, GAGE's conceptual framework takes a holistic approach that pays careful attention to the interconnectedness of what we call 'the 3 Cs': Capabilities, Change strategies and Contexts' in order to understand what works to support adolescent girls' development and empowerment – now and in the future (see Figure 1.1). This framing draws on the three components of Pawson and Tilley's (1997) approach to evaluation, which highlights the importance of outcomes, causal mechanisms and contexts – but we tailor it to the specific challenges of understanding what works in improving adolescent girls' capabilities.

The first building block of our conceptual framework are capability outcomes. Championed originally by Amartya Sen (1984; 2004), and nuanced to better capture complex gender dynamics at intra-household and societal levels by Marta Nussbaum (2011) and Naila Kabeer (2003), the capabilities approach has evolved as a broad normative framework exploring the kinds of assets (economic, human, political, emotional and social) that expand the capacity of individuals to achieve valued ways of 'doing and being'. At its core is a sense of competence and purposive agency: it goes beyond a focus on a fixed bundle of external assets, instead emphasising investment in an individual's skills, knowledge and voice. Importantly, the approach can encompass relevant investments in girls with diverse trajectories, including the most marginalised and 'hardest to reach' such as those who are disabled or are already mothers.

GAGE's focus on capabilities is also rooted in the UN Convention on the Rights of the Child's recognition of child rights and emphasises investments in the person as a whole, including bodily integrity and autonomy; social connectedness; access to, control over and use of assets; development of skills and knowledge;

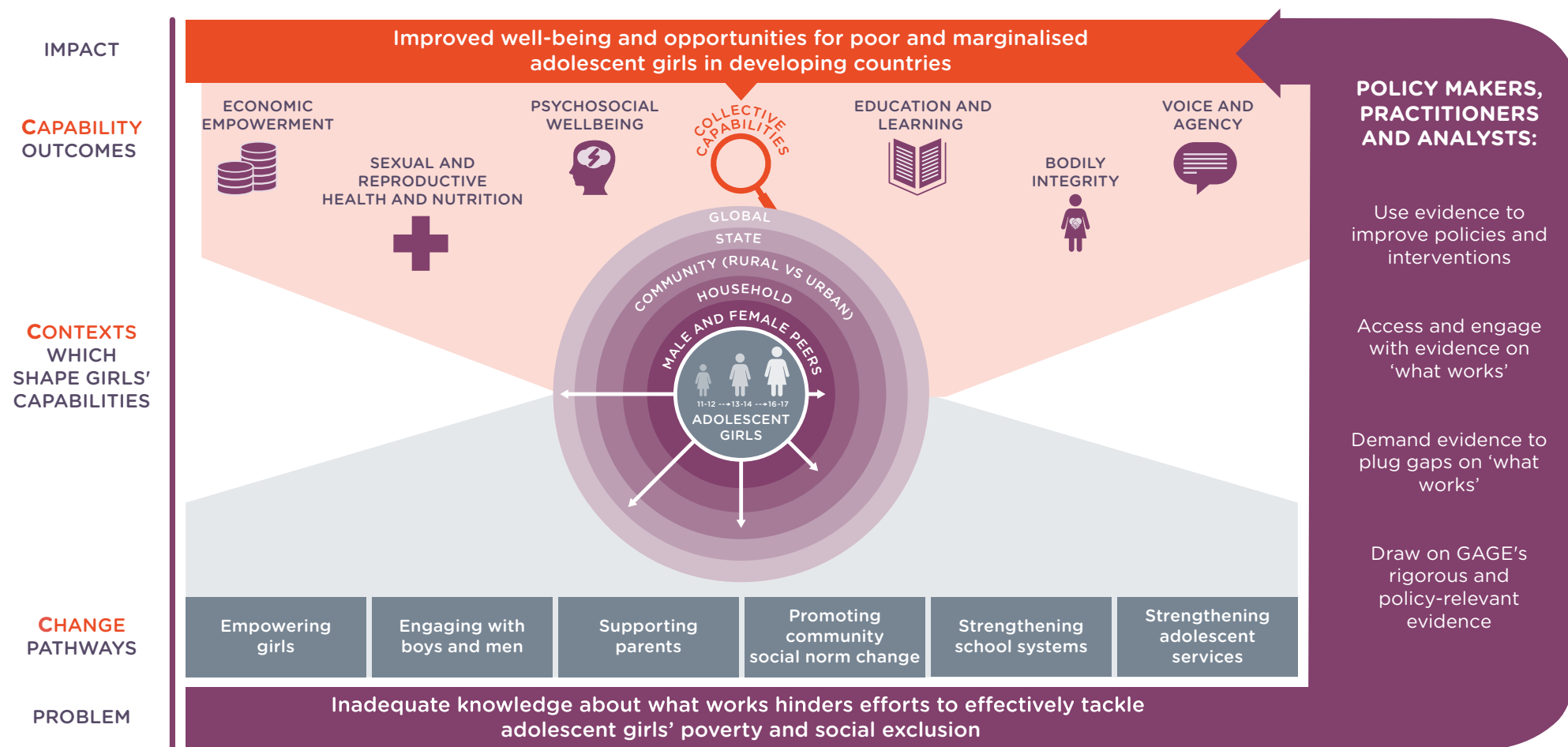
and ability to express voice. It also helps us capture the dynamic nature of adolescence, during which girls' capabilities emerge. It recognises that 11-year-old girls need preparation for the changes their bodies are about to undergo and are often best reached through play; 15 year olds are struggling with how to manage awakening sexuality and balance biological and social imperatives; and 19 year olds are often functional adults who need pathways to work and parenting classes of their own.

The second building block of our conceptual framework is context dependency. Our 3 C's framework situates girls ecologically and recognises not only that adolescent girls at different stages in the life-course face different needs and constraints, but that these are also highly dependent on girls' contexts at family or household, community, state and global levels.

The third and final building block of our conceptual framework acknowledges that girls' contextual realities will not only modify the pathways through which they develop their capabilities but also determine the change strategies that can be employed to improve their capability outcomes. Our ecological approach emphasises that, in order to nurture transformative change in girls' capabilities and broader well-being, potential change strategies must simultaneously invest in integrated intervention approaches at different levels, weaving together policies and programming that support girls, their families and their communities while also working to effect system-level change.

In short, the GAGE conceptual framework offers an analytical approach to unpack how the capability outcomes of different groups of adolescent girls – in comparison to those of their male peers – are shaped by the causal mechanisms embedded in different change strategies, which are in turn mediated through specific local, national and global context dynamics.

Figure 1.1. GAGE 3 Cs Conceptual Framework



Capabilities outcomes and challenges

GAGE's framework posits two levels of final, multidimensional outcomes: those that relate to individual girls' capabilities and those related to what Kabeer (2003) calls their 'collective capabilities'.

1. Individual capabilities

The capabilities approach emphasises investments in girls as a whole, whereby girls are supported to develop the functioning ('being and doing') that provides them with the freedom to choose the kind of life they value (what Sen terms a 'capability set') (Sen, 2004; Unterhalter, 2003; Nussbaum, 1997). In addition to recognising the importance of physical, economic and educational competencies, a capabilities approach highlights the centrality of girls' psychosocial well-being and their ability to exercise agency and voice in terms of setting and achieving their own goals. GAGE's focus on capabilities is especially well suited to capturing the dynamic nature of adolescence and the ways in which it expands or limits girls' ability to realise their full adult potential and to transit out of poverty sustainably.

2. Collective capabilities

Collective capabilities are group-level capabilities that emerge through collective action, are often supported by champions, and refer to forms of cognitive and practical agency that emerge out of the social relationships that develop as a result of sustained interaction (see also Figure 2.2). Collective capabilities are unlikely to emerge in the absence of these group interactions and not only help strengthen individual capabilities but also can ultimately benefit others who are not personally involved in these

interactions (see Kabeer, 2011; Trani et al., 2011; Ibrahim, 2006). Our framework envisions that collectively empowering girls means that adolescent girls are made visible on policy and programming agendas--from the grassroots to the national level--and command the attention of both formal and informal leaders. Their unique needs are no longer hidden in agendas focusing on 'children', 'youth' or 'women' and are instead directly heard, acknowledged and met. It also envisions that community groups and service providers become aware of the age- and gender-sensitive needs of adolescent girls, and understand how age and gender work in tandem to preclude access to services for girls even where broader availability is good.

Capability domains

As a result of the physical, emotional, cognitive and social changes that girls experience over the course of adolescence, threats to their capabilities become both broader and deeper – as does the importance of working with them to tackle these threats. In this next section we outline six broad capability domains, the challenges that adolescents in the Global South face in achieving these, and the positive capability outcomes against which our research will assess progress over time. For more details on the sub-outcomes we will measure, please see Annex 1. In doing so, we also recognise that understandings and experiences of adolescence evolve over time and can vary significantly across locations (see discussion on contexts below) and can be shaped significantly through girls' own strengths and resilience that contribute to overcoming the challenges they face (see discussion on change strategies below).

Education and learning

This capability domain focuses on the services and support adolescents have to acquire the cognitive skills and knowledge they need in order to engage with and make good decisions in a rapidly changing world.

Challenges adolescent girls face regarding education and learning

Girls have made tremendous progress over the past generation in terms of both their access to education and their schooling outcomes. However, in most Southern countries they continue to be disadvantaged in terms of:

- Access – with girls still more likely to be out of school than boys and especially blocked from pursuing non-traditional fields;
- Substantive access – with even in-school girls lacking access to the quality education that is necessary to achieve longer-term gender-equitable outcomes;
- Transitions – with girls in most Southern countries more likely to be pushed off track than boys by events such as national exams and movement between school levels. (see Box 1.3).

Education and learning capability outcomes that would support adolescent girls' development trajectories

As part of its focus on what works, GAGE research will assess the following aspects of adolescents' education and learning outcomes: whether younger adolescent girls are regularly attending schools that provide age-appropriate and gender-responsive quality education, have access to the resources and services they need for a positive school experience, have the time to complete their homework, and have educational outcomes sufficient to guarantee continued access to school (e.g. passing scores on national exams). Our research will explore whether they have confidence in their own ability to learn and are beginning to set longer-term goals for themselves with regard to education and occupation. Similarly, we will assess older girls' access to secondary school and vocational training and whether they are honing their longer-term objectives, realistically balancing personal aspirations and local reality.

Testimony 1.1. Shaima: My determination and persistence have grown up with me

My name is Shaima. I am a 19-year-old girl from Gaza, which is very rural and poor. I have been quadriplegic since birth. I have faced many struggles that at times have seemed too much. However, as I have grown up, my determination and persistence have grown up too.*

My disability has made it difficult for me to get an education. The director at my secondary school initially refused to accept me, because the school has three floors and no lift system for my wheelchair. I insisted and my father adapted the school building himself. Even then school was a struggle. I often arrived very late because of difficulties with transportation. Because I use a wheelchair, drivers don't pick me up, they just ignore me at the taxi stations.

Even worse was when other children teased me and refused to be near me because of my disability. At school, I felt as if I was not a full human being. I cried many times because I got no support from the other students and my teachers. I got good grades, despite the struggle I faced on a daily basis.

**Names have been changed*

Box 1.3. Educational challenges facing adolescent girls

According to the World Bank (2016), across all low- and middle-income countries girls are now more likely than boys to survive to the last year of primary education (73.7% versus 71.4% in 2012). Indeed, this pattern holds true even in low-income countries (56.1% versus 54.2%) and across all regions of the world (ibid). In most low-income countries, however, girls' early advantage evaporates with the transition to secondary school – especially for the poorest girls. Across all low-income countries, 32% of girls of lower-secondary age are out of school, compared with only 29.4% of boys. Similarly, while 37.4% of girls ultimately complete lower secondary school, 41.8% of boys do so. Overall, only 46.9% of secondary students in low-income countries are girls. While there is regional variation, with girls in East Asia and the Pacific, for example, actually more likely to complete lower secondary than boys (92.7% versus 89.3) and girls in Sub-Saharan Africa especially disadvantaged (34% of girls versus 41.8% of boys completing lower secondary), the prevailing pattern in the Global South is for adolescence to flatten girls' educational trajectories more than those of boys – especially for those from the most disadvantaged households (UNESCO, 2016). There is also evidence that gains in enrolment may be hiding other forms of parental underinvestment in girls' education. In India, for example, boys are now significantly more likely than girls to have access to the private English-language education that produces better educational and occupational outcomes (Nanda et al., 2014; Dercon and Singh, 2013).

There are many reasons for girls' uptake of schooling shifting with adolescence. For example, with girls more at risk of sexual- and gender-based violence as their bodies mature, families keep them home to not only protect them from violence but also ensure they remain the sexually pure signifiers of family honour that traditional gender norms require (Tefera et al., 2013; Islam, 2012; Jones et al., 2015a; 2016b; Ghimire and Samuels, 2014, 2014). Furthermore, even where adolescent girls are permitted to enrol in school, their attendance can suffer because their care-related burdens tend to grow as they become more capable of substituting their own labour for that of their mothers (Nanda et al., 2013). In Rwanda, for example, while young adolescent girls (age 10–14) spend about four hours more each week on domestic tasks than do boys (17 hours versus 13 hours), by later adolescence (age 15–19) the gap grows to six hours (21 hours versus 15 hours) (NISR, 2012). Similarly, in Ethiopia, while 78% of younger girls and 52% of younger boys engage in unpaid domestic labour, for those between the ages of 15 and 29 rates radically diverge – to 91% versus 48% (CSA, 2014). The cost of school also impacts adolescent girls' school enrolment and attendance. Among the poorest rural households in Tanzania, for example, Alcott et al. (2016b) found 80% of girls had been sent home because they could not pay school fees.

Furthermore, even where girls' enrolment rates continue to rise, their substantive access to quality education continues to lag (Vaughan, 2016; Calder and Huda, 2013). In some countries, high teacher absenteeism and growing student-to-teacher ratios mean enrolment does not translate into teaching – or even that children's educational outcomes are worsening (Transparency International, 2013; Woldehanna and Pankhurst, 2014). Lloyd (2009), for example, notes that the quality of education in many developing countries is so poor that over half young women (currently aged 20–24) who completed third grade remain functionally illiterate. Indeed, in the African countries included in her sample, fewer than 50% of young women had achieved literacy at the end of Grade 5. Vaughan (2016) adds that gender-insensitive curricula, teachers' differential treatment of girls and boys and educational systems also limit girls' substantive access, ultimately preventing them from translating their cognitive and academic gains into broader empowerment (see also Murphy-Graham, 2009; Durrani, 2008; Stromquist, 2006).

Adolescent girls are also particularly likely to have limited access to the fields of study that would ultimately result in more lucrative employment. At secondary and tertiary levels they remain largely excluded from science, technology, engineering and mathematics fields. This pattern holds true for technical and vocational training as well. Not only do girls overall have less access to employment-oriented training, but also, where they do have access, they tend to be cloistered into more 'traditional' fields, such as hairdressing (Vaughan, 2016; UNESCO, 2012; Kabeer, 2009).

