

**Enhancing Youth Skills and Economic Opportunities to Reduce Teenage Pregnancy in  
Colombia<sup>1</sup>**

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*“Fertility decisions should be the result of one’s deliberate choice rather than an outcome of one’s constraints and lack of economic, educational, and social opportunities.”*

Azevedo et al. (2013).

## 1. Introduction

**The Government of Colombia (GoC) has identified teenage pregnancy as a priority issue.** The current strategic framework to address teenage pregnancy in Colombia is outlined in the CONPES 147, effective from February 2012 until March 2014. The CONPES 147 establishes a multi-sectoral framework that aims to address the determining factors of teenage pregnancy within Colombia (Box 1). The national strategy outlined in the CONPES 147 was piloted in 192 municipalities for youth ages 10 through 19. Building on this strategy, the Commission for the Guarantee of Sexual and Reproductive Rights is developing a new framework to guide the government’s policy and activities to address this important policy issue in the coming years.

**Parallel to its work on teenage pregnancy, the GoC released a national strategic framework to generate opportunities for Colombian youth in July 2014.** The CONPES 173 proposes guidelines for generating opportunities for youth, ages 14 through 28 years, with specific emphasis on the accumulation of human capital and adequate preparation and insertion into the labor market (Box 1). Both strategies include significant components dedicated to the creation of life plans, and the development of skills and opportunities necessary for young women and men to develop and fulfill those plans.

**Following a World Bank presentation of the results of a regional study (*Teenage Pregnancy and Opportunities in Latin America and the Caribbean*, Azevedo et al. 2013) which places strong emphasis on strengthening opportunities and agency for youth in the region, representatives from the GoC within the National Planning Institute (DNP – Departamento Nacional de Planeación) expressed interest in exploring possible links between the CONPES 147 and 173.** This note is prepared in response to this interest. It utilizes the conceptual framework proposed in the *World Development Report on Gender Equality and Development* (2012) to argue how critical life skills - cognitive, socio-emotional, technical and professional – can boost the agency of young women and men in Colombia and, in turn, positively affect teenage pregnancy rates and youth preparation for the labor market. The note includes an overview of the WDR 2012 gender equality framework and World Bank regional study on teenage pregnancy; outlines the Colombian country context with regard to gender equality and youth labor market outcomes; reviews interventions that develop life skills; and highlights how these interventions might be relevant to the GoC policies and programs related to teenage pregnancy prevention (CONPES 147) and youth labor (CONPES 173).<sup>2</sup>

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<sup>2</sup> The recommendations put forth in this note are founded on the assumption that fertility decisions that are based on a larger opportunity set and with a greater capacity to exercise agency will likely result in reduced pregnancy rates among teenagers. Research clearly shows that greater access to sexual and reproductive health (SRH) services and improving knowledge about SRH are vital to reducing rates of teenage pregnancy. The intension of the note is not to recommend that skills interventions should be the sole focus of a teen pregnancy policy strategy, but rather see their inclusion as an important part of the mix of other health, education, and gender norms policies of an effective national teen pregnancy prevention strategy.

**Box 1 – Overview: CONPES 147 and CONPES 173****CONPES 147**

The CONPES 147 (2012) is national strategy to reduce teenage pregnancy rates in Colombia. The rights-based, human development approach recognizes that the main risk factors and vulnerabilities to adolescent pregnancy – which include, among others, poverty, substance abuse, early sexual debut, barriers to education, absence of economic opportunity, and the presence of armed groups – may result in different outcomes based on the ability or inability of individual young people to overcome challenges. The multi-sectoral intervention seeks to mitigate vulnerabilities while expanding protective factors, those which motivate and enable adolescents and young adults to construct life plans and to strive to fulfill them. The CONPES 147 includes strategic objectives to improve quality, youth-friendly health services and sexual education important for increased competencies and access to sexual and reproductive health, but emphasizes the need to simultaneously expand opportunities for youth (in and out of school) and strengthen non-cognitive and socio-emotional skills such as self-esteem, identity, independence and autonomy, critical thinking, hard work, and the ability to negotiate gendered social norms. While the CONPES 147 emphasizes the importance of expanded opportunities for young women and men, it focuses almost exclusively on the endowments of health and education, and excludes specific strategic components relative to economic opportunities (aspirations, preparation for the labor market, employment, etc.).

**CONPES 173**

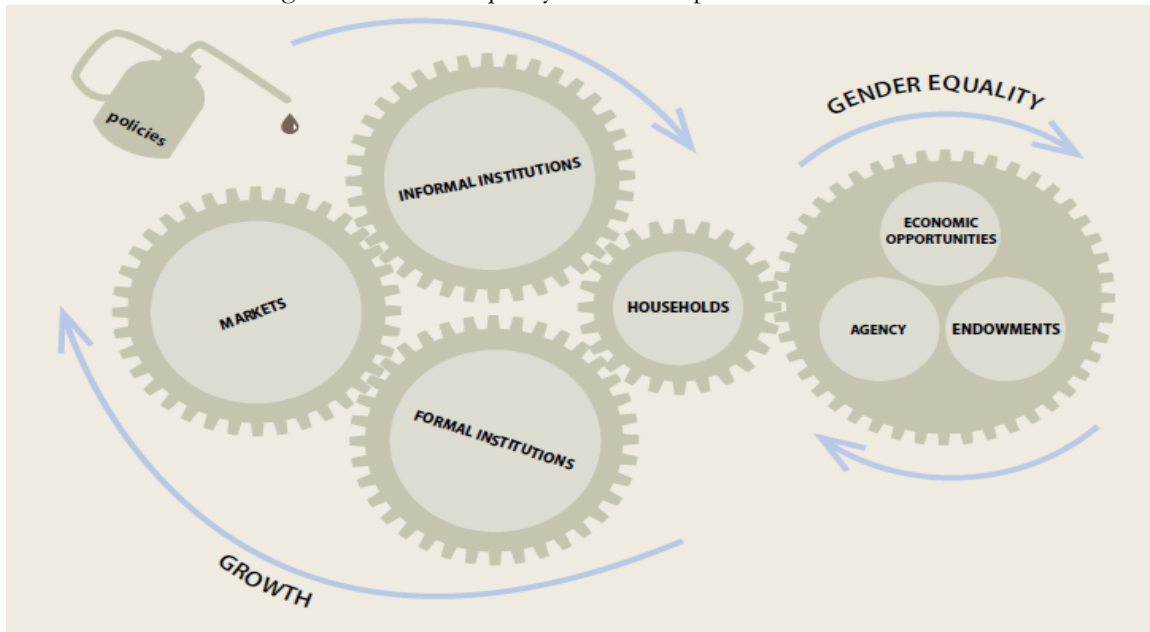
The CONPES 173 (2014) outlines a national strategy to create and strengthen labor market opportunities for youth ages 14-28. Specific policy recommendations for adolescents (age 14-17) who are not yet old enough to work legally in Colombia focus on human capital accumulation through education and the support of school-to-work transitions. With regard to education, the policy encourages efforts to increase the quality and relevance of education for youth and to mitigate drop-out risks related to lack of access or resources. Additionally, CONPES 173 proposes integrated actions to improve youth employability through vocational orientations for youth ages 14-17 that would expose youth to a variety of career tracks; work practicums to enable them to gain experience in the private sector; and socio-emotional skills training to promote professional behaviors and competencies. The strategy also identifies actions to increase youth access to information about skills and competencies required for various careers, and how and where they can obtain those competencies. The CONPES 173 does not include an analysis or proposals for strategic entry points for youth into the labor market in the short or long-term, nor does it include any gender-analysis relative to differing knowledge or opportunity gaps for young women and men in Colombia.

**2. Theoretical Framework: Gender Equality and Development**

According to the World Development Report 2012: Gender Equality and Development (WDR 2012), gender equality has both intrinsic and instrumental value for development. Gender-related outcomes may be understood in the context of dynamic interactions between households, markets and institutions, both formal and informal. Household decisions – number and spacing of children, spending on health and education, etc. – are made based on the preferences, incentives and constraints of family members, which are shaped by social norms, gender roles, and the structure and function of labor markets and formal institutions.

The WDR 2012 framework (Figure 1) shows how economic growth, coupled with good policy-making, can generate positive gender equality outcomes, which in turn, fuel further growth. The framework also identifies three key dimensions of gender equality: the accumulation of **endowments** in the form of education, health and physical assets; **economic opportunities** that result in income generation, and **agency**. The WDR 2012 defines agency as “an individual’s (or group’s) ability to make effective choices and to transform those choices into desired outcomes” (World Bank 2012, pg. 150).

Figure 1: Gender Equality and Development Framework



Source: WDR 2012.

Market forces, expansion of service delivery institutions, and income growth have contributed to narrowing gender gaps in education, fertility and labor market participation in many countries. However, women do not always benefit from national policy or economic growth. Gender inequalities can persist when relevant policies are rejected or blocked; when reinforcing constraints stymie progress; or when agency (individual voice and household decision making) is limited. Entrenched gender roles and social norms (informal institutions) that govern responsibility for care and household work, “acceptable” work for men and women, and physical and sexual autonomy can reinforce social and institutional barriers and perpetuate intergenerational gender gaps. For poor women, and for women who face other factors of exclusion - ethnicity, remoteness, race, or disability – gender gaps can remain even more sizeable.

**In the case of Colombia, various indicators related to women’s economic opportunity and endowments show dramatic improvement in the past decade.** The annual growth rate of the female to male participation ratio averaged 2.5 percent between 1990 and 2012; and female labor force participation grew 23 percent between 2000 and 2010.<sup>3</sup> Health indicators show that the share of births attended by skilled health staff reached near universality<sup>4</sup> in 2011; maternal mortality rates

<sup>3</sup> World Bank, Poverty and Labor Brief 2012.

<sup>4</sup> World Development Indicators (WDI). Share of births attended by skilled health staff was 99.3% in 2011, up from 86.4% in 2000.

fell a dramatic 35 percent between 2000 and 2010; and contraceptive prevalence reached an all-time high of 79 percent.<sup>5</sup>

**However, persistent and significant gaps exist within all dimensions of the gender equality in Colombia.** In the accumulation of endowments, a slight gender gap in primary school enrollment that favors boys reverses and widens at higher levels of education, significantly favoring girls.<sup>6</sup> Despite higher levels of educational attainment, Colombian women face a stubborn gender-wage gap and higher levels of unemployment than men, limiting the quality of their economic opportunities.<sup>7</sup> Both male and female youth face difficulties entering the labor market, and prolonged unemployment creates critical setbacks in economic opportunity and earning capacities. Domestic and unpaid care work remains the primary responsibility of women and girls, reducing their available hours for paid productive work; and violence against women continues to threaten the rights, security and health of many Colombian women and children.<sup>8</sup> Dramatic inequalities exist within subnational data in every indicator, especially within low-income, low-education and rural populations.

### 3. Teenage Pregnancy: Facts and Implications

**Within the Colombian context, reinforcing constraints – limited and gender-unequal economic opportunities, exclusion from quality endowments among marginalized populations, and social norms and gender roles that relegate unpaid care work to women and tolerate violence against them (emotional, physical and sexual) - affect young women's choices and actions with respect to life plans and fertility decisions.** Despite significant progress since 2000, teenage pregnancy rates in Colombia still remain very high.<sup>9</sup> According to the National Demographic and Health Survey, nearly 20 percent of teenage girls in Colombia are or have been pregnant; and 34 percent of teenage moms report they wanted to become mothers.<sup>10</sup>

**The majority of teenage pregnancies remain unplanned, signaling a lack of opportunity and agency for young girls.** In Colombia, 66 percent of teenage mothers reported either not wanting a child at the time (16 percent) or wanting a child at a later age (50 percent).<sup>11</sup> A qualitative study conducted in Ecuador shows that many teenage mothers do not have clearly defined life goals, aspirations, or life plans before becoming pregnant (Azevedo et al. 2013). Several other qualitative studies suggest that teenage mothers do not necessarily plan on getting pregnant, but they do not avoid doing so – some lack the power to negotiate contraception with their partner; some are ashamed to access contraception; some simply do not consider the risk of getting pregnant when making decisions about whether to engage in sexual activity; and some demonstrate a lack of ‘capacity to aspire’ due to real and perceived opportunities for socio-economic advancement.<sup>12</sup>

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<sup>5</sup> WDI 2010. Maternal mortality (deaths per 100,000 live births) was 130 in 2000 and 85 in 2010. Contraceptive prevalence rate was 79.1 in 2010; world average, 50.7.

<sup>6</sup> WDI 2012. Female to male primary enrollment ratio was 0.97 in 2012. Within secondary education the ratio reverses, favoring girls, to 1.09. Tertiary education enrollment has highest gap, with female to male enrollment ratio of 1.13 in 2012.

<sup>7</sup> DNP, Informe ODM 2013. Gender wage gap increased from 18.8% in 2008 to 23.3% in 2012. Female to male unemployment ratio was 1.69 in 2012, which exceeds both UMI (1.46) and world (1.42) averages.

<sup>8</sup> According to 2012 DHS survey, 38.6 percent of Colombian women (ages 15-49) have experienced physical violence by an intimate partner within their lifetime, and 20.7 percent of them reported experiencing physical violence within the last 12 months. With regard to sexual violence, 11.8 percent of women reported sexual intimate partner violence in their lifetime, and 6.9 percent within the last 12 months.

<sup>9</sup> WDI 2012. Adolescent fertility in Colombia was 69 (births per 1,000 women ages 15-19) in 2012, almost equal to the high LAC average (68.0 in 2012), but more than double the upper middle income country (UMC) average of 31.2.

<sup>10</sup> ENDS 2010.

<sup>11</sup> Ibid.

<sup>12</sup> “...pregnancy seems to be often due to carelessness, ‘something that happened’ which reflects a lack of control of adolescents over their life projects. At the same time this indicates a certain lack of well-defined goals, aspirations and

**Teenage mothers face lower educational outcomes throughout their lifetime.** Background papers for the *Teenage Pregnancy and Opportunities in Latin America and the Caribbean* study (hereafter: Regional Study) found that teenage mothers are less likely to finish secondary education<sup>13</sup> and have reduced work hours (Kruger and Berthelon 2012; Arceo-Gomez and Campos Vazquez 2011). Early disengagement from school is correlated with a higher likelihood of teenage pregnancy. According to the Ministry of Education, more than 50 percent of Colombian students who have ever dropped out of school did so because of becoming a mother or father.<sup>14</sup> Teenage mothers may drop out of school on account of their pregnancy, or they may drop out for other reasons and then be more likely to become pregnant. A study in the U.S. found that pregnant teenagers not in school were 12 times more likely to want to become pregnant than their female teenage counterparts in school (Bonnell et al. 2005; Heavey et al. 2008).

**Teenage mothers face greater health challenges and difficulties in their personal lives.** Teenage births come with higher risks of maternal mortality, fetal death, and infant mortality.<sup>15</sup> Teenage mothers are also more likely to be single heads of household, to get a divorce and to have less chance of finding a quality life partner (Arceo-Gomez and Campos Vazquez 2011). Teenage mothers have less personal and leisure time and participate in fewer social engagements with friends and peers, which negatively impacted their well-being (Azevedo et al. 2013). Fathers of babies born to teenage mothers reported a significant increase in economic pressure and responsibility.

**The effects of teenage pregnancy are multigenerational: children of adolescent mothers are more likely to partake in risky behaviors when they become adolescents and face lower educational, and health outcomes** (Azevedo et al. 2013; Hoffman 2008; National Campaign to Prevent Teen and Unplanned Pregnancy 2013; Gueorguieva et al. 2001). Children of teenage mothers are more likely to drop out of school, have lower educational outcomes, become a teenage parent themselves, and suffer health problems. As an adult, they are more likely to be unemployed and have lower economic outcomes (Hoffman 2008; National Campaign to Prevent Teen and Unplanned Pregnancy 2013; Gueorguieva et al. 2001).