Bodily integrity

This capability domain focuses on adolescent girls' freedom and protection from gender-based violence including child marriage, harmful traditional practices, and other forms of coercion.

Challenges adolescent girls face regarding bodily autonomy and integrity

While girls in many Southern countries are at risk of violence from early childhood – beginning before birth in countries with strong son preference – the second decade of life amplifies the threats that girls face (see also Box 1.4). Depending on context, adolescent girls are faced with high odds of:

- Child marriage – which is most often forced by fathers and other adult family members but is sometimes 'freely' chosen;
- Female genital mutilation/cutting and other harmful traditional practices, often arranged by mothers and other adult family members;

- Sexual and gender-based violence at the hands of romantic partners and other family members as well as community members.

Bodily integrity capability outcomes that would support adolescent girls' development trajectories

While acknowledging that risks to girls' bodies vary tremendously by context, GAGE research will assess whether both younger and older girls have the knowledge, skills, resources, and support to resist child and forced marriage and harmful traditional practices carried out on girls' bodies. It will also assess their ability and support to protect themselves from the broader age-based abuse and sexual and gender-based violence that is meted out within their own households, schools, communities and other institutions. Additionally, we will examine whether older girls also have tools to protect themselves within sexual relationships.

Testimony 1.2. Gelila: Trapped in an early marriage to a priest

*My name is Gelila. * I am a 13-year-old married girl currently in 5th grade. I was promised in marriage at the age of 1 to a priest. He is old and I am not happy in my marriage. I am stuck because my husband would lose his priesthood if he divorced me.*

I know that girls should not get married before the age of 18, as I have heard it on television in my neighbour's house. I know that when girls get married early they are unlikely to live a peaceful life.

I only want to begin life with my husband after I get employed. Even if my family insist on me living with him now, I would not accept it. I don't want to drop out of school, I will finish my education.

**Names have been changed*

Box 1.4. Bodily integrity challenges facing adolescent girls

Child marriage remains a significant threat for adolescent girls in many Southern countries. One-third of girls in developing countries are married before the age of 18 and nearly 10% are married before the age of 15, with girls from the poorest and least-educated families especially at risk (ICRW, 2016). Rates in some countries are far higher. In Bangladesh, 66% of girls are married as children and in Nepal and Ethiopia more than 40% are married before adulthood (ibid.). Furthermore, while child marriage is on the decline in most contexts, there is evidence that it is becoming more common in some conflict-affected areas, as families struggle to balance the twin demands of economic security and girls' safety, and rape and forcible 'marriage' is used as a weapon of war (Girls Not Brides, 2016; WRC, 2016). Among Syrian refugees in Jordan, for example, rates of registered child marriage jumped from 12% to 32% between 2011 and 2014 (UNICEF, 2014b).

Where female genital mutilation/cutting and other harmful traditional practices are associated with rites of passage or child marriage, adolescent girls are at further risk (UNICEF, 2016). In Egypt it is estimated that 80% of girls between the ages of 15 and 19 have been cut (28 too many, 2016), usually in early adolescence (UNICEF, 2014a). Similarly, in Malawi, girls as young as 10 are forcibly initiated into sex by men known as 'hyenas' who are paid to 'turn them into women' (Ahmed, 2014; Tonthola, 2016).

Research has found that adolescent girls are especially vulnerable to sexual and gender-based violence, including – when they are in relationships – intimate partner violence. Indeed, of women who have been sexually victimised, most were victimised the first time during adolescence (UNICEF, 2014a). Rates of victimisation are staggeringly high: about one in five older adolescent girls (age 15–19) in Cameroon, DRC and Uganda, for example, have experienced forced sex (ibid.) and 87% of Bangladeshi girls between the ages of 10 and 18 have experienced 'eve teasing' (BNWLA 2010 survey, cited in Islam, 2012). Indeed, although there are obvious challenges surrounding reported violence versus experienced violence, research suggests that in some countries sexual and gender-based violence has been markedly worse in recent years as social controls on women and girls have relaxed and they have begun to move out of their households and into school and employment in greater numbers. While many families believe child marriage is the best way to protect their daughters from violence, statistics suggest otherwise. In Nepal, 44% of the perpetrators of violence against adolescent girls are husbands or partners (UNICEF, 2014a) and in Ethiopia Erulkar (2013) found that the youngest brides were significantly more likely to experience violence at the hands of their husbands than their older peers, in part because they have had less time to develop the voice and agency that will allow them to negotiate and resist and in part because they are the most likely to be married to men who are significantly older than they are. Girls in conflict-affected areas are also highly vulnerable to sexual and gender-based violence.

Adolescent girls' own decision-making in some cases heightens their vulnerability to violence. Driven by the cognitive changes mentioned above, which encourage sensation-seeking and risk-taking but make planning and emotional control challenging (Steinberg, 2015; WHO, 2014a), girls in some contexts engage in variety of risky behaviours, including sexual relationships with not only age mates but also the older 'sugar daddies' uniquely positioned to exploit them (Kyomuhendo Bantebya et al., 2013, 2014; Silberschmidt and Rasch, 2001). In Uganda, for example, research has found that girls are involved in sexual relationships at ever earlier ages, in part because they want money (Kyomuhendo Bantebya et al., 2013, 2014), and that nearly 13% of 15–19-year-old girls have engaged in cross-generational sex outside of marriage (Amin et al., 2013).

While adolescent girls are undeniably victims in this context, as most are using the relationships to mitigate acute poverty and in all cases they are children in need of protection rather than exploitation, Silberschmidt and Rasch (2001), working in Tanzania, observe that adolescent girls are also 'active social agents' – albeit with minimal understanding of longer-term consequences, made worse by the taboos and policy decisions that surround sexual and reproductive health education in many contexts (see also Parkes, 2016; Hallman et al., 2016).

Source: <http://www.cgdev.org/blog/230-indicators-approv-agenda>

Physical and reproductive health and nutrition

This capability domain is concerned with adolescent knowledge and awareness about their bodies and how to keep healthy. This includes access to the knowledge, supplies and services needed to manage menstruation and protect themselves from sexually transmitted infections and unplanned pregnancy.

Challenges adolescent girls face regarding their health and nutrition

Outside of countries with a strong son preference, where girls' nutrition and physical health can be compromised from birth, threats to girls' physical capabilities emerge and grow in adolescence (see Box 1.5). Specifically, adolescent girls' vulnerability grows in relationship to their:

- Nutritional status – given that while their bodies are growing quickly they lack access to nutrient-dense foods, especially iron-rich foods after they begin menstruation. This is particularly dangerous where adolescent pregnancy is common;
- Menstrual practices – given that taboos often preclude knowledge and practice of safe sanitation;

- Reproductive and sexual health – given the risk of pregnancy and sexually transmitted infections and their difficulty in accessing health care.

Physical and reproductive health and nutrition capability outcomes that would support adolescent girls' development trajectories

GAGE research will explore the extent to which girls of all ages have equitable access to nutritious food and quality health care when they need it. It will also ask whether girls are able to hygienically manage menstruation without shame or fear—focusing on the younger girls who have been largely ignored by existent research. Because girls' access to sexual and reproductive health care tends to be especially limited, largely owing to social norms, key questions will consider whether girls have physical and social access to youth-friendly services that can provide them with the more explicit information on sexuality they need in order to make smart choices and protect themselves. GAGE will also assess girls' access to maternity-related care.

Testimony 1.3. Chantal: Taking charge of her future

My name is Chantal. I am 15-years-old, from Rwanda's rural Nyaruguru District. I live in a mud-brick house, with my mother and five siblings. My family is very poor, but I am working hard to keep my options for the future open. My house is simple, we do not have running water or electricity, and sometimes we do not have enough to eat.*

I am happy growing up. I am really pleased I now have breasts. In my culture that makes me beautiful and mature. I have spoken to my friends about puberty and I look forward to my first period.

I think about many possibilities for my future. I would like to go to university and become a doctor. However, if it is not possible, then I would like to run my own small business. I would also like to get married and have children. I would like to have a boy first because girls can bring trouble, like early pregnancy--while boys can support the family.

**Names have been changed*

Box 1.5. Physical health and nutrition challenges facing adolescent girls

Given that about 45% of skeletal mass and 15% of final adult height are gained during adolescence, girls' nutritional disadvantages can be exacerbated during adolescence – especially where they lack access to protein and micronutrients (Thurnham, 2013). In Ethiopia, for example, research has found that adolescent girls have poorer diets than boys (Roba et al., 2015) and that girls aged 13–17 years are more likely than boys to report being food-insecure, especially in severely food-insecure households and even when comparing sibling pairs (Hadley et al., 2008). The nutritional status of married girls, whose bodies are often expected to support pregnancy and lactation regardless of their age or physical condition, is especially problematic (Thurnham, 2013). Many begin pregnancy under-weight and with micronutrient deficiencies (especially anaemia) and then see their own bodies further compromised by foetal growth imperatives (ibid.).

Adolescent girls face other health risks with puberty as well. For example, where menstrual practices remain shrouded in secrecy – and girls have no access to sanitary supplies – they can be at risk of infection from unhygienically managed menstruation (Tarhane and Kasulkar, 2015; Pandey, 2014; Dasgupta and Sarkar, 2008; El-Gilany et al., 2005). Similarly, while the global adolescent fertility rate has been declining for decades, plunging from 86.5/1000 in 1960 to 44.8/1000 in 2014, rates of early childbearing remain high in many low-income countries, reaching a high of 204/1000 in Niger (World Bank, 2016). Despite progress, pregnancy- and birth-related complications remain a leading cause of death for adolescent girls (WHO, 2014b). Disadvantaged by both biology, which leaves females more susceptible than males, and social norms that preclude negotiation about sex and contraception, adolescent girls are also uniquely vulnerable to sexually transmitted infection – again especially where the adolescent penchant for experimentation and risk-taking collides with culture (AVERT, 2016). Indeed, in eastern and southern Africa, girls account for 80% of all new HIV infections in adolescents and HIV/AIDS is the number one cause of death for girls aged 15–19 (Fleischman and Peck, 2015).

Adolescent girls' physical capabilities are further limited by the reality that many do not have control over their own health care (WHO, 2012; UNICEF, 2011a; UNAIDS, 2014). Not only is their access controlled by gatekeepers including parents, husbands and in-laws, who, owing to cultural taboos, often fail to ensure girls have even rudimentary education about sexual and reproductive health (Bray and Dawes, 2016), but also many communities lack youth-friendly health services (WHO, 2012; Pathfinder, 2012; Tylee et al., 2007). In some cases, barriers are practical, with clinics too far from where adolescents live or costs that are out of reach. In other cases, barriers are social, leaving unmarried girls to face provider stigma regarding their sexuality and married girls to face disapproval regarding their fertility choices (ibid.). Furthermore, because adolescents are typically embarrassed by their bodies and their sexuality, in some cases, even when care itself is of high quality, adolescents are simply too embarrassed to seek it out (WHO, 2012; UNICEF, 2011a).

Psychosocial well-being

This capability domain is concerned with adolescents' sense of self and ability to set their own goals and demonstrate resilience in the face of setbacks. It recognises the importance of both internal emotional capacity and external social support.

Challenges adolescent girls face regarding their psychosocial well-being

Adolescence is a time of heightened psychosocial vulnerability, with half of all mental illnesses beginning by age 14 and neuropsychiatric disorders the leading cause of disability in adolescence (1.6). Adolescent girls are more likely than their younger peers or their male age mates to show signs of mental health disorders, especially anxiety and depression (WHO, 2014a). Girls are especially at risk because:

- As demands on their time grow they have ever less opportunity explore their own interests and identities;
- They face increasing social isolation as their bodies mature, with many removed from school, deprived of their friends, and confined to their homes – especially after marriage;
- Oestrogen increases the stress response that contributes to depression and anxiety;
- In conflict-affected contexts they often face heightened risks of sexual and gender-based violence and resulting psychosocial trauma;

- There are also emerging challenges with regard to rapidly expanding exposure to digital environments in the absence of adequate adult guidance.

Psychosocial well-being capability outcomes that would support adolescent girls' development trajectories

Given significant evidence gaps in the field of adolescent psychosocial wellbeing, GAGE researchers will explore the ways in--and extent to which--younger girls are emotionally supported to develop confidence in themselves and to feel valued within their families, households, schools and peer groups. It will also examine whether they have someone to whom they can turn with problems and have the time and space to develop and practise the social skills that foster voice. In the case of older girls, GAGE research will examine whether they are able to imagine and set goals for their own romantic relationships and then build relationships that are rooted in mutual respect and interdependence. Research will also examine whether the girls who are actively engaged in asserting their independence are supported by their families with appropriate boundaries – to keep them safe – and have access to trusted confidants outside of the family sphere.

Testimony 1.4. Jehan: Looking at life through a window

My name is Jehan. I am a 18-year-old girl and live with my large extended family in a two-room house in Gaza. I was forced to leave school after Grade 8 to care for the younger children in my family. I spend my time trapped inside looking through windows with a lot of sorrow and sadness inside me.*

My life has been miserable lately. It has revolved around work at home. Since I am not allowed outside without permission, there is little way for me to escape the housework.

I am hoping things might get better soon. I recently joined a literacy school, which helps girls like me that have dropped out of school to catch up. I know there is a long road in front of me. If I had a wish, I would like to become a journalist to earn money and to help oppressed people.

**Names have been changed*

Box 1.6. Psychosocial well-being challenges facing adolescent girls

By late adolescence (age 15–19) suicide is the number one cause of death for girls – with those in South East Asia having rates more than twice as high as their peers in other regions (WHO, 2014a). Social norms play a large role in girls' greater susceptibility to mental health problems. Even in childhood, they are less likely than boys to have the unstructured time to play and 'be' that is critical to the development of identity, self-esteem and broader well-being (Jones et al., 2014a, 2014b). Seen by their parents as more compliant and useful, they are burdened with the lion's share of chores and as a result are more likely to be socially isolated and deprived of opportunities to develop their own interests. Girls who are out of school or whose families have the highest care burden are particularly likely to lack peer socialisation (ibid.).