**Teenage pregnancy can have negative effects on individuals and families, but also can result in significant economic losses to society overall.** For example, teenage pregnancy costs taxpayers in the United States of America (U.S.) over \$9 billion a year<sup>16</sup> (Hoffman 2006). In Brazil, if the current cohort of 15-19 year old females had delayed pregnancy until their early 20s, the country would have an estimated \$3.5 billion more in economic productivity (Chaaban and Cunningham 2011).<sup>17</sup>

**Negative outcomes associated with teenage pregnancy may be driven and/or exacerbated by the absence or low quality of economic and educational opportunities available.** Evidence from public health literature shows that young women's reproductive health decisions are often tied

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clearly-framed life projects that they are decided to stand up for and defend. The significance of the capacity to aspire as a means to increase one's development outcomes has been highlighted by the work of Arjun Appadurai. Aspirations are formed by ideas and beliefs about life, about conceptions about what one aims to achieve in life, and about the willingness to take actions in order to achieve those goals." (Azevedo et al. 2013)

<sup>13</sup> Kruger and Berthelon (2012) uses nine rounds of Chilean household surveys (1990-2009) to analyze adolescent fertility as a determinant of dropping out of high school. They find that teenage motherhood significantly reduces the probability of high school completion (by 18-37 percent) and the effects are larger for poor and lower educated households. Results imply targeting policies towards reducing teenage pregnancy will positively impact female youth educational outcomes, at least in the shorter term.

<sup>14</sup> Encuesta Nacional de Deserción Escolar (ENDE), implemented by the Ministry of Health in 2010.

<sup>15</sup> WHO 2014; UNICEF/ECLAC 2007.

<sup>16</sup> This figure reflects the cost of health and foster care, higher incarceration rates among children of teenage parents, and the loss in tax revenue from teen mothers with lower educational and economic outcomes.

<sup>17</sup> This study only considers economic impacts and does not take into account health or social impacts or the lower productivity of a child of a teenage mother.

to their economic condition, with poverty being a significant risk factor for teen pregnancy (Azevedo et al. 2013). Other determinants identified to increase the likelihood of teenage pregnancy include race,<sup>18</sup> a difficult family and/or housing situation, low aspirations, low educational outcomes, being a victim of physical or sexual abuse, and instability in their life (Guttmacher Institute 1998).

**Evidence from Colombia is consistent with public health literature on the drivers of teenage pregnancy.** Teenage pregnancy rates are highest among adolescent girls in the lowest two wealth quintiles (30 and 27 percent, respectively, are their pregnant or already mothers). Education seems to be an even more significant factor: in 2010, 55 percent of adolescent girls with no education and 49 percent of girls with primary education were pregnant or already mothers.<sup>19</sup> Multivariate analysis from the baseline evaluation of the CONPES 147 (Box 2) shows strong and expected correlations between conditions of poverty, living in rural areas, the household head's education level, a mother ever being pregnant in her adolescence, age of sexual initiation, and contraceptive usage.<sup>20</sup>

**Box 2. Adolescent Pregnancy Decision Making: Preliminary Evidence from the CONPES 147 Baseline**

The findings from the baseline impact evaluation report of the CONPES 147 prepared by Econometria provide insight on the context faced by teens and the factors that may affect teen pregnancy in 53 municipalities in Colombia with high rates of teen pregnancy.<sup>21</sup> The report highlights the importance of access to health services and quality education on SRH; but also explores the roles that expectations for the future, gender norms, and employment status may play in affecting teen pregnancy rates.

For the subsample of teens that were sexually active, the average age of sexual initiation was 14 for males and 15 for females. Colombia's laws identify fourteen as the age when sex can be consensual, but six percent of all females and twelve percent of all males stated their sexual initiation began prior to age fourteen. The average number of partners is much higher for sexually active males, 3.73, than it is for sexually active females, 1.96.

Self-reported contraceptive usage (any method) for males is 60 percent and for females is 56 percent; but usage varies among subsets of the youth population. Statistically significantly fewer rural females (28 percent) use condoms than urban females (40 percent). Contraceptive usage in the first sexual engagement was 60 percent for males and 54 percent for females. Gendered social norms appear to be present with respect to perceived responsibility for obtaining contraceptives: when asked whether their partner is responsible to obtain contraceptives, only 8 percent of males responded yes while 43 percent of females responded affirmatively.

SRH knowledge and access to quality SRH information is low in the sample. Adolescents desire information about SRH: when asked how many teens had looked for information about sexuality at least one time, 68 percent of male and 62 percent of female teens responded affirmatively. But only 10 percent of male and 12 percent of female teens say they know of places where they can talk about sexuality. With respect to the use of SRH services, rates drop significantly - only 4 percent of male

<sup>18</sup> A study in the U.S. found that pregnant Hispanic teenagers were twice as likely to have planned their pregnancy as compared to pregnant African-American teenagers (Heavey et al. 2008). Another study in the U.S. state of California found Hispanic teenagers far more likely to desire a pregnancy (Guttmacher Institute 1998).

<sup>19</sup> ENDS 2010.

<sup>20</sup> The multivariate analysis does not produce causal estimates of relationships.

<sup>21</sup> The findings presented here are based on a single cross-section of data (sample size: 2,622; individuals between the ages of 14 and 19) collected in 53 municipalities in Colombia that were flagged for prioritization because of their high rates of teen pregnancy.

teens and 11 percent of female teens report unsatisfied demand for quality information and services. When asked if teens know of a place where they can access free contraceptives, 19 percent of males and 31 percent of females responded yes. Among these, 75 percent of males and 43 percent of females attained contraceptives at a pharmacy.

Teen perceptions of the effects of teenage pregnancy conflict with research findings. When asked about their ability to determine their future, most teens believed that what happened in the future was out of their control and that pregnancy would not interfere with their life plans. Half the sample also stated that being an adolescent parent would not decrease their potential future earnings, and over half the sample thought that being an adolescent parent would not affect their life plans.

Among the sample, 5 percent of males and 14 percent of female teens reported that one of their sexual relationships had resulted in a pregnancy. Econometria found that the probability of being pregnant as a teenager is positively correlated with the following characteristics: poverty, rural, head of the household did not complete secondary school, and mother was pregnant in her adolescence. Their analysis also shows that age at first sexual relationship and use of condom during the first sexual relationship was negatively correlated with teen pregnancy.

The analysis also shows that students whose studies were interrupted before the age of 14 had greater probability of a teen pregnancy. Teens who reported having worked prior to age 14 also showed higher rates of teen pregnancy (this could be a proxy for economic hardship in the household as well as many other factors). The study does not explore the relationship between work for adolescents ages 14 to 19 and their aspirations, future expectations and teen pregnancy; but could be important in understanding the linkages between economic opportunities and teenage pregnancy rates in Colombia.

Findings on SRH information are ambiguous. Econometria finds that receiving information on sexual and reproductive rights and reproductive decisions prior to age 14 is positively correlated with teen pregnancy, but that receiving information about pregnancy, maternity and paternity and information about violence is negatively correlated with teen pregnancy. The authors caution readers that this relationship could be driven by low quality information, but it also can be noted that teens engaging in sexual behavior may be more likely to seek this information.

In summary, the descriptive statistics from the baseline data show low levels of access to SRH services, potentially low quality knowledge and information about SRH, and low levels of contraceptive usage. Teenage pregnancy is strongly correlated with conditions of poverty, living in rural areas, household head's education level, a mother ever being pregnant in her adolescence, age of sexual initiation and contraceptive usage. Additional multivariate analysis is inconclusive in terms of identifying consistent correlations between labor (currently working), expectations for the future, aspirations, life plans, or SRH knowledge on teen pregnancy. The correlations observed in the multivariate analysis are summarized in Table T4.

**Attitudes and expectations about the future can influence the probability of teenage pregnancy** (Plotnick 1992, 1993, 2007). When young women are poor and face a lack of opportunities, early childbearing is often seen as a rational, viable choice, and in certain circumstances positive choice, reducing the incentives to avoid an early pregnancy (Azevedo et al. 2013; Cater and Coleman 2006; Perez Then et al. 2011).<sup>22</sup>

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<sup>22</sup> Global qualitative studies have shown that motivations and reasons for a young person to plan a pregnancy in adolescence include an idealization of motherhood, the desire to love and be loved, an effort to solidify or formalize a relationship, and to create a loving family when they did not have one of their own (Cater and Coleman 2006). Many



**Through the CONPES 147 on Teenage Pregnancy, the GOC sought to create a comprehensive policy through which interacting and reinforcing drivers of teenage pregnancy could be addressed.** The policy seeks to address these constraints on an institutional, community, family and individual level. The policy recommends institutional improvements in endowments; and recommends that ministries of health and education strengthen and expand access to information and services on sexual and reproductive health and to improve educational opportunities for both in and out-of-school youth (flex education models, dropout alert systems; literacy and employability programs). It also identifies the need for community-level justice and security personnel to respond to cases of abuse, particularly for those pregnant before the age of 14. Advocates at the local level – teachers, community leaders, health professionals, etc. – address community-level constraints created by a distrust and misperception of youth, and transform social norms pertinent to gender relations. Finally, the policy recognizes the role of individual youth who ultimately are able or unable to overcome economic, cultural or situational constraints facing them. In order to support these young men and women, the policy aims to increase the agency of youth through non-cognitive and socio-emotional skills development and through the articulation and pursuit of life plans.

**The concurrent development of CONPES Juventud and the continuation of CONPES 147 provide a unique opportunity to exploit synergies between the next Teenage Pregnancy Prevention Strategy (currently under development) with youth labor policy.** Both strategies include significant components dedicated to the creation of life plans, and the development of skills and opportunities necessary for young women and men to develop and fulfill those plans. Both strategies seek to relieve the constraints of Colombian youth to education and socio-economic opportunities, and to enable them to develop and pursue meaningful life plans. However, while the CONPES 147 identifies the importance of expanding opportunities for youth, it focuses primarily on educational opportunities and largely ignores the importance of economic opportunity. The human rights and human development approach could be strengthened through inclusion of tangible, market-related opportunity creation or skills development specific to success in the labor market, the explicit aim of the CONPES 173.

#### **4. Labor Opportunities: Building Blocks of Aspirations<sup>23</sup>**

The WDR 2012 framework considers economic opportunity a key pillar to gender equality that can have immediate and multi-generational impacts on individuals, families, communities and national economies. Economic opportunity can increase an individual's agency by expanding their life choices, increasing their capacity to better support themselves and their families, and participate more actively in their communities and nations (World Bank 2014).

Economic growth in Colombia, partnered with targeted cash transfers, led to a decrease in extreme poverty rates from 17.7 percent to 9.1 percent between 2002 and 2013; with the poorest 40 percent of the population experiencing faster income growth (6.5 percent) as compared to the national average (4.1 percent).<sup>24</sup> Within the same period, national unemployment rates decreased from 15.6 percent (2002) to 9.6% (2013). Energy sector expansion, coupled with rising commodity prices, drove economic growth and ignited a shift in employment from tradable sectors (agriculture and

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cultures view pregnancy and motherhood positively regardless of whether it takes place in adolescence; and motherhood in some contexts may increase a woman's social status or mark an entrance into adulthood (UNFPA 2013, Perez Then et al. 2011).

<sup>23</sup> Unless otherwise stated, the labor market indicators presented in this section were computed based on the Gran Encuesta Integrada de Hogares (GEIH) data covering the 2008 to 2013 period. For details on the construction of these indicators, please refer to the Data Annex.

<sup>24</sup> World Bank, Colombia Systematic Country Diagnostic (SCD) Concept Note, 2014.

manufacturing) to service sectors (finance and commerce).<sup>25</sup> Women's increased participation in the labor market was instrumental in reducing poverty in Colombia as more low-income women entered the labor force relative to high-income women.<sup>26</sup> However, wages and unemployment rates show a gender gap unfavorable to women and youth continue to face significant barriers to entering the labor market.

**Economic opportunities (both real and perceived) are different for young men and women due to gendered responsibilities in the household, varying access to social networks and the labor market, and gender-based violence that affects their ability to consider and seek job opportunities.** Societal norms often dictate what is viewed as appropriate work and behavior for men and women, affecting the labor options and choices of male and female youth. In many places, adolescence for boys can bring increased independence and autonomy, but can impose restrictions on personal independence and freedom for girls (World Bank, *The Adolescent Girls' Initiative* website). Young women may take on more domestic and care work within the family, which can isolate them and limit their ability to build networks; young men, on the other hand, may be encouraged to pursue employment and leisure outside of the home, and consider their role as future breadwinners for their families. In some societies, socially acceptable norms may include early marriage and childbearing, sexual abuse and violence, among others, all of which can have adverse effects on young females (UNFPA 2013; World Bank 2012).

**Youth labor is characterized by high levels of unemployment and informality.** According to the GEIH 2013, the unemployment rate among males and females ages 15-18 and 19-24 is around double the rate of the general working age population. A high percentage of youth work in the informal sector: for youth ages 15 to 18, informality rates exceed 80 percent (GEIH 2013). Not surprisingly, youth have lower coverage in social security and benefits: only 33.6 percent of youth ages 18 to 21 have health care and only 19.7 percent have pensions (CONPES 173).

**Work prior to the age of 18 is discouraged in order to protect the rights of children; and youth policies, including the CONPES 173, emphasize the accumulation of human capital in education.**<sup>27</sup> When dividing the youth ages 15-18 into four mutually exclusive groups, the following statistics arise: 22 (12) percent of females (males) are neither in school nor employed; 63 (55) percent of females (males) are in school and not employed; 7 (13) percent of females (males) are employed and in school and 8 (20) percent of females (males) are employed and not in school.<sup>28</sup> In spite of the law, at 15 (33) percent for females (males) the proportion of employed youth ages 15-18 remains high, particularly for young males.

**Colombian women (ages 10 and higher) work more hours than their male counterparts and spend a higher proportion of their time in unpaid work (GEIH 2013).** Gendered care work likely affects their ability to participate in the labor force: statistical data shows that twice the number of males ages 15-18 are employed as compared to females (32 percent vs. 17 percent); and this difference carries into the next age bracket (ages 19-24) (71 percent vs. 46 percent). According to GEIH data, Colombian men spent 61.6 hours per week in both paid and unpaid work, while women spent 72.4 hours, a gap of 10.8 hours. With respect to unpaid work, men worked 13.1 unremunerated hours per week on average, compared to 32.0 hours for women, a difference of 18.9 hours. The vast majority, 92.4 percent, of unpaid work was household labor and care work (children and the elderly).

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<sup>25</sup> World Bank 2014.

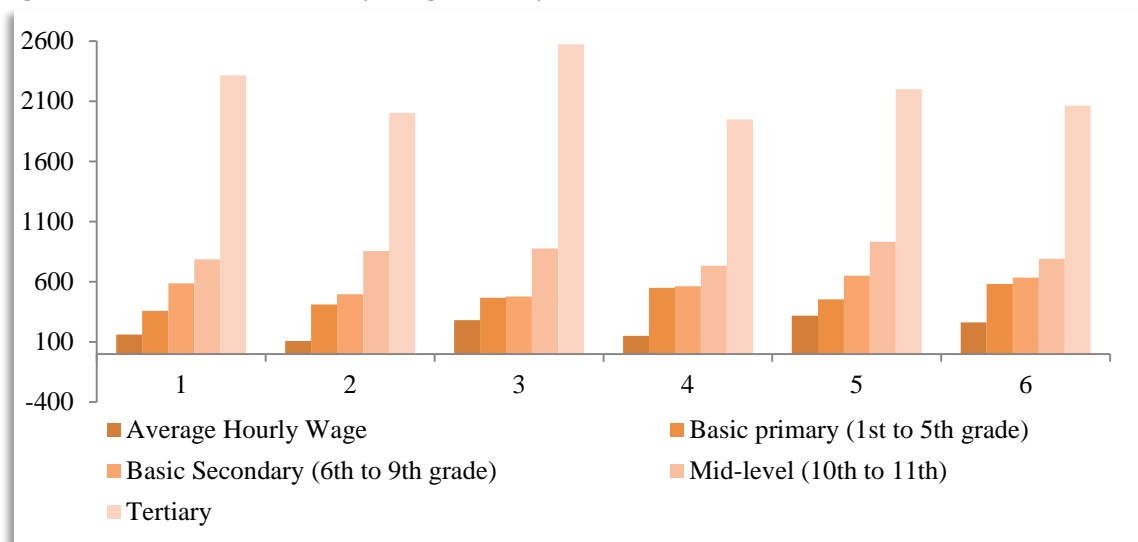
<sup>26</sup> World Bank, Poverty and Labor Brief, 2012.