Adolescence all too often deepens this isolation, particularly in cultures where girls see their mobility restricted and especially where girls marry as children and are deprived of the daily support of their natal families (Jones et al., 2015a, 2015b; WHO, 2014a; Edmeades et al., 2014; Erulkar and Muthengi, 2009). Research in a variety of countries has found that young brides are particularly susceptible to mental health disorders and are among the most likely to attempt suicide, particularly if they find themselves pregnant before they are ready (Petroni et al., 2015; Amin, 2015; Ahmed et al., 2013; Gage, 2013). Sexual and gender-based violence has also been linked to girls' higher rates of depression and anxiety (WHO, 2014a; Garoma et al., 2008; Kohrt et al., 2008), with evidence that social media is opening up whole new venues for bullying girls in adolescence (UN Statistics Division, 2015; Broadband Commission, 2015). There is also evidence that biology plays a role in adolescent girls' vulnerability to mental health problems, especially mood disorders. While before puberty girls and boys are equally likely to suffer from anxiety and depression, by mid-adolescence girls are about twice as likely to suffer from them as boys – with incidence rates estimated in the 4–5% range (Thapar et al., 2012). Though causality is difficult to establish, it is thought that the hormonal changes that girls experience in adolescence render them more susceptible to both depression and anxiety because of the ways in which oestrogen increases the stress response – at the same time that girls are encountering increased levels of stress owing to their changing social realities (ibid.; Balzer et al., 2015; Wharton et al., 2012).

The psychosocial needs of adolescent girls living in fragile and conflict-affected areas are often particularly acute, given that they are disadvantaged by both age and gender and lack the resources and skills that would help them cope in day-to-day environments often rife with new dangers (Robles and Spindler, 2016; Falb et al., 2016). For example, a recent evaluation of adolescent Syrian refugees living in Jordan (UNICEF, 2014c) found that, compared with boys, girls between the ages of 12 and 17 felt less supported by their parents to attend school and less safe in their environments and overall had more emotional difficulties. Indeed, adolescent girls in Gaza highlighted the tension inherent in the notion of 'family support'. They felt their families' emphasis on their safety had too sharply limited their mobility and access to their friends, ultimately making them feel less valued (Samuels and Jones, 2015).

Voice and agency

This capability domain focuses on the ability of adolescent girls to meaningfully participate in household, school and community life—which are key to them developing the skills required for political participation in adulthood.

Challenges adolescent girls face in terms of exercising voice and agency

Constrained by both their age and their gender, girls in the Global South often have less voice and agency within their homes, schools and communities than boys (see Box 1.7). Girls' access to decision-making is restricted by:

- Their limited access to physical spaces as concerns about their safety and sexual purity grow, especially when they are removed from school or are married;
- Their increasing socialisation into docility and subservience as they are expected to demonstrate that they are 'good' girls;
- The lack of local role models who can demonstrate alternative day-to-day pathways for adolescent girls and young women.

Voice and agency capability outcomes that would support adolescent girls' development trajectories

GAGE research will examine whether younger girls are able to negotiate with their parents and other family members for outcomes that impact their lives—such as a more equitable distribution of household labour, input into broader household decisions, and time and access to public spaces for recreation and community participation. It will also examine whether they are active participants in the classroom and have access to age-appropriate information. In the case of older girls, research questions will include whether they are able to make more decisions within the household and are moving towards becoming the ultimate arbiters of their own futures (within safe limits that acknowledge adolescent cognition). GAGE will also consider whether they are developing a sense of themselves as members of a community, rather than merely their own families, and have access to school- and community-based venues for developing voice and agency.

Testimony 1.5. Reshma: Roles in village life

My name is Reshma. I am a 16-year-old girl in 11th grade in school. I live with my mother and older brother in Nepal's Kapilvastu district.*

My mother is the village leader. She often holds many of the village's regular meetings in our home. She also has many other important positions. She is the secretary of the women's co-operative, sits on the water user committee, and is on my school management committee. My father has been abroad working. He is happy my mother is so involved in the village. He is proud of her.

I am a peer educator. Initially, my brother told my mother that he forbid me to do the programme. But my father stepped in and told my mother to let me go. I now run three sessions a week. I am also the president of the District Youth Club and the youth representative in the Ward Citizen Forum, a village level committee formed by the government.

The younger girls in the village are beginning to have more opportunities. I work hard to show other parents in the village that education does not mean that their girls will be spoilt. Everything is changing.

**Names have been changed*

Box 1.7. Challenges relating to voice and agency for adolescent girls

While boys most often see their space for decision-making grow in adolescence, girls often see theirs shrink, especially when they are removed from school or are married (Mmari et al., 2016; Basu and Acharya, 2016; Hallman et al., 2014; WHO, 2014a). With the growing threat of sexual and gender-based violence, and increasing emphasis on their sexual purity as a signal of family honour, adolescent girls have access to fewer physical spaces than do boys of the same age, which in turn deprives them of opportunities to express their opinions and practise leadership skills (Ghimire and Samuels, 2013, 2014; Tefera et al., 2013; Jones et al., 2013, 2014a, 2014b; Adelson et al., 2016; Heissler, 2011).

Critically, however, even when they have relatively equitable access to physical spaces, as social norms that equate femininity and docility become more rigidly enforced during adolescence girls are often forced to cede voice and agency to others in their environments in order to be seen as 'good girls'. In Rwanda, for example, Calder and Huda (2013) found that because girls are socialised to meet social expectations and maintain a good reputation they felt they were less able to control their own lives. In Gaza, as noted above, parents' growing concerns about adolescent girls' safety left them with fewer options for expressing, much less pursuing, their own needs and desires – leaving them feeling less valued even as they were more protected (Samuels and Jones, 2015). Similarly, in Nepal, while boys are expected to speak out and dominate, girls are expected to evidence increasing reserve as they prepare to become 'good wives' who are submissive and obedient to both their husbands and their in-laws (Ghimire and Samuels, 2014; Lundgren et al., 2013). The impact of this socialisation on girls' access to agency cannot be overstated. One study of more than 3,000 Bangladeshi adolescent girls found 70% had never participated in household decision-making and only 10% had seen their opinion acted upon (Rahman et al., 2007).

Girls' voice and agency is also sharply limited by the lack of role models they see in the world around them (Vaughan, 2016; Watson, 2015). Not only does women's political representation remain low – with women holding only 23% of seats in national parliaments and occupying only 17% of ministerial positions (UN Women, 2016) – but also even the day-to-day leaders that girls encounter are far more likely to be male. Teachers are a case in point. While the profession is heavily feminised in the Global North – a reality that admittedly causes its own problems – in many low-income countries female teachers remain comparatively rare. The result of long decades during which girls were denied their rights to a formal education, only about one-fourth of primary teachers in Côte d'Ivoire, DRC and Mali are female (UNESCO, 2016). In Liberia the rate is only 14%. Girls are especially unlikely to encounter female role models in secondary school. Across all low-income countries, only 22.8% of secondary teachers are female (ibid).

Economic empowerment

This capability domain focuses on whether adolescents are able to choose decent employment and access and maintain, in an age-appropriate manner, credit and control over their own incomes.

Challenges adolescent girls face in terms of achieving economic empowerment

- Adolescent girls in the Global South have fewer routes to economic empowerment than their male peers (see Box 1.8). Their pathways are frequently blocked by:
- Parental aspirations – and later personal aspirations – that centre on marriage and motherhood rather than education and employment;
- Educational outcomes that are still more limited – in scope and quality – than those of boys;
- Job markets that offer girls more limited employment options than boys;
- More limited access to the resource endowments (including land and assets), savings, credit and training programming that would help them create their own economic independence.

Economic empowerment capability outcomes that would support adolescent girls' development trajectories

GAGE research will explore whether younger girls are supported to aspire and are introduced, within the household, at school or in the community, to a range of possible occupations. As girls mature, the research will increasingly focus on whether adolescents are becoming more financially literate, have access to resource endowments-- including land and agricultural assets, and are able to access the cash and credit options necessary to support them to develop their own incomes. GAGE will examine whether girls' vocational training is matched to local environments and avoids pigeon-holing them in gender-segregated occupations. As girls enter early adulthood, GAGE will explore whether the options open to them in adolescence ultimately helped them obtain decent work that – including self-employment – that pays a living wage without incurring risks of ill-health and violence.

Testimony 1.6. Mohammed: Looking ahead

My name is Mohammed. I am a 17-year-old boy and for the last five years, since my family fled Syria for Jordan, I have been out of school and working to support my family.*

I work long days in the construction industry. I start work at 7:30 am and finish at 8 pm, six days a week.

My mother recently heard about an evening school for adolescents which allows students to study part-time for two years, to get a 10th grade certificate, and then eventually sit the national exam which would allow for university entrance. I am thrilled to have this opportunity. I loved school in Syria but I've had to prioritise other things here because of my family's situation and my responsibility for the household.

My salary might be cut, given that I will need to work fewer hours so that I can attend the classes. The next few years will be financially difficult for us because of this. My dream is to be an accountant so that I can take care of my father's business. He has a butcher's shop in Syria. We need a very good education to realise our career ambitions.

**Names have been changed*

Box 1.8. Economic empowerment challenges facing adolescent girls

In many Southern countries, driven by expectations that daughters will eventually become members of their marital families, the aspirations that parents hold for their daughters are markedly lower than those they hold for their sons. In early adolescence, girls begin to internalise these differences and lower their own aspirations to match those of their parents (Dercon and Singh, 2013; Nanda et al., 2014) – a process accelerated by the higher rates of exam failure in lower secondary school that result from their more limited time to study owing to heavy household work burdens. Girls' access to eventual economic empowerment is further restricted by the reality that in most low-income countries they have fewer options than their male peers for decently paid employment – or access to the credit they need to start their own businesses. Indeed, not only are girls and young women's unemployment rates significantly higher than those of their male peers (11.5% versus 9.3% for all low-income countries and 15.2% versus 12.8% for low- and middle- income countries in 2014) – especially in the Middle East and North Africa (47.5% versus 25.2%) (World Bank, 2016) – but also, where adolescent girls are employed, they are disproportionately likely to be confined to either agriculture or the informal labour market in general, and domestic work in particular (UN Women, 2015; Perrons, 2014; Nanda et al., 2013). While disaggregated data is only rarely collected, International Labour Organisation (ILO) (2013) estimates that, of the 17.2 million children engaged in domestic work in 2012, over 67% were girls. Indeed, its figures suggest that nearly 10% of all employed 15–17-year-old girls are working as domestics, risking daily exposure to not only exploitive work environments but also sexual and gender-based violence (ibid. ILO, 2016). Adolescent girls also have less access to assets, especially land, and to the financial and training opportunities that would enable them to grow their own incomes over time (leaving some vulnerable to transactional or survival sex, and/or to less than desirable marriage arrangements) (Vaughan, 2016; Girls Not Brides, 2016; Watson and Harper, 2013; Chiweshe, 2014; Mercy Corps, 2013; Bandiera et al., 2012).

Change strategies to support adolescent capabilities

While GAGE's primary focus is on adolescent girls, our ecological model recognises that helping girls flourish across capability domains requires diverse multi-faceted change strategies. One of the main gaps, however, in current approaches to reducing the threats facing adolescent girls and maximising their capabilities is a lack of attention to causal mechanisms; change processes are poorly understood and little attention has been paid a priori to either scalability or sequencing (Marcus, 2014; Fulu, 2014). The dearth of qualitative impact evaluation evidence, often required in order to address the 'whys' that are left after the quantitative 'whats', makes explication even more challenging.

Building on a growing body of evidence from the Global South, our framework posits that change strategies must facilitate other actors coming together to construct an environment that enables and supports girls to become the women they would like to become. It weaves together approaches that focus on girls with those that engage boys as well as families, schools, communities and broader services and systems. We are interested in exploring the relative contribution of diverse interventions, including those that emphasise i) human capital development – such as cash transfers incentivising girls' education and vocational training for girls; ii) gender empowerment approaches – such as clubs that provide girls with access to safe spaces, life skills tuition and mentors; iii) social norm change approaches – including programming that offers boys and men opportunities to explore new masculinities as well as parents' groups, community conversations and media campaigns aimed at re-valuing girls; and iv) legal reform and awareness tactics that enhance local to national-level capacity for the protection of girls' rights.

It is worth noting here that at a conceptual level, this separation of different types of interventions is critical to opening space for thinking about how to effect change in girls' capabilities. On a more pragmatic level, however, we acknowledge that interventions may frequently be inter-linked and that separation could be artificial. For example, while we have separated out schools as a critical venue

for creating change for girls—many of the school-based interventions likely to impact girls' capabilities also require strengthening the educational system and supporting policy change in the educational arena. Individual schools need toilets; teachers need training on gender responsiveness. District-level systems need to better monitor teacher absenteeism, while regional- and national-level systems need to create curricula for girls' clubs. National policy needs to address teachers' sexual abuse of girls.

Similarly, while we have addressed the importance of shifting social norms in the context of family- and community-based interventions, we understand that it is also important to address the ways in which broader institutions sanction and perpetuate inequitable norms. For example, individual health care providers can shame adolescents seeking SRH care, dissuading all but the bravest. Thus in contexts where laws and policies prohibit unmarried girls from receiving care without parental permission or require married girls to have their husbands' consent, sensitivity training must be paired with wider reform in order to improve girls' access to contraception. Similarly, although educating priests and imams about the dangers of child marriage is a useful and necessary step, to protect girls from child marriage, there is a critical need to complement such interventions with efforts to strengthen legal and child protective systems as well as buy-in from the leadership of religious institutions.

Finally, we also recognise that diverse local understandings of adolescence will shape the resonance of particular approaches in different national and subnational contexts but here present a broad brush strokes overview of different clusters of programme intervention approaches.

GAGE's conceptual model recognises five key change strategy outcomes:

1. More confident, empowered girls who have age-appropriate knowledge, skills and voice;
2. More gender-sensitive boys;
3. More supportive and egalitarian parents;

4. More supportive and egalitarian communities (including school communities);
5. More accessible, higher-quality girl-friendly services and systems.

To achieve these outcomes, GAGE's conceptual model envisions assessing the efficacy of inter-linked interventions focusing on:

Empowering girls

Building off their strengths and supporting their access to programming, centred around safe places where they can socialise, explore age-appropriate curricula and develop voice and agency

Our model recognises that safe spaces for girls to congregate, socialise and learn are central to their broader well-being. However, as it also acknowledges that they have different needs depending on their age and the context in which they live, it defines 'safe space' broadly and includes under its rubric school-based (e.g. Girls Education and Mentoring Services in India) and community-based (e.g. 12+ in Rwanda) clubs, sports opportunities (e.g. CARE's Power to Lead and Innovation through Sport) and savings groups (e.g. Save the Children's Kishoree Kontha), as well as the informal spaces under staircases or in doorways that girls carve out for themselves (UNFPA, 2015; Chakravarty et al., 2015; Bandiera, 2015; Brown and Oddsdottir, 2013; Girl Effect, 2013; Baldwin, 2011). While we understand that, from girls' perspective, the largest value of these spaces often lies in the opportunities they afford to socialise, we also see these spaces as venues through which to deliver a gender-transformative curriculum that teaches age-appropriate information and skills, fosters awareness of shared gender interests and supports girls to develop aspirations, self-efficacy and voice.