<sup>27</sup> According to Colombian law, youth may enter the labor market after 15 years of age, but those ages 15 to 17 years require special permission from the Labor Inspector or the local territorial entity (Ley 1096 de 2006, Art. 35).

<sup>28</sup> LAC Equity Lab tabulations of SEDLAC (CEDLAS and the World Bank), based on the methodology of "Out of School and Out of Work: A Diagnostic of Ninis in Latin America", work in progress by De Hoyos, Popova, and Rogers (World Bank).

Even as women attain higher levels of education, wages continue to be higher among men at all education levels. Between 2008 and 2013, the hourly wage gap by education between males and females have remained, overall, remarkably stable, favoring males at all education levels (primary to tertiary education).

**Figure 1: Male/Female Hourly Wage Gap by Education Level – 2008-2013**



*Source: Gran Encuesta Integrada de Hogares 2008-2013.*

**Labor market indicators suggest that barriers and challenges facing young women when entering and remaining active within the Colombian labor market are different from those faced by their male counterparts.** Females lag behind their male peers in every labor indicator – labor force participation, wages, unemployment, unpaid work. These findings suggest strongly the need to implement policies with a gender focus as a way of overcoming these gendered inequalities in the labor market (see Box 3).

### **Box 3: Addressing gender inequalities in the labor market**

Gender disaggregated labor data presented in this note, while not exhaustive, reveals a clear and persistent disadvantage for young women in labor markets. Addressing gender inequalities in the labor market might require additional support for young women preparing for formal work. Further research, could identify gender-specific barriers and challenges facing youth (in school, out of school, vulnerable) and form a basis for gender-informed policy and program design. The following are potential considerations for policy and initiatives supporting young women's preparation and integration into the labor force.

**Labor Market Segregation** – Social norms often dictate what types of jobs are appropriate (or not) for men and women. Youth should be encouraged to pursue work according to their capabilities, aspirations, and income potential. The pursuit of non-traditional work may require targeted support and encouragement to young women that will boost their agency and prepare them for specific challenges (sexual harassment, gender discrimination, discouragement from friends and family, etc.) they might face in male-dominated sectors.

**Private Sector Sensitization:** Especially in cases where young women are pursuing fields that have typically been dominated by men, employers and employees may need sensitization on gender-

specific issues – discrimination, harassment – but also on potential benefits for diversifying their workforce.

**Addressing labor market barriers for young women should not come at the expense of young men.** The barriers and challenges facing male and female youth in labor markets are different; and it is crucial to research and understand these differences before designing any type of policy or specific activities to address them.

The CONPES 173 on Colombian Youth recognizes that youth (ages 14-28) enter the labor market under unfavorable conditions due to barriers to the accumulation of human capital, and emphasizes the importance of formal education as a solution for youth employability and labor market preparation.<sup>29</sup> For in-school youth, the strategy advocates for increased quality of education and the mitigation of drop-outs (through monitoring, special programs and middle to high school transition support). It proposes supporting youth development of life plans through increasing access to information about relevant career options; enabling youth to acquire the skills necessary for different types of work; and providing the opportunity to develop marketable skills (work practicums, certification opportunities) relevant to those career options within the school environment. The strategy identifies the need for formal systems of information that provides youth from all socio-economic groups access to information on where to obtain work; and argues for the creation of political instruments that bolster legal protections relative to the type of work, locations and intensity of hours for youth workers. For unemployed, out of school youth, the CONPES recommends employability programs that include relevant socio-emotional and technical skills relevant to the Colombian labor market.

**A stronger gender-based approach that exploits possible synergies with the CONPES 147 could help strengthen the impact of the Colombian Youth strategy.** For instance, the CONPES 173 does not include an analysis on strategic opportunities (short or long-term) within the Colombian labor market for youth, nor does it propose gender-specific solutions to labor market preparation for youth. However, key components within the strategy, namely, the opportunity for youth to develop marketable skills within the context of their life plans, and the provision of cognitive and socio-emotional skills in technical training centers provide important opportunities for exploiting synergies with the CONPES 147 on teenage pregnancy.

#### **5. Cognitive and Socio-Emotional Skill Development – Evidence from successful programs around the world**

**A growing body of evidence suggests that boosting higher-order cognitive and socio-emotional skills in youth can have positive impacts on education, health, and labor market outcomes in the short and long term** (World Bank 2013; UNFPA 2013; Advocates for Youth 2008; Lonczak et al. 2002; Ibarraran et al. 2012; Bandiera et al. 2012; Cunningham and Villaseñor 2014). Cognitive and socio-emotional skills are beneficial for all age groups; but cannot be learned at any age, and require a progressive acquisition based on developmental capacity (Guerra et al. 2014). If developed and reinforced in adolescence and young adulthood, these skills can greatly influence young men and women's development and professional success (Borghans et al. 2008, Guerra et al. 2014).

**Cunningham and Villaseñor (2014) propose four key skill sets – basic cognitive, higher-order cognitive, technical and socio-emotional skills – necessary for youth, especially within in the**

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<sup>29</sup> CONPES 173

**context of labor market.** Cognitive skills, as defined by the American Psychological Association (APA), include the “ability to understand complex ideas, to adapt effectively to the environment, to learn from experience, to engage in various forms of reasoning, to overcome obstacles by taking thought” (Neisser et al. 1996). **Basic cognitive skills** form foundational academic knowledge and include literacy and math skills; while **higher-order cognitive skills** build on these basic competencies, and include skills relative to more complex information processing – critical thinking, decision-making, organization, efficiency, problem solving, written and oral communications, and strategic management (Cunningham and Villaseñor 2014). **Technical skills**, a subset of cognitive skills, pertain to an individual’s knowledge and ability to complete work-related tasks, such as the ability to change the oil in a car, the knowledge of Java or C++ to program a computer, or the capacity to operate heavy machinery (Almlund et al. 2011). **Socio-emotional skills** include behaviors, attitudes and traits that determine how we approach and complete different situations or tasks. Termed “non-cognitive” by economists and sometimes labeled “psychosocial” or “soft skills” by development practitioners, socio-emotional skills include, among many others, motivation, punctuality, self-confidence, grit, conscientiousness, dependability, and leadership.

**Higher-order cognitive and socio-emotional skills training can increase individual agency by equipping youth with skills to identify effective choices and transform those choices into desired life outcomes.** Higher-order cognitive skills training can provide youth with the tools to better understand their environment, think more deliberately about their future, and learn how to pursue specific paths to achieve their new goals (i.e. avoiding risky behaviors, building self-esteem, making good decisions, etc.). Socio-emotional skills such as self-control, grit, self-efficacy, and sociability (among others) can equip them with the behaviors, attitudes and traits to help them fulfill positive life goals relative to academic achievement, sexual and reproductive health and labor market outcomes (Heckman et al. 2006; WHO 1999, Guerra et al. 2014). Research suggests that cognitive skills, while important, are not sufficient for economic success; and higher wages and greater employability are associated with higher levels of socio-emotional skills (Duncan and Dunifon 1998; Heckman et al. 2006; Judge and Hurst 2007, Guerra et al. 2014).

**Higher-order cognitive and socio-emotional skill development can level the field of opportunities for young men and women by equipping them to think critically about social and gender norms and to avoid behaviors that perpetuate gender inequalities.** Research suggests that young people with more gender-equitable attitudes have better sexual health outcomes than their peers (Azevedo et al. 2013, World Bank, *Adolescent Girls Initiative*). Men who ascribe to hegemonic notions of masculinity are less likely to use condoms or other contraceptives, and more likely to perpetrate violence against their intimate partners and/or have multiple sex partners (International Sexuality and HIV Curriculum Working Group 2009). Men with more gender-equitable attitudes were less likely to perpetrate sexual violence, and more likely to be happy, to have been tested for HIV, to talk to their partners and to have better sex lives. (ICRW and Promundo, 2011). In some contexts, social definitions of femininity that center on motherhood can influence the aspirations of young women; but socio-emotional skills that enhance individual and group agency and create alternate notions of feminine identity (Presler-Marshall and Jones 2012).