The majority of recent girl-focused programming, regardless of what other content it delivers, includes some sort of safe space programming. As Girl Effect (2013) notes, this is because research has identified a wide variety of ways in which safe spaces help girls reach their potential. First and foremost, they help girls develop the supportive peer networks that reduce the social isolation that all too often accompanies puberty in Southern countries. This not only gives girls a chance to simply be adolescents and have fun with their friends, but also helps them learn to trust themselves and others – critical if they are to learn to speak up and out. Safe

spaces also, depending on the content they deliver and the role models with whom they link girls, help girls broaden their horizons and aspire to different futures. They also encourage independence, at the very least through improving girls' mobility, and can enhance girls' safety, by encouraging them to move about together, teaching them about their rights and providing them with trusted adults who can serve as sounding boards and safety nets for the many opportunities, threats and decisions girls face as they move through adolescence (e.g. how to handle peer pressure, set limits around romantic relationships or negotiate with parents to stay in school).

Existent interventions have linked a wide variety of content with safe spaces, including basic education and tutorial support, livelihoods training and financial literacy, sexual and reproductive health programming and rights awareness programming on issues including gender-based violence, child marriage and harmful traditional practices. Results have overall been quite positive – albeit not always replicable and often dependent on selection effects (Baird and Özler, 2016). BRAC's Empowerment and Livelihood for Adolescents, for example, offered Ugandan girls safe spaces combined with livelihoods and life skills training. Participant girls not only increased their incomes but also reduced their exposure to forced sex and their odds of child marriage and adolescent pregnancy (Bandiera, 2015). Egypt's Ishraq combined social support with informal education for out-of-school adolescent girls. Assessment found participant girls more literate and knowledgeable about sexual and reproductive health (Sieverding and Elbadawy, 2016). CARE's Tesfa offered Ethiopian girls financial education, sexual and reproductive health education or a combination package – again in conjunction with safe spaces. The evaluation found that, while there appears to be trade-off between the broadest and the largest impacts, with the combined package delivering more but smaller magnitude effects, the most transformative aspect of programming may well have been via reductions in girls' social isolation (Edmeades et al., 2014, 2016). Indeed, married girls were so empowered by having the opportunity to come together and discuss how marriage had impacted their lives that, even though the programme was not aimed at preventing child marriage, girls took it upon themselves to work in their communities to end the practice (Edmeades et al., 2014; Jones et al., 2016b). Recognising the power of this

sort of collective action, some safe space interventions (e.g. Rwanda's 12+) are now including action practicums, which offer girls opportunities to develop leadership skills and become involved with community campaigns that impact their lives.

In addition to safe space programming, other interventions aimed at girls have included providing them with other types of access to information, such as through radio dramas (e.g. Kenya's Chakruok, which was aimed at married girls unreachable through other mechanisms), magazines (e.g. Girl Effect's Ni Nyam Pinga in Rwanda), hotlines or social media. Programming has linked girls with in-kind or financial transfers – such as cash transfers, school uniforms or sanitary supplies – to help the poorest girls offset their economic disadvantage.

Engaging with boys and men

Engaging them in gender-transformative programming that will help them exercise positive masculinities critical to opening space for their sisters and female peers' growing capabilities

While recognising that adolescent boys face a wide variety of gender-specific threats of their own – and as such deserve programming that helps them reach their own capabilities (Kato-Wallace et al., 2016) – GAGE's focus on adolescent girls means boys' inclusion is viewed through more focused lens that explores the relative effectiveness of approaches that target them as brothers, peers and future husbands (and fathers) in order to achieve gender-transformative outcomes for girls. Recent approaches aimed at encouraging more egalitarian gender attitudes and behaviours include helping them share chores so their sisters and wives can study and rest, using their more favoured social status to advocate for girls' aspirations – especially where families and communities are less supportive of change – and working against sexual harassment and violence rather than perpetrating it. In addition to broader social media campaigns, there is growing evidence that adolescent boys can be effectively reached through arts and sports opportunities, particularly where they can be combined with positive male role models (Berents, 2016; Jejeebhoy et al., 2016; Das et al., 2015; Berkowitz, 2004).

Supporting families

Supporting them through programming including economic support, positive parenting and norm change interventions – to help them support their daughters to achieve new futures

Recognising that today's families are effectively parenting their adolescent girls in a brave new world, given rapid transformations in the educational, economic and social landscapes of most Southern countries, our conceptual model underscores the importance of directly targeting parents and extended family members with programming that simultaneously promotes normative change and encourages positive parenting. To help families see all children through a more gender-equitable lens that recognises them as individuals with their own unique abilities and aspirations, there are a range of emerging interventions. These include parents' groups (e.g. guided mothers' support groups or parent teacher associations), home-based curricula (e.g. via health extension workers) and positive masculinities programming (e.g. MenCare, 2016; GEC, 2016; Jones et al., 2016b; MenEngage, 2016; Abuya et al., 2016). Critical for the longer-term well-being of both girls and boys is that interventions help parents and other caregivers find the fine line increasingly required for modern parenting, especially in more urban environments, which requires that they avoid the instrumentalism and gender discrimination of the past while actively managing their children's adolescence (Jones et al., 2016a; Plan Nepal, 2012; UNICEF, 2011b). In some contexts, this will mean helping parents simultaneously encourage their daughters' aspirations and support them to negotiate the hard realities of the world safely and responsibly. In other contexts, where adolescents are claiming more independence than is safe, it will mean helping parents set more rigid boundaries around their children's behaviour, even where their children are literate and they are not. In addition to supporting such norm change within families, there is a robust evidence base that suggests that, where parents' ability to practically support their daughters is constrained by a lack of resources, financial and in-kind transfers can be powerful levers to help incentivise girls' education (de Groot et al., 2016; UNGEI, 2014; Nanda et al., 2014; Baird et al., 2011; Erulkar and Muthengi, 2009).

Promoting community social norm change

Working with gatekeepers who have the potential to accelerate social norm change and then cascading messaging to the broader public

Given that social norms are held in place by expectations – and that community environments become increasingly important to shaping girls capabilities as they progress through adolescence – targeting broader communities is crucial to building the support girls need to optimally progress through the second decade of life. It is particularly important in environments where adolescents look for emotional support from non-related adults (Bray and Dawes, 2016). Community-level interventions increasingly begin by focusing on the community and religious leaders who typically uphold local customs and traditions (e.g. World Vision's Channels of Hope and CARE's Social Action and Analysis Groups) (Edmeades et al., 2014). While there are a range of approaches, including both informal conversations in tea shops and other masculine spaces aimed specifically at men, and more formal presentations hosted by NGOs at local schools, emerging evaluation evidence suggests that more effective models encourage dialogue between a range of community norms-holders and foster ownership of change based on local realities and positive outliers (Jones et al., 2016b; Edmeades et al., 2014; Erulkar and Muthengi, 2009; Abuya et al., 2016). Other pathways for community engagement might include, depending on context, mobilisation around the safety of public spaces or the creation of girl-friendly recreation zones. HarrassMap, for example, has helped bring sexual and gender-based violence into the open in a handful of countries with the worst rates of sexual harassment, giving women a simple way to publicly report harassment and encouraging community members to mobilise to make spaces safer (HarrassMap, 2016). Media campaigns designed to boost the value of girls, such as Ethiopia's Yegna or Uganda's GREAT, have also been found to be helpful, particularly when they are paired with face-to-face discussion groups that give community members an opportunity to discuss the new ideas introduced by programming (Jones et al., 2015a; Kerner, 2016).

Strengthening school systems

Supporting them to become more adolescent-friendly and gender-responsive spaces

Schools are a critical locus for adolescent development, especially as children throughout the developing world become more likely to transition into secondary school rather than leaving education after they complete primary school. As the locations where adolescents often spend the bulk of their non-home time, and the primary venue for peer interaction, schools are critical to empowering adolescent girls, especially those marginalised by complex webs of contextual, economic, social and lifecycle factors (GEC, 2016; Achyut et al., 2016).

Our framework envisions a variety of change strategies that work through schools. For example, in countries where evidence suggests gender-segregated toilets would improve girls' school attendance – or simple adaptations would allow girls with disabilities to attend school – our model supports infrastructure improvements. Where, on the other hand, girls leave school because teachers are poorly trained in the more active teaching methods that engage adolescents, see girls as less able students than boys or fall back on violent discipline to manage classroom behaviour, it calls for helping strengthen the capacity of teachers and school management (e.g. through increased training or anonymous reporting 'mail boxes'). Emerging evidence suggests other promising change strategies working through schools might include, depending on context, programming that helps girls develop the soft skills they can use to optimise academic skill sets; helping schools develop school councils that foster adolescent engagement on more political issues or improve parent-school communication; linking teachers and schools into reporting chains that can help girls address immediate threats of child marriage; instituting enforcement mechanisms to ensure teachers' absenteeism is reduced, etc. (GEC, 2016; Chinen and Coombes, 2016; Achyut et al., 2016; Jones et al., 2015a, 2016a, 2016b; Transparency International, 2013). Critically, the GAGE model recognises that, by positioning themselves as more gender-equitable spaces with zero tolerance for sexual and gender-based violence, schools also offer a unique opportunity to nurture change in whole cohorts of children at once (Vaughan, 2016).

Strengthening adolescents services and systems

Strengthening the services and systems with which girls interact

While there is considerable focus on demand-level change in current programming for adolescent girls, it is also key to work on strengthening the services and systems on which the development of girls' capabilities depends. In most low-income countries – and especially those that are fragile and conflict-affected – these services, which include (in addition to schools above) health care, child protection, social work, gender-based violence services and legal aid, have very limited institutional, financial and human resources and struggle to meet existent need. In some contexts, human resources lag. In much of sub-Saharan Africa, for example, youth-friendly sexual and reproductive health services are largely unavailable (Pathfinder, 2012). This has had devastating impacts on adolescent pregnancy rates in countries where pre-marital sex has become more common, such as Uganda (Kyomuhendo Bantebya et al., 2013, 2014). In other contexts, financial resources lag. In Ethiopia, for instance, even where district (woreda)-level commitment to preventing child marriage is high, officials often lack the staff and transport that would enable them to regularly monitor more rural communities (Jones et al., 2016a).

Legal frameworks also need attention. In some countries there are strong legal frameworks, but only limited awareness of those frameworks – suggesting a high need for legal education. In other countries, frameworks themselves need refocusing. In Viet Nam, for example, where Hmong adolescent girls regularly

witness alcohol-fuelled domestic violence among their parents, current laws emphasise family reconciliation rather than child protection or violence prevention. This means women and children's well-being is sacrificed for the notion of familial harmony (Jones et al., 2013). System-level shortcomings are further exacerbated by a dearth of social workers in general and of those with a specific child protection and gender-based violence case management mandate in particular.

In order to grow capacity to meet newly created demand among adolescent girls, government systems need to be supported to develop not only a stronger adolescent-friendly lens but also more and better-qualified human resources; better reporting and management information systems; and better monitoring and evaluation capacities. In many contexts, they also need assistance developing linkages and referrals, making and monitoring budgets and sharing lessons they have learnt.

As with girls, however, there is no one size fits all approach to strengthening systems and services. Not only do laws and policies vary between countries, but even within countries some sectoral policies are much stronger than others (e.g. education tends to be much stronger than domestic violence). Government buy-in and capacity also varies—with the areas seeing the most resistance from conservative social and religious actors (e.g. changing practices such as child marriage or FGM) often seeing the largest capability deficits and the most significant coordination issues, especially at the subnational level, but at times also at the national level.

Box 1.9. Taking account of non-linear change processes

Given the complexities of the contexts adolescents inhabit, it is critical to also think through not only the ways in which change strategies can most effectively be woven together in order to support change—but also better understand how they can unintendedly slow or undermine change. For example, early research found that Ethiopia's public works programme, the Productive Safety Net Programme (Hoddinott et al., 2009; Kebede, 2012), resulted in some girls being pulled out of school as their own domestic labour was substituted for that of their mothers. Similarly, despite decades of global research that has identified education as central to reducing child marriage, recent research in Viet Nam's Hmong communities found that improvements in lower-secondary enrolments may be driving an increase in child marriage, with young adolescents choosing to marry for "love" as soon as they complete the 9th grade and are forced into the more solitary lives in subsistence agriculture (Jones et al., 2014a)

GAGE is well positioned to explore these non-linear change processes. Our quantitative work will help us to identify patterns, find relationships, and measure change. Our qualitative work, especially the annual cohort through which we will track the same girls over time, will facilitate the in-depth exploration that speaks to how and why change happens. This will not only allow us to disentangle impact pathways, but also to thoroughly investigate—from girls', boys' and parents' perspectives—unexpected outcomes and drivers.

Context dependency

GAGE's conceptual framework recognises that both adolescent girls' capabilities and the change strategies aimed at supporting them are deeply dependent on the contexts in which they are situated. As noted by Harper et al. (2017 forthcoming), the interplay of diverse context factors plays an important role in shaping the vulnerabilities and opportunities facing adolescent girls, including the uptake and resonance of specific programming and services. Local variation in socio-cultural and religious traditions, geographic location and employment opportunities combined with broader patterns in population dynamics, conflict, governance and climate change are likely to have a profound effect on development trajectories.

How to disentangle the effects of these different and inter-related context layers is challenging, compounded by the fact that the global evidence base on the relationship between adolescent trajectories and diverse context variables is especially thin (Sheehan et al., 2017). Through its cross-country comparative research design, GAGE will pay particular attention to a range of context factors which remain under-researched in the global evidence on adolescent development experiences, including contexts of fragility, urban versus rural settings, settings with distinct socio-cultural and religious traditions, as well divergent governance and state-civil society relations.

To facilitate analysis the GAGE framework's ecological approach distinguishes between family, community, state and global context spaces and factors, whilst recognising that in reality context factors may manifest as a web of influences with multiple sites of overlap and inter-connectedness.

Family contexts

As discussed in the section on Change Strategies above, an adolescent's family context is likely to play a critical role in terms of her access to economic, social and emotional resources, exposure to educational opportunities, female role models and development of positive aspirations for her future, among others. Families – including in-

laws in the case of married girls - can also play a more negative role in terms of demands for domestic and care work support, de-prioritisation of girls in terms of the allocation of economic resources, the practice of age- and gender-based violence either by parents or siblings, and pressures to undergo child marriage and/or other harmful traditional practices. Critically families often constitute the site in which age- and gender-related norms play out most intimately and concretely – parents, and in many cultural contexts also older brothers, seek to ensure conformity with dominantly held social norms, and enact sanctions in the case of non-compliance.

Community contexts

The community space in which adolescents live also plays a critical role in shaping both the vulnerabilities they face, as well as the opportunities – including programming and services – they are able to enjoy. And as discussed in the Change Strategies section above, as adolescents become older, community dynamics – including the availability of spaces to congregate with peers in a safe and supportive environment, and access to guidance from non-family adults - become increasingly important.

Rural versus urban

The geographical location where an adolescent resides constitutes an important mediating factor in shaping what community-level challenges and opportunities are present. Because rural poverty and disadvantage has been a critical focus of development interventions in recent decades, we tend to know more about the types of challenges adolescents face in rural settings – including lack of transport, long distances to schools, markets and other services, the time intensity of water and fuelwood collection, and the dearth of economic opportunities for young people in particular (e.g. Harper et al., 2017). In Viet Nam, for example, Hmong girls residing in remote mountainous communities have seen remarkable transformation in their access to and uptake of formal education in recent years, with most now graduating from lower secondary school. However, the

complete absence of employment options in their local environment – combined with the reality that restrictive gender norms are central to Hmong identity – has meant that very few have been able to translate schooling into employment or broader empowerment (Jones et al., 2014a, 2015b; see also Vaughan, 2016). In Ethiopia, on the other hand, rural girls' growing access to domestic and international migration and the cash economy is pulling many out of school, sometimes even before the end of primary school, albeit with considerable social and emotional costs given the divide between their rural natal communities and their urban destinies (Jones et al., 2014c, 2015a, 2015b).

More recently there has also been greater attention on the emerging and unequal gendered effects of climate change in agrarian and pastoralist settings. While adolescent girls only rarely enjoy access to resources—land, water, energy, etc.—equal to their male peers, when those resources are stressed girls are especially likely to lose out. For instance, in times of drought in Ethiopia, Plan found that the time girls spend fetching water for their families can rise from two hours a day to six—effectively preventing them from attending school.⁴⁰ Similarly, because few girls and women have legal title to the land they farm—even though they have primary responsibility for producing own-consumption food stuffs around the world—their access to the training and inputs that would

enable them to adapt to environmental change is minimal (Masson, Norton and Wilkinson, 2015).

By contrast, we know relatively little about the specific challenges and opportunities available to adolescents in urban settings (Chant et al., 2017). Urban girls have many diverse needs, which are growing exponentially and fracturing as urban areas themselves further diversify into informal settlements, peri-urban areas, enclaves for migrants, etc. For example, while girls and women are overrepresented in informal settlements around the world, slum areas rarely have lighting and separate toilets, vital for improving girls' physical safety. Even when services are available, urban girls can find it difficult to access them, either because of their responsibility for time-consuming household chores and caring for relatives, or (in the case of access to contraception, for example) embarrassment and fear of being found out (UN Habitat, 2010).

Socio-cultural and religious traditions and norms

Another critical community-level context variable involves the religious and moral context in which adolescents find themselves. While family members are often those who police compliance with social norms, community leaders and opinion leaders, including religious and traditional leaders often play a critical role

Box 1.10. The role of religion in shaping gender norms

Religion plays a very important role in reinforcing and emphasising social and gender norms that often restrict and control girls' lives. Religious groups influence adolescents in diverse ways in different contexts: through their teachings and, in some cases, through specific programmes imparting religious and moral teachings to adolescents. While religious institutions often have a national presence, the ways in which teachings are interpreted and communicated can vary considerably at community level where in many contexts religious leaders often enjoy significant social status. However, although young people often self-identify with their religious community, and express interest in participating religious institutions our formative qualitative research has highlighted that, in Ethiopia, in particular adolescent girls often do not have any voice or agency within religious institutions and may even be excluded from attendance at religious services – whether they be Orthodox Christian or Muslim.

Cognisant of these complexities, the GAGE qualitative and survey-based research will strive to unpack and understand the influence of religion and socio-cultural traditions and norms on girls' choices and capabilities. While there is increasing attention to the role of social norms in shaping capability outcomes for adolescent girls (e.g. Harper et al., 2014), experts increasingly recognise that a norms lens risks being applied somewhat mechanistically, lacking a nuanced and contextualised understanding of broader power relations and politics (Harper et al., 2017). Accordingly, we will also engage with local leaders and key faith-based organisations through stakeholder workshops for our Policy and Legal Analysis work-stream to understand potential entry-points and challenges to shape the discourse within religious communities. Finally, the interventions that we will evaluate take an ecological approach to adolescent girls programming and in several countries including Nepal and Ethiopia we will assess the relative effectiveness of community dialogues, which typically also interface with traditional leaders and faith-based organisations.

in either championing or challenging restrictive gender norms (see also Box 1.10). Female genital mutilation or cutting (FGM/C) and child marriage in particular are often driven by perceived religious strictures surrounding purity. Similarly, conservative norms when embodied by teachers and healthcare providers regarding, for example, unmarried girls' sexuality can make it difficult for adolescent girls to seek effective information and care in their community (Chandra-Mouli, 2014). Such stigma, and a dearth of adolescent-friendly services, increases girls' risk of a host of negative outcomes including HIV, gender-based violence and pregnancy.

State-level context factors

Our ecological approach pays particular attention to variation at the state level and the extent to which governance dynamics and institutions take into account local need and diversity. Differences in resourcing, both financial and human, and the politics surrounding commitments to the implementation of policies and legal frameworks, from national to subnational levels, play a large role in the extent to which adolescent girls' needs are rendered visible and prioritised. Nepal's gender budget initiative, for example, has resulted in significant reallocation of spending priorities. The proportion of government spending considered (by the government) directly gender-responsive grew from just over 11% in 2007 to nearly 22% in 2014 (Poudel, 2014). Similarly, the push to educate Hmong girls has resulted from a national commitment to universal lower secondary education, while recent declines in child marriage in Ethiopia are in part driven by the government's federal to state level commitment to end child marriage by 2025 (Jones et al., 2016a, 2016b).

Contexts of fragility

However, in areas characterised by what Gough (2013) terms 'insecurity regimes', including conflict-affected geographies and camps for displaced people or refugees, adolescents will face distinct and overlapping risks and vulnerabilities and therefore require different and highly tailored programming, especially when state and social institutions are non-functional or severely compromised. In the case of adolescent girls from Syrian refugee communities in Jordan, due to experiences of extreme violence and trauma, and the perceived level of risks of sexual and gender-based harassment and violence

within host communities, means that many adolescent girls remain almost completely home-bound without access to education, peer networks or psychosocial support services (Abu Hamad et al, 2017).

Civil society-state dynamics

Variations in the space allocated to civil society are also important to girls' outcomes because of the way in which greater freedoms for CSOs can translate into deeper engagement with the government and more opportunities to hold leaders accountable (Tembo and Chapman, 2014). Where CSOs face a more restrictive environment, it becomes more difficult to deliver innovative programming to girls. Sometimes this is because NGOs are largely shut out from direct service delivery or prohibited from engaging in advocacy around certain issues; other times it is because they must rely on existent rubrics for identifying beneficiaries that effectively exclude the most vulnerable (Jones et al., 2016a). On the other hand, where there is already a vibrant women's movement (e.g. India, parts of Latin America), there may be more space to engage on broader gender equality issues – though recent experience suggests that, as movements have fragmented to variously focus on employment, food security, maternal health, etc., they have almost entirely abandoned adolescent girls' issues, which tend to require more attention to intersecting vulnerabilities. More vibrant women's movements may also encourage informal conservative backlash, especially with regard to sexual and reproductive health rights. GAGE's policy and legal analysis work-streams will explore some of these tensions. Critical in all countries, regardless of the space allocated to CSOs, is that attention be paid to how girls' voices are embedded in and interact with CSOs and broader movements. Where there are strict age hierarchies, for example, girls may have little voice even in women's organisations.

Global context factors

The final set of context factors that our framework considers are global, including the role of international conventions and frameworks; the related advocacy and programming work of international NGOs and global rights movements; the relative influence of bilateral and multi-lateral donor funding, policies and programmes; the pull and push of migration opportunities, the effects of an increasingly globalised economy on local employment

markets; as well as the influence of digital technologies in shaping adolescents' ability to communicate and be connected with people and dialogues that transcend state borders (see Box 1.11). As part of the political economy analysis that GAGE will include in its mixed methods research approach, we will explore the relative importance of international conventions and discourses on adolescence and gender in shaping national level policy and programming behaviours, including the programming and advocacy approaches adopted by

INGOs and by the donor community, and the ways in which international trends intersect with state-level political and institutional dynamics. As the GAGE cohort of adolescents that we will track longitudinally reach mid- and older adolescence, we will also explore the effects of migration opportunities on adolescent girls' decision-making around investments in education and employment, as well as the effects of globalisation on gendered labour market opportunities.

Box 1.11. Girls and the rapidly evolving digital media landscape

Driven by the size and youthfulness of the developing world, adolescents in the global South are one of the fastest growing populations of internet users. Access can be a double-edged sword. It offers potential for education and recreation, including a channel through which girls can 'meet' new ideas and safely build the voice that may be constrained in real life by social norms dictating silence and subservience but some content available online is grossly inappropriate for young people, and the internet provides a mechanism for predatory men. One challenge is to ensure that the internet is equally available to girls and boys. Current evidence suggests that it is not. This is because parents are less likely to fund mobile access for daughters than for sons and girls often report feeling unsafe in "public" access spots such as internet cafes. Another challenge is how to keep girls safe in the digital world. While children in the global North have parents and teachers who can guide them through safety and privacy issues, young people in the global South are not only more likely to be online than their elders—they are more likely to be literate.

Indeed, understanding and building programming around even the most subtle differences in girls' geographical locations can be critical to whether programming helps or hinders progress. While text messaging and social media are transforming many (though not the poorest) girls' lives across the world--from reminding them to seek healthcare to helping bank the unbanked--they can also be risky if adequate guidance is not available. Hmong girls in Viet Nam, for example, report that traffickers often rely on text messaging to tempt potential victims and then make plans with them once they are "hooked".

Balancing these concerns, and maximising the internet's potential for introducing transformative change, especially in the light of governments who all too often respond by restricting access entirely, is one that will require care and forethought.

Source: Kleine et al. (2014), De Pauw (2011),



GAGE's core research questions

Stemming from our conceptual framework, GAGE will seek to address two core sets of questions. The first is framed around adolescent perspectives and experiences and based on the capabilities narrative presented above. The second set, around the relative efficacy of different types of change strategies in diverse contexts, begins with the evidence presented above but is further nuanced below. More specifically, these questions are as follows:

Research questions on understanding adolescent experiences and perspectives

- What is the patterning of adolescent outcomes across each capability domain? (see specific questions that GAGE will explore under each capability domain above)
- What factors – including gender roles and responsibilities, familial support, discriminatory social norms, urban/rural residence, access to quality schooling and other adolescent-friendly services – shape adolescent well-being at different stages in the second decade of life? (see also Box 1.12 for emerging debates which GAGE's cross-country comparative research will be able to speak to regarding a global convergence of core adolescence experiences).

- How do adolescent girls and boys themselves understand their worlds as gendered? And how does this vary by context – within and across countries?
- How much do adolescent girls' and boys' experiences, attitudes and identities in early adolescence shape their subsequent behaviours and world views across the second decade of life and into early adulthood?
- How do adolescent girls and boys understand the wider macro-level context, and their place in the changing social and political order?

Research questions on programme effectiveness

Timing

When is the best time to intervene in adolescence, using what types of change strategies in what contexts?

Evidence from existent girl-focused development programming suggests that different interventions are best timed differently and that in most contexts girls benefit from a more integrated approach that bundles modalities (Yount et al., 2016; Rose and Gordon, 2016; Patton and Reavley, 2016; Nanda et al., 2013). Some types of programming appear particularly suited for younger teens. For example, as gender gaps in learning tend to

Box 1.12. Converging adolescent experiences versus context specificities

While the experience of adolescence varies by both individual and culture, with the line between childhood and adulthood blurred where adolescents do not live with their parents and must work to meet their own basic needs and contribute to the household economy (Bray and Dawes, 2016), there is a widely recognised arc to development that largely transcends particularities. Indeed, although 'marked variabilities in family forms, in the relevance of school systems to cultural norms and economic opportunities, in access to health care and leisure activities, in religious orientations and values... can create deep fissures in the experiences of adolescents from one nation to the next... or among different economic or social groups within a nation' (Brown et al., 2002: 19; see also Hart et al., 2004; Lloyd, 2005; Breinbauer and Maddaleno, 2005), there is growing evidence that the global 'experience' of adolescence is slowly converging as children spend more years in the age-segregated environment of school (Bray and Dawes, 2016; Hammack and Toolis, 2015; Jensen and Arnett, 2012; Casey et al., 2011; Brown et al., 2002; Schlegel and Hewlett, 2011; Schlegel and Barry, 1991). Indeed, even as the notion of adolescence as the transition between childhood and adulthood begins to fray, as 'emergent adults' are unable to assume traditional adult roles because rapid socioeconomic change has narrowed older pathways faster than it has opened new ones – trapping many, especially young men, in decades of 'youth' or 'waithood' – global similarities in the developmental milestones through which young people in the second decade of life progress are striking (Jensen and Arnett, 2012; Arnett, 2011, 2000; Honwana, 2012; Galambos et al., 2007).

emerge in early adolescence (Krutikova and Singh, 2016) and as once girls fall 'off track' educationally it becomes far more difficult for them to complete their schooling, most research has found that educational interventions return greater benefits when they are targeted to younger girls. This is especially when they are mindful of nationally determined transition points (such as exam schedules and between primary and lower-secondary school) (Edwards et al., 2014; Erulkar and Muthengi, 2009; Abuya et al., 2016). Similarly, evidence on early adolescence as a 'sensitive period' for social processing (Blakemore and Mills, 2014; Crone and Dahl, 2012; Fuhrmann et al., 2015) and the adoption of gender norms (Kågesten et al., 2016; Basu and Acharya, 2016; John et al., 2016; Mmari et al., 2016) suggests that programming aimed at girls' psychosocial well-being and notions of gender empowerment should start with younger girls.

By contrast, some interventions appear better targeted to older girls. Growing evidence suggests, for example, that, while sexuality and financial education should begin laying formative rights-based groundwork in childhood (UNESCO, 2009; Aflatoun International, 2016), the most intensive interventions are probably best delivered when girls are older. In-depth sexual and reproductive health curricula, for example, are rarely appropriate for the youngest adolescents, given that most are more embarrassed than interested – and that their parents and teachers are largely uncomfortable with the notion of their exposure to 'adult' content (Erulkar and Medhin, 2014; Laterite and Plan, 2014). Similarly, vocational training and economic empowerment programming seems best suited to older girls, who are more likely to have a reason for saving and budgeting and to be working outside the home (Austrian and Muthengi, 2013; UNIOF, 2012).