**Many youth, especially vulnerable youth, are not often exposed to higher-order cognitive or socio-emotional skills at home or from their peers; and are less likely to develop them on their own, putting them at a disadvantage in the labor market** (Lasida and Rodriguez 2006). Guerra, Modecki and Cunningham (2014) argue that basic cognitive, higher-order cognitive and socio-emotional skills are learned in progression. They identify *optimal periods* for investment in the acquisition of specific skills – problem solving, resilience, achievement motivation, control, teamwork, initiative, confidence and ethics – and argue that the optimal stage for the development of these skills is middle-childhood (ages 6 to 11), with the primary school being a critical venue for skill acquisition. **Studies have shown that many programs that include a combination of**

**interventions including non-cognitive and socio-emotional skills, sexual and reproductive health information, academic support, and technical training can improve development outcomes for youth** (Ball and Moore 2008; Rosenthal 2009; Bandiera et al. 2012; Ibarraran et al. 2012; Adoho et al. 2014). Examples of comprehensive and multi-faceted programs have been shown to not only reduce teenage pregnancy rates, but also reduce instance of other risky behaviors such as drug and/or alcohol abuse, violent and/or criminal behavior and dropping out of school. However, the evidence suggest that the “right” combination of intervention is context dependent and further research is needed to better understand the specific ways in which specific skills can improve labor outcomes for youth (Guerra, Modecki, and Cunningham 2014).<sup>30</sup>

The following case studies highlight programs that incorporated life skills training and had positive impacts on reducing teenage pregnancy. These studies are by no means exhaustive.<sup>31,32</sup>

### **1) GUATEMALA CASE STUDY: *Abriendo Oportunidades***

In Guatemala, Mayan girls are marginalized and achieve much lower health, human development, and economic outcomes over their lifetimes compared to non-indigenous girls.<sup>33</sup> They often get married at a young age and drop out of school. As an attempt to reverse these trends, girls’ clubs established in safe spaces within their communities allowed girls to make friends and foster a support network while receiving higher-order cognitive skills, socio-emotional skills<sup>34</sup> and information on sexual and reproductive health (UNFPA 2013; Catino et al. 2011).

**Beginning in 2004, the Population Council of Guatemala implemented a project called Creating Opportunities (*Abriendo Oportunidades*), which aimed to support Mayan girls (ages 8-18) through adolescence.** The *Abriendo Oportunidades* program trains girls to run community-based girls’ clubs. Girls are divided into two age cohorts (ages 8-12 and 13-18) to better support participants with age-appropriate and relevant information. Each year new girls are selected and trained to lead the girls’ clubs providing peer-to-peer training through workshops on self-esteem, life skills, developing aspirations and planning for the future, sexual and reproductive health, and HIV/AIDS prevention. Together with their mothers, participants are supported by the Guatemalan Indigenous girls Resource and Empowerment Network (GIGREN), which is a platform through which they can advocate at the community and national level. (Catino et al. 2011)

**A qualitative evaluation<sup>35</sup> showed that the overall impact of *Abriendo Oportunidades* on girls’ self-esteem, was very positive** (Catino et al. 2011). Girls’ access to positive role models in their own communities increased, and qualitative evidence shows that community attitudes about girls’ social status and involvement in public activities have become more positive and supportive. Interviews with program participants attribute changes in intra household dynamics to participation in the program, which have led to more equitable treatment between male and female siblings, especially with regard to school attendance and freedom of movement.

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<sup>30</sup> Several important evaluations on this topic are underway; for example: the Haiti Adolescent Girls’ Initiative (World Bank), Economic Empowerment of Adolescent Girls and Young Women in Liberia (World Bank), and Empowering Girls in Rural Bangladesh (J-PAL), among others. These evaluations will continue to shed light on the best skills to focus on along with the most successful delivery methods.

<sup>31</sup> In the process of selecting the case studies to be included in this note, the team first undertook a comprehensive search of programs and selected for inclusion those that included teenage pregnancy outcomes as a part of the program’s review and evaluation.

<sup>32</sup> Tables T1, T2 and T3 in the Table Annex summarize these programs’ characteristics, components, outcomes and results.

<sup>33</sup> For instance, indigenous women in Guatemala ages 15 and older have 2.5 years of education on average, as compared to 5.7 years for non-indigenous women. Literacy rates for indigenous women are considerably worse than their non-indigenous counterparts: 48.3 percent versus 80.5 percent (Escobar 2011).

<sup>34</sup> Project documents use a broader term “life-skills.”

<sup>35</sup> The methodology of the qualitative evaluation is unknown, as it was not discussed in Catino et al. 2011.

Girls also reported having more autonomy and mobility as they are able to travel to local girls' group locations. The qualitative study also identified that participants gained "more future-oriented outlook and are able to articulate more ambitious goals for themselves, such as delaying marriage, returning to school, and striving to start a small business."

## **2) U.S. CASE STUDY: Seattle Social Development Project**

**The Seattle Social Development Project works with elementary school students (grades 1-6) to develop skills for participation in school and family and promote school attachment.**

Teachers are taught to foster an interactive and cooperative classroom environment through proactive classroom management. Parents received training in behavior management, providing academic support and specific skills to reduce risks for drug use. The socio-emotional skills curriculum for students emphasized building interpersonal problem-solving skills and refusal skills. The program was designed under the hypothesis that if families and schools provide youth with opportunities for active and contributive environment that creates participation skills for children, they will develop strong bonds with school and family and in turn these bonds will protect youth against socially unacceptable behaviors. (Lonczak et al. 2012; Hawkins et al. 1999)

Results of an evaluation<sup>36</sup> showed that the project helped prevent risky sexual behaviors and negative health impacts for participants several years later (Advocates for Youth 2008; Lonczak et al. 2002). For instance, at the age of 21, only 38 percent of female participants reported they had ever been pregnant versus 56 percent in the comparison group. Also, only 23 percent of participants had given birth versus 40 percent in the comparison group. There was no difference in the percentage of males who had fathered a child between groups.

**The social development approach that boosted socio-emotional skills not only reduced the incidence of teenage pregnancy, but also improved condom use, increased educational outcomes, and decreased risky behaviors.** Program participants reported a lower number of sexual partners by the age of 21: 43 percent of youth in the comparison group said they had 6 or more sexual partners, but only 32 percent of participants had engaged in the same behavior. Results were very strong for African-American participants with regards to condom use - half of African-American participants reported using a condom at every sexual encounter versus only 12 percent in the comparison group. Among African-Americans in the sample, 79 percent of program participants reported using a condom during their last sexual encounter as compared to 36 percent in the comparison group. Condom use at the last sexual encounter was also greater for program participants overall (60 percent vs. 44 percent). Participation in the project was also found to increase educational outcomes and reduced incidence of bad behavior such as violent and/or criminal acts and alcohol abuse. The researchers found that the design of this social development program, which promoted academic success, fostered attachment to school, and improved social skills at a young age, could help prevent risky behavior and negative sexual health outcomes throughout teenage years and into young adulthood.

## **3) DOMINICAN REPUBLIC CASE STUDY: *Juventud y Empleo* Project**

***Juventud y Empleo* (JE) is a government-sponsored training program to increase labor market outcomes for disadvantaged youth (ages 16 to 29) without a high school education.**

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<sup>36</sup> Lonczak et al. 2002 performed a follow-up study of sexual behavior at age 21 for the treatment (144 participants) and control group (205 non-participants). The evaluation design was a non-randomized control trial with long-term follow-up. No significant differences were found between the "full" treated and control groups along gender distribution, race distribution (white vs nonwhite), poverty (free lunch eligibility during grades 5, 6, or 7), proportion from single-parent homes (during grade 5), mean years of parents' education (during grade 5), mean years living in Seattle (by grade 6), or mean number of residences lived in (from age 5 to 14 years),.

The program includes 75 hours of skills training combined with 150 hours of technical and vocational training. After completing all 225 hours, participants complete a 3-month internship in a private sector firm.

**The skills curriculum aims to boost self-esteem and expectations by emphasizing good professional habits and planning for the future.** It specifically includes: *cognitive skills* to improve math and communication ability, *higher-order cognitive skills*<sup>37</sup> to improve decision making in the workplace, teamwork, efficiency, and finding and maintaining quality employment; and *socio-emotional skills* to better manage social relationships and prevent conflict. The vocational component developed technical skills in a job of the participant's choice – including secretary, baker, hair stylist, and auto mechanic, among others.