Given that most evaluated programmes target adolescent girls aged 10–19 without clear differentiation of age groups, it is critical that GAGE direct attention to age disaggregation and the ways in which it impacts uptake and outcomes of programming. The limited evidence that exists suggests that, when programmes are open to a wide range of girls (e.g. 10–19 or even 10–24), the youngest are often effectively shut out. For example, the endline report of BALIKA in Bangladesh found that participation was highest among girls aged 14–15 (Amin et al., 2016). Data from Biruh Tesfa in Ethiopia showed that girls aged 15–19 accounted for the majority, whereas those aged 11–

14 comprised only 18% of participants (Erulkar et al., 2011). In particular, those aged 10–12 tend to benefit less in all types of interventions, with the exception of programmes aiming to improve girls' primary school enrolment and attendance. This said, the quest to specify optimal intervention packages for relatively small age cohorts may be misplaced – in part because optimal intervention packages will be so context-specific and in part because precise age is not always a defining issue. Life stage, such as being in primary school, secondary school or out of school, being married/in union and having a child or being single and childless may be more meaningful differences. At the same time, there is a danger in over-segmenting interventions, as this may end up excluding vulnerable groups of girls and producing backlash. GAGE can help in exploring these issues.

Which programmes must be delivered in early adolescence in order to see significant returns on investment?

Overall, given that girl-focused programming rarely disaggregates between adolescent girls of different ages, there is little evaluation evidence that speaks to whether it can ever be 'too late' to intervene with girls in most regards. As noted above, however, current evidence suggests that early adolescence is likely to be a better intervention point for many types of programming (McCarthy et al., 2016). Given the rapid growth girls experience just prior to and immediately after menarche, for example, nutritional interventions would be unlikely to result in permanent impacts on girls' body stature or brain development if they were delivered later in adolescence (Prentice et al., 2013; Francis et al., 2002). Similarly, evidence from Ethiopia's Berhane Hewan (Erulkar and Muthengi, 2009) and Egypt's Ishraq (Sieverding and Elbadawy, 2016) suggests educational programming is best delivered to younger girls. The former found programming did not improve older girls' school enrolment and the latter found they were less likely to join and more likely to drop out, perhaps because of child marriage. The most conclusive evidence regarding whether programming can be 'too late' comes from Malawi's Zomba cash transfer programme. A legacy impact study conducted five years after the intervention ended concluded that aiming the programme at girls eligible to attend the final years of primary school might have indeed been 'too late' (Baird et al., 2015).

Duration and intensity of programming

Are current interventions too short and/or lack intensity?

There is little evidence that speaks to intensity or duration. Indeed, what little evidence there is likely says more about which girls select into longer-term or more intense programming than it does about programming itself. That said, programmes do appear to be more efficacious for girls who participate the most intensively. For example, Acharya et al. (2009) found in the Better Life Options Programme (India) that comprehensive awareness of HIV transmission routes had increased by from 21% to 50% among all intervention participants and from 26% to 63% among all regular participants (those who had attended more than half the sessions). Similarly, in the DISHA programme in India, depth of exposure was a significant factor in changing gender norms and attitudes, with the degree of change between 1.5 and four times higher for girls and young women who took part in the targeted (high-intensity) intervention, as opposed to the mass intervention (Kanesathasan et al., 2008). There is, however, little evidence systematically testing a range of intensity options. For example, while girls in India's Kishoree Kontha programme preferred shorter, more frequent, meetings (Glennerster, 2013), we do not know whether there are thresholds above which greater frequency of meetings or longer meetings is counterproductive because it is too time-intensive. Furthermore, although most evaluations indicate the number of life skills or vocational training sessions, there is no comparative material examining whether a different design might have been more effective.

While again noting a dearth of evidence with regard to duration, there is some evidence that impacts from longer duration programmes may be stronger. The strongest evidence comes from Egypt's Ishraq. Girls who participated for the full 30 months consistently demonstrated greater increases in academic skills in reading, writing and mathematics than those who participated for shorter periods (Brady et al., 2007). The duration of participation in the Ishraq project was also associated with changes in the rate of child marriage. On the other hand, one study of a programme working to promote alternative masculinities in Ethiopia found that attending around a third of scheduled sessions was sufficient to lead to attitude and practice change (Pulerwitz et al., 2014).

It is important to guard against the temptation to assume more (i.e. longer or more frequent activities) necessarily equates to better-quality programming and it is vital to take into account other demands on adolescents' time. However, as with programme intensity, there is no evidence concerning thresholds, above which returns from a programme diminish. Likewise, although there are often data on the length of programmes, there is an absence of experimental analysis of the effectiveness of different designs. If we are to reach the Sustainable Development Goals with available resources, it is critical to understand what sorts of programmes are catalytic and scalable.

Combination of programme components/ (de)bundling

How do investments in girl-focused programmes compare with more proven approaches such as cash transfers?

There is a slowly growing evidence base on the relative impact of different programme components, as a result of a growing number of experimental and quasi-experimental evaluations with different programme arms (e.g. the Population Council's Adolescent Girls Empowerment Programme and BRAC's Empowerment and Livelihood for Adolescents programme). Overall, this suggests that, while cash and in-kind transfers can be critical to some outcomes for some girls, with the Transfer Project showing impacts on sexual debut, pregnancy, child marriage and transactional sex (Palermo, 2016), other types of programming can be even more effective for most girls and the synergies between transfers and other modalities can be large and worth pursuing.

Apni Beti Apni Dhan cash transfer is a case in point. The programme, which provided mothers with a small amount of cash after the birth of a daughter, and then girls with a larger amount of cash when they turned 18 if they were unmarried, increased the probability of girls' completing Grade 8 and improved the number of hours they were allowed for homework. It did not, on the other hand, reduce their odds of child marriage, change the probability that they would complete Grade 12, alter their mothers' aspirations for them or change the gender-equitable attitudes of either mothers or girls – because the programme did not pair cash with even minimal messaging aimed directly at norms (Nanda et al., 2014, 2015). Indeed, beneficiaries indicated that even

improvements in girls' education were related to their marriageability. An ongoing evaluation of Kishoree Kontha in Bangladesh also speaks to the power of combining cash with other types of programming. Initial results suggest impacts on girls' schooling are the largest when a financial incentive is combined with a 'basic package' that includes safe spaces and gender empowerment programming³ (Bakhtiar, 2013; Glennerster, 2013).⁴ Finally, while an evaluation of Morocco's cash transfer programme found cash helped girls – but not boys – progress through school on time, it also found cash was insufficient to reduce girls' unpaid care and suggested pairing subsidies with community norm interventions (Pesando, 2016). GAGE will explore the extent to which tailored girl-focused interventions are more genuinely transformational than other more general human capital development approaches, and in which capability domains.

How effective is a minimum package approach targeting girls versus a more ecological model?

Are there gains from (un)bundling programme components?

There is a growing consensus that multi-component interventions are more effective than single-component interventions for achieving a number of adolescent girl outcomes, with Nanda et al. (2013) concluding that comprehensive programmes should be the 'new norm' (p.45; see also Yount et al., 2016; Rose and Gordon, 2016; Patton and Reavley, 2016). For example, Yount et al.'s (2016) systematic review of violence prevention (defined broadly to also include child marriage) for adolescent girls found single-component intervention studies had the least favourable outcomes, with four of five single-component intervention studies having no impact or mixed results. By contrast, four of six bundled

interventions had positive outcomes. There is also some evidence that financial interventions should not be delivered on their own. Austrian and Muthengi (2014), for example, found that, when adolescent girls received only a savings account – and not the larger health and social skills intervention – they increased their economic assets, but also their odds of sexual harassment (see also Dunbar et al., 2010; Lautze and Raven-Robert, 2006).

Notably, however, there is some evidence that care must be taken when bundling programming. Education and livelihood interventions can be forced into competition with one another, for example when young people are encouraged to drop out of school to work in the family business or after they have been helped to develop business skills through livelihood interventions (Brown, 2001; Nanda et al., 2013).

Moreover, while multi-pronged interventions are increasingly recognised as more effective than single-pronged interventions, the multi-pronged nature of interventions makes it difficult to tease apart which components are central and which are more ancillary – or whether different prongs foster valuable synergies (Alcott et al., 2016a; Rushdy, 2010). There has also been little attention to whether more complex interventions are best targeted to a single level (e.g. provide girls with several forms of intervention at once) or whether effects grow when programming simultaneously pursues several change strategies at once (e.g. holistically target girls, families and communities). GAGE is uniquely positioned to explore, for example, whether bundling girl-focused and community-focused interventions together fosters important synergies. There is particularly little evidence regarding how systems-level change interacts with other types of programming. GAGE is positioned to help address these issues.

What sorts of programmes can catalyse change for girls?

Taken together, emerging evidence concerning what types of programmes can catalyse change for girls suggests programming aimed at education and psychosocial well-being is likely to have significant spill-over impacts – perhaps especially for younger girls. Decades of research has found, for example, that girls' schooling has a 'multiplier effect' and is related to a host of other positive impacts – including not only eventual employment and poverty reduction but also decreased

3 The odds of child marriage, on the other hand, were related only to whether girls had received the financial incentive.

4 Similarly, assessment of the Berhane Hewan programme in Ethiopia found that different strategies were seen as central to different outcomes by different people at different times – with economic incentives sometimes less important than other modalities. In one study, for example, fathers, mothers and husbands stressed the importance of school material supply for increasing girls' school attendance and of community conversations for delaying child marriage and increasing family planning utilisation (Mekbib and Molla, 2010). Another study, however, concluded that, while economic incentives were important early on, they lost import once attitudes and norms began to shift (Rushdy, 2010).

odds of child marriage and gender-based violence (UNICEF, 2004; King and Hill, 1997; Floro and Wolf, 1990). Other research has found that psychosocial well-being and a sense of agency are crucial to girls' longer-term outcomes, with impacts on more concrete outcomes such as school attainment and employment but also on harder-to-measure empowerment outcomes, such as the ability to negotiate contraception (Rose and Gordon, 2016; Calder and Marcus, 2014; 2016). Given the great variation in existent educational and psychosocial programming, GAGE is poised to add to debates by exploring which programmes appear to have the most powerful impacts.

For older girls there is some evidence that economic empowerment programmes can catalyse change. As noted earlier, evaluation of Uganda's Empowerment and Livelihood for Adolescents, for example, found impacts not only on income generation but also on rates of child marriage, adolescent pregnancy and sexual and gender-based violence (Bandiera et al., 2012; Bandiera, 2015). Similarly, economic empowerment programming in Bangladesh has been found to improve not only financial literacy and days spent on income generation but also school enrolment, parent-child communication and the respect husbands show their young wives (UNICEF, 2012). However, it is unclear what specific interventions lead to the greatest change and how they should be targeted in terms of timing or population.

There is also evidence that strengthening systems can lead to cascading change for girls. The DFID-funded Finote Hiwot programme, for example, provided crucial learning and support that contributed to encouraging the Ethiopian government to call for ending child marriage and female genital mutilation/cutting by 2025. Partnerships

the programme helped develop with Girl Hub, UNICEF and UNFPA have supported a 'crowding-in' of new actors and resulted in growing support for programming aimed at improving girls' outcomes (IMC Worldwide, 2015).

Legacy effects

What are the cumulative benefits of interventions for adolescent girls' individual and collective capabilities?

There is very little evidence on the long-term effects of particular interventions, primarily because evaluations are conducted within a relatively short timeframe after the end of a programme/individuals' participation in it (Baird and Özler, 2016). Not only is there a major knowledge gap concerning legacy effects, but also such evidence as exists suggests changes are not necessarily sustained. For example, Baird et al.'s (2015) study of the legacy impacts of Malawi's Zomba cash transfer concluded that the substantial impacts on adolescent education and sexual and reproductive health shown early on were 'almost entirely transient'. However, the pool of studies that probes these issues is extremely small.

Going forward, we need not only to understand the longer-term positive effects of programming but also to explore the possibility of unintended consequences and even backlash. As a nine-year programme, GAGE is ideally placed to examine the effects of different interventions, and intervention bundles, in different economic and political contexts, and to examine the effects of 'alumni'-type activities – those that aim to maintain links with and a degree of support to programme graduates (e.g. the Binti Pamoja Centre, BRAC's Advancing BRAC Graduates programme and the Camfed Association's Cama Girl Network) (Population Council, 2010; Kober, 2016).

Conclusions: bringing our core research questions to life

In sum, our 3Cs approach (Capabilities, Change strategies, Contexts) will allow us to combine different lenses, integrating the best of theories of economic investment, legal change, social norms approaches, and gender empowerment. This will enable us to focus attention on the dynamic interactions that shape adolescent outcomes and gendered experiences in the real world. In particular, GAGE will contribute to the global evidence on:

- the patterning and trends in girls' and boys' capability outcomes – as well as their subjective experiences and perceptions – over the course of adolescence, mindful that where and with whom they live affords them very different opportunities.
- the importance of inter-sectionality, digging beneath national aggregates and, in response to global calls for greater attention to principles of equity, shedding light on the lives of adolescent girls and boys who are facing multiple and interconnected sources of deprivation and disadvantage (e.g. disability, ethnic or caste minority status, migrant or refugee status, urban vs rural location etc.) and exploring the ways in which gender differences intersect with other sources of social difference.
- the interplay of different capabilities, including not only more quantifiable outcomes such as education, health and productive means – but also agency and voice, bodily integrity and psychosocial wellbeing – exploring how they intersect to achieve sustainable transformative change;
- the relative effectiveness and sustainability of different change strategy approaches on adolescent development trajectories at different junctures in adolescence, paying particular attention to the potential gains of longer-term investments.
- the mediating effects of global and local contexts (from rapid urbanisation to conflict to climate change), as well as the role of national policies, laws, institutions and politics in shaping change processes – accelerating progress in some capability domains but exposing adolescents to new risks and vulnerabilities in others.

We will operationalise these research questions through four broad strands of research as follows:

1. Evidence synthesis on what works where and why;
2. Mixed-methods longitudinal impact evaluations of programmes aimed at gender transformation for adolescent girls;
3. Participatory action research with adolescents living in conflict-affected contexts to understand programme legacy effects as they transition through adolescence and into early adulthood; and
4. Responsive research funding, including proposals developed through 'innovation lab' settings between researchers and practitioners, in what we are calling the GAGE Learning Exchange.

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Annexes

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Annex 1: Capability outcome sub-components

Table 1: Sub-components of the GAGE capability outcomes

Capability domain	Outcome sub-components	Sub-component outcomes for girls	Sub-component outcomes for boys	Brothers and male peers as change actors	Families as change actors	Communities as change actors	Systems and services as change actors
Education and Learning	1. Cultivation of aspirations whereby education is a critical component of future development trajectories	1.1 Girls recognise the importance of education to achieving their future aspirations	1.2 Boys recognise the importance of education to achieving their future aspirations	1.3 Brothers and male peers recognise girls' right to aspire to a future that requires educational achievement	1.4 Families shape and support male and female adolescents' right to aspire to a future that requires educational achievement	1.5 Communities actively support male and female adolescents' right to aspire to a future that requires educational achievement	1.6 Systems and service providers develop and enforce a coordinated inter-sectoral approach to actively support male and female adolescents' right to aspire to a future that requires educational achievement
	2. Access to affordable, age-appropriate, gender-responsive and quality educational and learning environments	2.1 Girls are able to access affordable, age-appropriate, gender-responsive and quality educational and learning environments	2.2 Boys are able to access affordable, age-appropriate, gender-responsive and quality educational and learning environments	2.3 Brothers and male peers recognise girls' right to access quality educational and learning environments	2.4 Families actively and equitably support, within their means, male and female adolescents' right to access quality educational and learning environments	2.5 Communities actively and equitably support male and female adolescents' right to access quality educational and learning environments	2.6 Systems and service providers develop and enforce a coordinated inter-sectoral approach (including education and social protection sectors) to equitably support access to quality educational and learning environments
	3. Support and resources to realise the right to education, including freedom from child work, domestic and care work responsibilities that preclude access to learning opportunities	3.1 Girls enjoy support and resources to realise the right to education, including freedom from child work, domestic and care work responsibilities that preclude access to learning opportunities	3.2 Boys enjoy support and resources to realise the right to education, including freedom from child work, domestic and care work responsibilities that preclude access to learning opportunities	3.3 Brothers and male peers recognise and where possible support girls' right to education, including freedom from child work, domestic and care work responsibilities that preclude access to learning opportunities	3.4 Families recognise and where possible support male and female adolescents' right to education, including countering discriminatory gender norms that hinder substantive access to education	3.5 Communities recognise and actively support male and female adolescents' right to education, including countering discriminatory gender norms that hinder substantive access to education	3.6 Systems and service providers develop and enforce a coordinated inter-sectoral approach (including education and social protection sectors) to ensure substantive access to education

Capa- bility domain	Outcome sub-components	Sub-component outcomes for girls	Sub-component outcomes for boys	Brothers and male peers as change actors	Families as change actors	Communities as change actors	Systems and services as change actors
Education and Learning	4. Support, skills and resources to transition to secondary and post-secondary educational and learning pathways	4.1 Girls are able to access the support, skills and resources to transition to secondary and post-secondary educational and learning pathways	4.2 Boys are able to access the support, skills and resources to transition to secondary and post-secondary educational and learning pathways	4.3 Brothers and male peers recognise girls' right to transition to secondary and post-secondary educational and learning pathways	4.4 Families actively and equitably support, within their means, male and female adolescents' right to transition to secondary and post-secondary educational and learning pathways	4.5 Communities actively and equitably support male and female adolescents' right to transition to secondary and post-secondary educational and learning pathways	4.6 Systems and service providers develop and enforce a coordinated inter-sectoral approach (including education and social protection sectors) to transition to secondary and post-secondary educational and learning pathways
	1. Access to knowledge, skills, resources and support to avoid early, forced and child marriage and to negotiate a marriage of one's choosing at an appropriate age	1.1 Girls are fully aware of and have the knowledge, skills, resources and support to avoid early, forced and child marriage and to negotiate a marriage of their choice at an appropriate age	1.2 Boys are fully aware of and have the knowledge, skills, resources and support to avoid early, forced and child marriage and to negotiate a marriage of their choice at an appropriate age	1.3 Brothers and male peers are aware of the risks to girls of early, forced and child marriage and actively support their right to a marriage of their choice at an appropriate age	1.4 Families actively prevent and do not perpetuate early, forced and child marriage and actively support an adolescent's right to a marriage of their choice at an appropriate age	1.5 Communities actively prevent early, forced and child marriage through social norm change efforts and the enforcement of sanctions against violators	1.6 Systems and service providers develop and enforce a coordinated inter-sectoral approach to the prevention and sanction of early, forced and child marriage
Bodily Autonomy, Integrity and Freedom from Violence	2. Access to knowledge, skills, resources and support to be protected and free from SGBV, including HTPs (e.g. FGM/C, dowry-based violence, abduction, trafficking, cyber-based GBV)	2.1 Girls are fully aware of and have the knowledge, skills, resources and support to be protected from the threat or perpetration of SGBV, including HTPs (e.g. FGM/C, dowry-based violence, abduction, trafficking, cyber-based GBV)	2.2 Boys are fully aware of and have the knowledge, skills, resources and support to be protected and free from SGBV	2.3 Brothers and male peers actively support girls' right to be free from the threat or perpetration of SGBV and practise positive masculinities	2.4 Families actively support male and female adolescents' right to be free from the threat or perpetration of SGBV	2.5 Communities actively prevent SGBV through social norm change efforts and the enforcement of sanctions against perpetrators	2.6 Systems and service providers develop and enforce a coordinated inter-sectoral approach to the prevention and sanction of SGBV

Capa- bility domain	Outcome sub-components	Sub-component outcomes for girls	Sub-component outcomes for boys	Brothers and male peers as change actors	Families as change actors	Communities as change actors	Systems and services as change actors
Bodily Autonomy, Integrity and Freedom from Violence	3. Access to knowledge, skills, resources and support to be protected and free from age-based violence, including corporal punishment, bullying and cyber bullying	3.1 Girls are fully aware of and have the knowledge, skills, resources and support to be protected and free from age-based violence, including corporal punishment, bullying and cyber bullying	3.2 Boys are fully aware of and have the knowledge, skills, resources and support to be protected and free from age-based violence, including corporal punishment, bullying and cyber bullying	3.3 Siblings support one another to gain the knowledge, skills and resources to be protected and free from age-based violence, including corporal punishment, bullying and cyber bullying	3.4 Families actively support male and female adolescents' right to be free from the threat or perpetration of age-based violence, including corporal punishment, bullying and cyber bullying	3.5 Communities actively prevent age-based violence through social norm change efforts	3.6 Systems and service providers develop and enforce a coordinated inter-sectoral approach to the prevention and sanction of age-based violence
SRH, Health and Nutrition	1. Access to age appropriate information and services to keep themselves healthy	1.1 Girls can access age appropriate information and services to keep themselves healthy	1.2 Boys can access age appropriate information and services to keep themselves healthy	1.3 -	1.4 Families actively ensure girls' access to health information and services	1.5 Communities promote equitable access to age appropriate information and services, as well as take action to counter negative health behaviours	1.6 Systems and service providers actively ensure girls' access to health information, services and supplies, as well as take action to counter negative health behaviours
	2. Access to information about nutrition and equitable access to nutritious food	2.1 Girls have access to information about nutrition and equitable access to nutritious food	2.2 Boys have access to information about nutrition and equitable access to nutritious food	2.3 Brothers are supportive of girls' right to equitable access to nutritious food	2.4 Family actively ensure girls' right to equitable access to nutritious food and take action to counter gender discriminatory food taboos	2.5 Communities promote girls' right to equitable access to nutritious food and take action to counter gender discriminatory food taboos	2.6 Systems and service providers actively ensure girls' access to information about nutrition, as well as take action to counter gender discriminatory food taboos
	3. Access to age-appropriate and stigma free knowledge, supplies and support to manage menstruation	3.1 Girls have access to access age-appropriate and stigma free knowledge, supplies and support to manage menstruation	3.2 -	3.3 Brothers are supportive of girls' right to stigma-free menstrual management	3.4 Family actively ensure girls' access to age-appropriate and stigma-free supplies and support for menstrual management	3.5 Communities actively ensure girls' access to age-appropriate and stigma-free supplies and support for menstrual management	3.6 Systems and service providers ensure girls' access to age-appropriate and stigma-free supplies, support and infrastructure needed for menstrual management

Capa- bility domain	Outcome sub-components	Sub-component outcomes for girls	Sub-component outcomes for boys	Brothers and male peers as change actors	Families as change actors	Communities as change actors	Systems and services as change actors
SRH, Health and Nutrition	4. Access to age appropriate, gender friendly and stigma-free sexual and reproductive health and puberty related information, services, supplies and support	4.1 Girls have access to age appropriate, gender friendly and stigma-free sexual and reproductive health and puberty related information, services, supplies and support	4.2 Boys have access to age appropriate, gender friendly and stigma-free sexual and reproductive health and puberty related information, services, supplies and support	4.3 Brothers and male peers are supportive of girls' right to access to age appropriate, gender friendly and stigma-free sexual and reproductive health and puberty related information, services, supplies and support	4.4 Family actively ensure girls' access to sexual and reproductive health and puberty related information, services, supplies and support, and counter gender discriminatory family planning taboos	4.5 Communities actively ensure girls' access to sexual and reproductive health and puberty related information, services, supplies and support, and gender discriminatory family planning taboos	4.6 Systems and service ensure girls' access to gender friendly and stigma-free sexual and reproductive health and puberty related infrastructure, information, services, supplies and support
Psychosocial well-being	1. Development of a strong sense of self with the internal emotional capacity to set independent aspirational goals, develop intrinsic motivation and demonstrate resilience in the face of setbacks	1.1 Girls explore their own interests, identities and build resilience	1.2 Boys explore their own interests, identities and build resilience	1.3 Brothers and male peers support girls and respect their right to explore their own interests, identities and build resilience	1.4 Families actively support and provide guidance so that adolescents can develop a strong sense of self and build resilience	1.5 Communities actively counter discriminatory gender norms around girls' submissiveness, self-sacrifice and actively encourage the development of self-esteem and resilience	1.6 Systems and service providers actively counter discriminatory gender norms around girls' submissiveness self-sacrifice, actively foster opportunities for the development of self-esteem and resilience
	2. Valued and emotionally supported within their families and personal relationships	2.1 Girls feel valued and emotionally supported within their families and personal relationships	2.2 Boys feel valued and emotionally supported within their families and personal relationships	2.3 Brothers and male peers value and emotionally support girls	2.4 Families value and emotionally support adolescents and provide guidance and age-appropriate boundaries	2.5 Community leaders and community members actively counter discriminatory gender norms undervaluing girls	2.6 Systems and service providers encourage positive parenting and community awareness so that adolescents and particularly girls feel valued and emotionally supported

Capa- bility domain	Outcome sub-components	Sub-component outcomes for girls	Sub-component outcomes for boys	Brothers and male peers as change actors	Families as change actors	Communities as change actors	Systems and services as change actors
Psychosocial well-being	3. Acquisition of emotional intelligence and communications skills to overcome social isolation and foster positive relationships with peers	3.1 Girls develop emotional intelligence and communications skills to connect and foster positive relationships with peers	3.2 Boys develop emotional intelligence and communications skills to connect and foster positive relationships with peers	3.3 Brothers and male peers support girls' right to connect and foster positive relationships with peers	3.4 Families actively support adolescents and particularly girls with guidance to develop healthy relationships rooted in mutual respect and interdependence	3.5 Communities actively counter discriminatory gender norms around girls' docility and isolation, and encourage social connectedness among adolescents, and particularly among girls	3.6 Systems and service providers counter discriminatory gender norms around girls' docility and isolation and provide opportunities for adolescents and particularly girls to connect
	4. Access to and satisfaction with tailored, stigma-free and age- and gender-friendly psychosocial and/or mental health services	4.1 Girls access tailored, stigma-free and age- and gender-friendly psychosocial and/or mental health services	4.2 Boys access tailored, stigma-free and age- and gender-friendly psychosocial and/or mental health services	4.3 Brothers and male peers support girls' right to access tailored, stigma-free and age- and gender-friendly psychosocial and/or mental health services	4.4 Families actively support adolescents to access to tailored, stigma-free and age- and gender-friendly psychosocial and/or mental health services	4.5 Communities actively counter discriminatory gender norms around tailored, stigma-free and age- and gender-friendly psychosocial and/or mental health services for adolescents	4.6 Systems and service providers counter discriminatory gender norms around support tailored, stigma-free and age- and gender-friendly psychosocial and/or mental health services for adolescents
Voice and Agency	1. Enhanced mobility (as a precondition for agency) to access public physical spaces, confidently and safely	1.1 Girls can access and move around public physical spaces confidently and safely	1.2 Boys can access and move around public physical spaces confidently and safely	1.3 Brothers and male peers are supportive of girls' right to access and equitably share public physical spaces	1.4 Families actively enable adolescents and particularly girls to move around their communities and access public physical spaces	1.5 Communities actively enable adolescents and particularly girls' access to public physical spaces confidently and safely	1.6 Service providers and policy makers actively enable and promote adolescents' and particularly girls' access to public physical spaces through supportive infrastructure, policing transport, scheduling of services

Capa- bility domain	Outcome sub-components	Sub-component outcomes for girls	Sub-component outcomes for boys	Brothers and male peers as change actors	Families as change actors	Communities as change actors	Systems and services as change actors
Voice and Agency	2. Tailored and diverse means to safely access and use age-appropriate information	2.1 Girls can effectively access and safely navigate tailored and diverse age-appropriate information	2.2 Boys can effectively access and safely navigate tailored and diverse age-appropriate information	2.3 Brothers and male peers are supportive of girls' equal use of communication media and devices	2.4 Families support adolescents to access and use safe and age-appropriate information sources	2.5 Communities support adolescents to access and use safe and age-appropriate information sources	2.6 Schools, service providers actively enable and promote adolescent access to tailored and diverse age-appropriate information, and support parents to guide their adolescents in safe and age-appropriate use and access of communication
	3. Meaningful participation in activities and in decision-making in family, community and school life	3.1 Girls can confidently and independently participate in activities and in decision-making regarding family, community and school life	3.2 Boys can confidently and independently participate in activities and in decision-making regarding family, community and school life	3.3 Brothers and male peers are supportive of girls' right to meaningfully participate in activities and in decision-making in family, community and school life	3.4 Families actively encourage adolescents and particularly girls to confidently and independently participate in activities and in decision-making regarding family, school and community life	3.5 Communities actively counter discriminatory gender norms around girls' participation and actively encourage and provide opportunities for adolescents and particularly girls to participate in community life	3.6 Systems and service providers actively counter discriminatory gender norms around girls' participation and actively encourage and provide opportunities for adolescents and particularly girls to participate in family, school and community life
	4. Meaningful civic participation	4.1 Girls are able to acquire skills to develop and exercise an independent civic identity	4.2 Boys are able to acquire skills to develop and exercise an independent civic identity	4.3 Brothers and male peers are supportive of girls' right to develop and exercise an independent civic identity	4.4 Families actively encourage adolescents to develop and exercise an independent civic identity	4.5 Communities actively counter discriminatory gender norms around girls' civic participation and actively encourage and provide opportunities for adolescents	4.6 Systems and service providers actively counter discriminatory gender norms around girls' civic participation and actively encourage and provide opportunities for adolescents and particularly girls to exercise an independent civic identity