**A randomized impact evaluation**<sup>38</sup> (Ibarraran et al. 2012) captured the results from 5,000 individuals (out of 10,309 participants) and surveyed them 18-24 months after the project ended. The goal of the evaluation was to assess the impact of JE on longer-term labor market outcomes along with any changes in lifestyle, behavior, or expectations. The economic-related results showed that JE had very minimal impact on improving employment rates except for a 17 percent increase in job formality<sup>39</sup> for men. Also, for those employed, monthly earnings increased by an average of 7 percent. Results in the non-labor indicators were more promising. Participation in JE decreased the adolescent fertility rate by 2 percentage points on average. The most significant effect was for 16-19 year olds who saw a decrease in adolescent fertility by 6 percentage points – a 48 percent decrease overall for this cohort. Overall levels of optimism and future expectations were also positively impacted by participation and these impacts were stronger for females and the younger members of the cohort.

**Novella and Ripani (forthcoming) explore the mechanism through which the JE program affected teen pregnancy.** They show evidence that supports that the impacts on teen pregnancy were driven by the positive effects of the JE program on socio-emotional skills (measured by the Social and Personal Competencies (CPS) scale and the Grit Scale) and expectations rather than an incapacitation effect (decreases in leisure time or time allocation changes).

#### **4) U.S. CASE STUDY: Teen Outreach Program (TOP)**

**TOP is a high school level**<sup>40</sup> **teenage pregnancy and school dropout prevention program. It is targeted towards students at high-risk for dropping out or for teenage mothering/fathering.** It has three components that are implemented over a nine-month timeframe - community service to empower youth to succeed, classroom discussions about their volunteer experience, and socio-emotional skills development.<sup>41</sup> The curriculum covers the topics of values, human growth and development, relationships, coping with family stress, along with other social and emotional issues associated with the transition from adolescence into adulthood. Students were encouraged to “discuss their feelings and attitudes about important developmental decisions including handling close friendships and romantic relationships, new academic and employment challenges.” Although the goals of the project are to reduce teenage pregnancy and school dropout rates, TOP only addresses these issues directly in 10-15 percent of the curriculum.

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<sup>37</sup> Project information documents use the term “professional skills.”

<sup>38</sup> The evaluation carried out was a randomized control trial. Effects are estimated using intention-to-treat, IV for treatment assignment, due to 20% attrition rates.

<sup>39</sup> A job is considered formal if it provides health insurance or issues a written contract.

<sup>40</sup> The program was also tested among middle school students but it was not as effective as it was for high school students at high-risk for teenage pregnancy or dropping out of school.

<sup>41</sup> Project information documents include the term “life skills.”



Evaluations<sup>42</sup> show that participants in TOP had fewer incidence of risky behavior like failing classes, suspension, dropping out of school and teenage pregnancy (Frost and Forrest 1995; Allen 2001; Allen et al. 1997; Advocates for Youth 2008). According to the most recent evaluation from a replication effort, participants in TOP had half<sup>43</sup> the risk of pregnancy of the comparison group (Allen 2001). Participants who were already mothers or fathers showed one-fifth the risk of a repeat pregnancy as compared to the control group. The risk of failing classes was 60 percent less likely for TOP participants; and suspension rates were 52 percent lower (Allen 2001).

**Researchers concluded that teenage pregnancy and school dropout rates were reduced by empowering participants' decision-making abilities, improving social interactions, and learning how to manage emotions through life skills trainings.** The power of using socio-emotional skills training as a tool to reduce teenage pregnancy and other risky behaviors is validated here, especially since the curriculum included only 10-15 percent of direct lessons on sexual and reproductive health and the consequences of leaving school early. Students were empowered by the lessons they learned on coping with the transition from adolescence into adulthood. The results have especially important implications for communities and sub-groups where directly addressing sexual and reproductive health issues with youth may be taboo.

The program conducted cost analysis estimating that the program cost between \$500 and \$700 per student per year; but in cases where facilitator time was covered, in-kind costs dropped to less than \$100 per student.

#### **5) U.S. CASE STUDY: Greater New Britain Teen Pregnancy Prevention's Pathways/Senderos Center**

**The Greater New Britain Teen Pregnancy Prevention's Pathways/Senderos Center in Connecticut (USA) combines several types of interventions.** This project promotes youth development for poor Latino middle and high school students (ages 11 to 18) and aims to reduce teenage pregnancy. Each year, 50 students (age 11) self-select into the program with the expectation of their participation in daily interactions over 7 years. Staff supports participants around the clock throughout the seven-year program. Project components include: 1) education on family life, sex, and health; 2) academic support through tutoring and school monitoring; 3) career and vocational preparation; 4) creative expression; 5) recreation; and 6) physical and mental health care referrals.

**An evaluation<sup>44</sup> (Rosenthal et al. 2009) for one cohort of 50 participants from 1997 to 2003 showed positive results in a number of outcome areas.** The evaluation showed that the participant group had a rate of 54.1 teenage births per 1000 females as compared to the local average rate of 94.1 teenage births per 1000 females. All participants graduated from high school on time, nearly 60 percent attended a four-year college (compared to 35 percent in the local average), and 14 percent graduated from college. Unfortunately, the evaluation did not include an assessment of economic or labor market impacts from the project.

**Results also indicate that some projects are expensive up front, but that costs outweigh long-term societal gains.** The evaluation included a cost-benefit analysis which showed that during the 7

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<sup>42</sup> Several evaluations were conducted employing different methodologies. Allen 2001 compares a treatment and control group of which only 20% is randomly assigned. He includes additional subject that are hand selected by guidance counselors to have similar socio demographic characteristics, to provide the study with more power.

<sup>43</sup> Findings are presented as odds ratios. Coefficients on treatment when controlling for socio-demographic characteristics are: pregnancies -.17, course failures -.14, suspensions -.18, all of which are statistically significant at the 1% level.

<sup>44</sup> Comparison group constructed using administrative data and census data, creating geographic, race, and age based population estimates. This only assures that the comparison group is similar to the treatment group along geographic, race and age variables. However, the participants may differ along other characteristics which could bias causal impact estimates. The evaluation does not address this potential bias nor does it detail selection into the program.

years of implementation, the cost to society outweighs the benefits by roughly \$1,600 per participant (about \$80,000 for one cohort of 50 students). However, just 2 years after a cohort finished the program (age 20.1), the benefits to society start to outweigh the costs. By the time former participants reach the age of 30, the net benefit to society is estimated to be \$10,475 per participant (\$523,750 for a cohort of 50).

**The evaluation (Rosenthal et al. 2009) emphasizes that training, specifically decision-making and taking responsibility for oneself, filled important knowledge gaps in these high-risk teenagers' lives.** The comprehensive approach, which focuses on improving the lives of the participants overall, not just sexual and reproductive decisions, positively impacts participants' emotional, professional, and education outcomes, and benefits society in the long run. The study highlights the importance for policy makers to focus on potential longer-term impacts of teenage pregnancy programs instead of immediate costs.

#### **6) UGANDA CASE STUDY: Empowerment and Livelihood for Adolescents Project (ELA)**

**The *Empowerment and Livelihood for Adolescents* project was implemented by the NGO BRAC Uganda and sought to improve cognitive and non-cognitive skills<sup>45</sup> of adolescent girls (ages 14-20) and technical skills training.** Trainings were implemented in 50 community 'adolescent development clubs' (not school-based) in order to ensure participation from both in school and out of school girls. The program took place outside of school hours to minimize interference with classes. For the girls in school, data confirms there were no dropouts during training, nor did participants decrease their school attendance or time spent on homework.

**Higher-order cognitive and socio-emotional skills training aimed to increase knowledge, particularly on sexual and reproductive health, and to reduce risky behavior.** The curriculum covered leadership, sexual and reproductive health (menstruation, pregnancy, STDs, HIV/AIDS, family planning), rape, and rights awareness on important topics for women in Uganda, including gender-based violence, child marriage, and bride price. Modules on management skills, negotiation, and conflict resolution were also included.