Capa- bility domain	Outcome sub-components	Sub-component outcomes for girls	Sub-component outcomes for boys	Brothers and male peers as change actors	Families as change actors	Communities as change actors	Systems and services as change actors
Voice and Agency	5. Role models who can demonstrate alternative day-to-day pathways to restrictive gender roles	5.1 Girls have access to inspirational community and national role models who demonstrate alternative day-to-day pathways	5.2 Boys have access to inspirational community and national role models who demonstrate alternative day-to-day pathways	5.3 Brothers and male peers have access to role models who demonstrate gender equitable ways of being and doing	5.4 Families support girls and boys to emulate role models who demonstrate gender transformative ways of being and doing	5.5 Communities actively promote linkages with role models who demonstrate gender transformative ways of being and doing	5.6 Systems and service providers actively foster role models who demonstrate gender transformative ways of being and doing and link them to adolescents in the community
	1. Aspirations about decent, rewarding and age-appropriate employment	1.1 Girls can aspire to decent, rewarding and age-appropriate economic opportunities	1.2 Boys can aspire to decent, rewarding and age-appropriate economic opportunities	1.3 Brothers and male peers actively support girls' right to aspire to decent and rewarding economic opportunities	1.4 Families actively nurture and support male and female adolescents' right to aspire to decent and rewarding economic opportunities	1.5 Community norms are supportive of adolescents' aspirations towards decent and rewarding economic opportunities	1.6 Schools and other service providers provide information and support to encourage adolescents' economic aspirations and raise parental and community awareness of adolescent economic participation
Economic empowerment	2. Numeracy and financial literacy	2.1 Girls are numerate and financially literate	2.2 Boys are numerate and financially literate	2.3 -	2.4 Families actively encourage adolescents to acquire and practice numeracy and financial literacy	2.5 -	2.6 Schools and other service providers provide the opportunity for adolescents to acquire quality and age appropriate numeracy and financial literacy
	3. Technical, vocational and business skills which are market appropriate and go beyond gender segregated occupations	3.1 Girls can acquire technical, vocational and business skills	3.2 Boys can acquire technical, vocational and business skills	3.3 -	3.4 Families actively encourage and support adolescents to acquire acquisition of TVET and other skills	3.5 Communities support adolescents to acquire TVET and other skills as well as local employment linkages	3.6 TVET and other skills training providers ensure opportunities for adolescents to avail themselves of market appropriate skills and linkages to employers
	4. Access to resource endowments including land and agricultural assets	4.1 Girls can access and control resource endowments including land and agricultural/ physical assets	4.2 Boys can access and control resource endowments including land and agricultural/ physical assets	4.3 Brothers and male peers are supportive of girls' equal inheritance rights	4.4 Parent ensure their daughters and sons have equal inheritance shares	4.5 Communities are supportive of gender egalitarian inheritance practices	4.6 Service provider and systems enforce gender egalitarian inheritance practices

Capa- bility domain	Outcome sub-components	Sub-component outcomes for girls	Sub-component outcomes for boys	Brothers and male peers as change actors	Families as change actors	Communities as change actors	Systems and services as change actors
Economic empowerment	5. Access to savings and credit options	5.1 Girls can access and control savings and credit that facilitate economic independence	5.2 Boys can access and control savings and credit that facilitate economic indepen- dence	5.3 -	5.4 Parents actively support adolescents' access to and control of savings and credit options	5.5 Communities actively support gender egalitarian savings and credit options	5.6 Financial providers and systems provide and facilitate gender egalitarian savings and credit options

Annex 2: GAGE and the Sustainable Development Goals (SDGs)

Table 2: Mapping the GAGE capability domains onto the SDG goals, targets and indicators

GAGE Capability domain	Sustainable Development Goals (SDGs)	GAGE Capability sub-components	SDG targets	SDG indicators
Education and Learning	Goal 4. Quality education	Aspirations whereby education is a critical component	Not included	Not included
	Goal 5. Gender equality	Affordable, age-appropriate, gender-responsive and quality educational and learning environments	Target 4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes	Indicator 4.1.1 Proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex
	Goal 8. Decent work and economic growth		Target 4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations Target 4.a Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all	Indicator 4.5 Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators on this list that can be disaggregated Indicator 4.a.1 Proportion of schools with access to: (a) electricity; (b) the Internet for pedagogical purposes; (c) computers for pedagogical purposes; (d) adapted infrastructure and materials for students with disabilities; (e) basic drinking water; (f) singlesex basic sanitation facilities; and (g) basic handwashing facilities (as per the WASH indicator definitions)
		The right to education, including freedom from child labour, domestic and care work responsibilities	Target 5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate Target 8.7 Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms	Indicator 5.4.1 Proportion of time spent on unpaid domestic and care work, by sex, age and location Indicator 8.7.1 Proportion and number of children aged 5-17 years engaged in child labour, by sex and age
		Transitions to secondary and post-secondary educational and learning pathways	Target 4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university	Indicator 4.3.1 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex

Bodily Autonomy, Integrity and Freedom from Violence	GAGE Capability domain	Sustainable Development Goals (SDGs)	GAGE Capability sub-components	SDG targets	SDG indicators
		Goal 5. Gender equality	Early, forced and child marriage	Target 5.3 Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation	Indicator 5.3.1 Proportion of women aged 20-24 years who were married or in a union before age 15 and before age 18
		Goal 8. Decent work and economic growth	Sexual and gender based violence including HTPs	Target 5.2 Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation	Indicator 5.2.1 Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence and by age
		Goal 16. Peace, and justice and strong institutions		Target 5.3 Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation	Indicator 5.2.2 Proportion of women and girls aged 15 years and older subjected to sexual violence by persons other than an intimate partner in the previous 12 months, by age and place of occurrence Indicator 5.3.2 Proportion of girls and women aged 15-49 years who have undergone female genital mutilation/cutting, by age
			Age-based violence	Target 8.7 Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms Target 16.1 Significantly reduce all forms of violence and related death rates everywhere Target 16.2 End abuse, exploitation, trafficking and all forms of violence against and torture of children Target 16.3 Promote the rule of law at the national and international levels and ensure equal access to justice for all.	Indicator 8.7.1 Proportion and number of children aged 5-17 years engaged in child labour, by sex and age Indicator 16.1.1 Number of victims of intentional homicide per 100,000 population, by sex and age Indicator 16.1.2 Conflict-related deaths per 100,000 population, by sex, age and cause Indicator 16.1.3 Proportion of population subjected to physical, psychological or sexual violence in the previous 12 months Indicator 16.1.4 Proportion of population that feel safe walking alone around the area they live Indicator 16.2.1 Proportion of children aged 1-17 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month Indicator 16.2.2 Number of victims of human trafficking per 100,000 population, by sex, age and form of exploitation Indicator 16.2.3 Proportion of young women and men aged 18-29 years who experienced sexual violence by age 18 Indicator 16.3.1 Proportion of victims of violence in the previous 12 months who reported their victimization to competent authorities or other officially recognized conflict resolution mechanisms

GAGE Capability domain	Sustainable Development Goals (SDGs)	GAGE Capability sub-components	SDG targets	SDG indicators
SRH, Health and Nutrition	Goal 2. Zero hunger	Health information and services	Target 3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births.	Indicator 3.2.2 Neonatal mortality rate
	Goal 3. Good health and well-being		Target 3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases	Indicator 3.3.1 Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations
	Goal 5. Gender equality		Target 3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	Indicator 3.3.2 Tuberculosis incidence per 100,000 population
	Goal 6. Clean water and sanitation		Target 3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol	Indicator 3.3.3 Malaria incidence per 1,000 population
			Target 3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents	Indicator 3.3.4 Hepatitis B incidence per 100,000 population
		Information and equitable access to nutritious food	Target 3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all	Indicator 3.3.5 Number of people requiring interventions against neglected tropical diseases
			Target 3.b Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health	Indicator 3.4.1 Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease
				Indicator 3.5.1 Coverage of treatment interventions (pharmacological, psychosocial and rehabilitation and aftercare services) for substance use disorders
				Indicator 3.5.2 Harmful use of alcohol, defined according to the national context as alcohol per capita consumption (aged 15 years and older) within a calendar year in litres of pure alcohol
				Indicator 3.6.1 Death rate due to road traffic injuries
				Indicator 3.8.1 Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access, among the general and the most disadvantaged population)
				Indicator 3.8.2 Proportion of population with large household expenditures on health as a share of total household expenditure or income
				Indicator 3.b.1 Proportion of the target population covered by all vaccines included in their national programme
			Target 2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round	Indicator 2.1.1 Prevalence of undernourishment
			Target 2.2 By 2030 end all forms of malnutrition, including achieving by 2025 the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women, and older persons	Indicator 2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)
				Indicator 2.2.1 Prevalence of stunting (height for age <-2 standard deviation from the median of the World Health Organization (WHO) Child Growth Standards) among children under 5 years of age
				Indicator 2.2.2 Prevalence of malnutrition (weight for height >+2 or <-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type (wasting and overweight)

GAGE Capability domain	Sustainable Development Goals (SDGs)	GAGE Capability sub-components	SDG targets	SDG indicators
SRH, Health and Nutrition	Goal 2. Zero hunger	Knowledge, supplies and support to manage menstruation	Target 6.2 By 2030, achieve adequate and equitable sanitation and hygiene for all, ending open defecation and paying special attention to the needs of women and girls and people in vulnerable situations	Indicator 6.2.1 Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water
	Goal 3. Good health and well-being	Sexual and reproductive health and puberty related information, services, supplies and support	Target 3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes	Indicator 3.7.1 Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods Indicator 3.7.2 Adolescent birth rate (aged 10-14 years; aged 15-19 years) per 1,000 women in that age group
	Goal 5. Gender equality		Target 5.6 Ensure universal access to sexual and reproductive health as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences	Indicator 5.6.1 Proportion of women aged 15-49 years who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care Indicator 5.6.2 Number of countries with laws and regulations that guarantee full and equal access to women and men aged 15 years and older to sexual and reproductive health care, information and education
	Goal 6. Clean water and sanitation			
Psychosocial well-being	Goal 3. Good health and well-being	Motivation and resilience	Not included	Not included
		Support networks	Not included	Not included
		Social connectedness with peers	Not included	Not included
		Psychosocial and mental health services	Target 3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	Indicator 3.4.2 Suicide mortality rate

GAGE Capability domain	Sustainable Development Goals (SDGs)	GAGE Capability sub-components	SDG targets	SDG indicators
Voice and Agency	Goal 4. Quality education	Mobility and access to safe spaces	Target 11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons Target 11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities	Indicator 11.2.1 Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities
	Goal 5. Gender equality			Indicator 11.7.1 Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities
	Goal 10. Reduced inequalities			Indicator 11.7.2 Proportion of persons victim of physical or sexual harassment, by sex, age, disability status and place of occurrence, in the previous 12 months
	Goal 9. Industrialization, innovation and infrastructure	Access to information	Target 5.b Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women Target 9.c Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020	Indicator 5.b.1 Proportion of individuals who own a mobile telephone, by sex Indicator 9.c.1 Proportion of population covered by a mobile network, by technology
	Goal 11. Sustainable cities and communities	Participation in decision-making in family, community and school life	Target 5.1 End all forms of discrimination against all women and girls everywhere Target 10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard	Indicator 5.1.1 Whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination on the basis of sex Indicator 10.3.1 Proportion of population reporting having personally felt discriminated against or harassed in the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law
	Goal 16. Peace, justice and strong institutions			
		Civic participation	Target 4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development Target 5c. Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels Target 16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels	Indicator 4.7.1 Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in: (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment Indicator 5.c.1 Proportion of countries with systems to track and make public allocations for gender equality and women's empowerment Indicator 16.7.1 Proportions of positions (by sex, age, persons with disabilities and population groups) in public institutions (national and local legislatures, public service, and judiciary) compared to national distributions Indicator 16.7.2 Proportion of population who believe decisionmaking is inclusive and responsive, by sex, age, disability and population group
		Role models	Not included	Not included

GAGE Capability domain	Sustainable Development Goals (SDGs)	GAGE Capability sub-components	SDG targets	SDG indicators
Economic Empowerment	Goal 1. No poverty	Economic aspirations about decent, rewarding and age-appropriate employment	Target 8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	Indicator 8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities
	Goal 4. Quality education		Target 8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training	Indicator 8.5.2 Unemployment rate, by sex, age and persons with disabilities
	Goal 5 Gender equality		Target 8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment	Indicator 8.6.1 Proportion of youth (aged 15-24 years) not in education, employment or training
	Goal 8. Decent work and economic growth		Target 8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment	Indicator 8.8.1 Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status
	Goal 10. Reduced inequality		Target 8.b By 2020, develop and operationalize a global strategy for youth employment and implement the Global Jobs Pact of the International Labour Organization	Indicator 8.b.1 Existence of a developed and operationalized national strategy for youth employment, as a distinct strategy or as part of a national employment strategy
			Target 10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status	Indicator 10.2.1 Proportion of people living below 50 per cent of median income, by sex, age and persons with disabilities
			Target 10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard	Indicator 10.3.1 Proportion of population reporting having personally felt discriminated against or harassed in the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law
		Numeracy and financial literacy	Target 4.6 By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy	Indicator 4.6.1 Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex
		Technical, vocational and business skills	Target 4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university Target 4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship	Indicator 4.3.1 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex Indicator 4.4.1 Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill

GAGE Capability domain	Sustainable Development Goals (SDGs)	GAGE Capability sub-components	SDG targets	SDG indicators
Economic Empowerment	Goal 1. No poverty	Access to resource endowments, including land and agricultural assets	Target 1.4 By 2030 ensure that all men and women, particularly the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership, and control over land and other forms of property, inheritance, natural resources, appropriate new technology, and financial services including microfinance Target 5.1 End all forms of discrimination against all women and girls everywhere Target 5a. Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws	Indicator 1.4.1 Proportion of population living in households with access to basic services Indicator 1.4.2 Proportion of total adult population with secure tenure rights to land, with legally recognized documentation and who perceive their rights to land as secure, by sex and by type of tenure Indicator 5.1.1 Whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination on the basis of sex Indicator 5.a.1 (a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure Indicator 5.a.2 Proportion of countries where the legal framework (including customary law) guarantees women's equal rights to land ownership and/or control
	Goal 4. Quality education			
	Goal 5 Gender equality			
	Goal 8. Decent work and economic growth			
	Goal 10. Reduced inequality			
		Access to savings and credit	Target 8.10 Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all	Indicator 8.10.1 (a) Number of commercial bank branches per 100,000 adults and (b) number of automated teller machines (ATMs) per 100,000 adults Indicator 8.10.2 Proportion of adults (15 years and older) with an account at a bank or other financial institution or with a mobile-money-service provider



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About GAGE

Gender and Adolescence: Global Evidence (GAGE) is a nine-year longitudinal research programme generating evidence on what works to transform the lives of adolescent girls in the Global South. Visit www.gage.odi.org.uk for more information.

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Front cover: Girls, Oromia, Ethiopia.

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