**The goal of the technical training component was to enable participants to start and maintain their own small-scale income generating activities following ELA training.** Participants could choose to learn income-generating activities for agriculture, raising poultry, hair styling, computers, or tailoring, among others. Girls also completed financial literacy courses covering budgeting, financial services, and accounting in addition to vocational-specific skills.

**The project included a rigorous randomized impact evaluation (Bandiera et al. 2012) which tracked 4800 girls over a period of 2 years (2008-2010).** Overall, ELA participation is attributed to a near 26% drop in fertility rates over a two year time window while increasing overall knowledge on pregnancy and HIV. Among sexually active participants, there was a 50 percent increase in self-reported routine condom use. There was a dramatic decrease in the number of girls who reported having had sex unwillingly over the past year (21 percent at the baseline down to almost zero), which suggests that life skills modules on rape, gender-based violence prevention, legal rights, and negotiation empowered them in their relationships with men. There were no reported changes in STD incidence, but those who contracted a STD were more likely to seek treatment at a health facility. When participants were asked the 'suitable age' for marriage and having children, the age reported increased over the participation period. Participants also preferred that their own daughters (present or future) get married at a significantly older age than reported at the baseline.

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<sup>45</sup> Project documents utilize term "life skills."

**Participation in the ELA project had strong positive economic impacts on beneficiaries.** The likelihood that girls participated in income generating activities increased by 32 percent in participant communities, mostly due to increases in self-employment. Over the span of the evaluation, beneficiary incomes increased by 14.8 percent on average.

The results of the ELA project evaluation suggests that “combined interventions might be more effective among adolescent girls than single-pronged interventions aiming to change risky behaviors solely through related education programmes, or to improve labor market outcomes solely through vocational” (Bandiera et al. 2012). This case suggests that higher-order cognitive and socio-emotional skills and traditional technical training are complimentary.

## **7) LIBERIA CASE STUDY: *Economic Empowerment of Adolescent Girls and Young Women (EPAG)***

The Adolescent Girls’ Initiative (AGI)<sup>46</sup>, *Economic Empowerment of Adolescent Girls and Young Women (EPAG)*, program in Liberia was launched in 2009 to increase employment and incomes for 2,500 young women by providing life skills and livelihood training to help them transition into productive work. Participants received six months of classroom based training followed by a six month support phase. Participants opted into either a formal employment technical track (hospitality, professional cleaning/waste management, office/computer skills, professional painting, security guard services, or professional driving) or a general self-employment “business development services”<sup>47</sup> track for their classroom training. The classroom based curriculum for all technical fields also included *cognitive skills* (financial literacy, math); *socio-emotional skills* (leadership, self-esteem, confidence, problem solving, community service, communication, time management, conflict management, job search techniques and interviewing, and preparation for professional life); and modules on sexual and reproductive health, early pregnancy, unequal gender norms, gender-based violence, and rights awareness (World Bank 2013; World Bank 2012, Adoho et al. 2014).

**Results from the midline impact evaluation of the EPAG program<sup>48</sup> show promising results** (Adoho et al. 2014). This evaluation was conducted six months after program participants had completed classroom based training comparing treated participants to a control group. Employment for participants increased by 47 percent, and earnings saw an 80 percent increase. Individual empowerment indicators such as self-confidence, anxiety about the present and future, and access to money showed positive effects. At the household level, gender norms became more equitable. An endline evaluation found that the impacts for treated participants on employment and savings were sustained in the treatment group. The control group from the midline was treated by the time of the endline as the evaluation was a randomized phase-in model, and impacts on this group also affirmed effects on employment and savings. The endline evaluation confirmed that the program did not have impacts on sexual behavior even when looking over a longer period of time (one year and four months after round one participants completed training). (World Bank 2012, Adolescent Girls Initiative 2014).

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<sup>46</sup> The Adolescent Girls’ Initiative (AGI), a public-private partnership between the World Bank and the Nike Foundation, promotes the transition of adolescent girls from school to productive employment through rigorously tested, innovative pilot interventions. AGI projects are being piloted in 8 countries including Haiti, Lao PDR, Afghanistan, Liberia, Nepal, Jordan, South Sudan, and Rwanda. Each project prepares participants for labor market entry through vocational and/or business training combined with life skills.

<sup>47</sup> The business services development track curriculum included training on entrepreneurship principles, market analysis, business management, customer service, money management, and record-keeping.

<sup>48</sup> The evaluation employed an individual level randomized control trial design, with a sample size of 1,601 students surveyed in baseline and midline. Results presented here are intention to treat findings. The midline data was collected seven months following completion of the classroom training and one month after the completion of the support phase.

## 8) HAITI CASE STUDY: *Adolescent Girls Initiative*

The Haiti **Adolescent Girls Initiative (AGI)** program, implemented from 2012 to 2014, sought to improve social and economic outcomes for 1,000 vulnerable females ages 17-21 in Port-au-Prince. The project included 4-6 months of technical training in a high-demand trade in local labor markets (auto mechanic, air conditioning repair, plumbing, construction, IT, etc.), 4-6 months of socio-emotional skills development, a month-long internship to hone professional skills, psycho-social support and a stipend to cover the transportation and food costs associated with participation.

**The life skills curriculum for Haiti AGI included 8 modules on: 1) psycho-social education; 2) civic engagement and leadership; 3) gender-based violence; 4) sexual and reproductive health; 5) professional development and work ethic; 6) disaster preparedness; 7) financial literacy; and 8) disability awareness.** Together with local partners, the World Bank created and validated the skills curriculum to ensure relevance and sensitivity to the local context, language and target audience. Teachers equipped with best practice methods specific to the target group conducted trainings at private training centers; and skills lessons were held at well-respected community NGOs.

**A qualitative evaluation<sup>49</sup> of the Haiti AGI reveals the positive effect socio-emotional skills training had on participants.** Female participants were more motivated and confident on account of participation in the AGI. The young women reported that modules on sexual and reproductive health, violence against women, and professional behaviors were the most relevant and helpful. Several women expressed particular regret that the sexual and reproductive health module was not taught earlier in the course; they claimed it would have helped them avoid negative outcomes relative to sexual and reproductive health decisions.<sup>50</sup> Through the violence against women module, many learned for the first time that non-consensual sex is rape. Mentors counseled young women who reported experiencing rape within their current relationships. Interviews indicate that AGI filled critical skill and information gaps for young women in Haiti, and provided them with opportunities previously not available to them. Participants reported having higher expectations about future labor opportunities “confidence across the board that they will be able to find enough shorter term work to significantly increase their income on a more frequent basis... [and] be able to earn above the minimum wage as skilled labor.” They credited socio-emotional skills training with these changes. (Schutte, *Forthcoming*)

**An impact evaluation of the Haiti AGI, which was completed three months after program completion, confirms that socio-emotional and technical skills of beneficiaries were enhanced.** AGI participants show increased autonomy in decision-making and personal mobility and standing in relations with family and others when compared to a control group. A positive impact on autonomy in personal mobility of AGI trainees was observed: AGI participants were 15pp more likely to go to school or training centers, 6pp more likely to go to NGOs and 8pp more likely to go to health centers. Their aspirations about work and income were strengthened; they became more assertive and willing to talk to others about job opportunities; and they were less willing to accept violent behavior from an intimate partner. The impact evaluation also shows that the intervention significantly reduces stress: beneficiaries reported feeling less overwhelmed and more in control (World Bank 2015).

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<sup>49</sup> The qualitative evaluation was conducted through eleven focus groups with 107 stakeholders interviewed including beneficiaries, family and parents, training center staff, mentors, and implementing NGO staff.

<sup>50</sup> This point highlights how difficult it is to fully interpret the results of impact evaluations for similar projects which may lack a qualitative angle. Aspects of agency are complicated to measure but researchers are coming up with creative ways to capture agency-related indicators through impact evaluations. However, qualitative evaluations are especially effective at capturing quotes, emotions, and other data that is difficult to quantify.

**With respect to labor-market outcomes, the evaluation shows that beneficiaries are less likely to be working in the short term; but that they are transitioning toward higher skilled jobs related to technical training received.**<sup>51</sup> Despite failure to produce immediate economic outcomes, Haiti AGI participants reported feeling more in control of their decisions regarding their professional life, and had higher aspirations for more education and enhanced expectations for better employment. Qualitative evaluations confirmed the key role of soft-skill training in preparing women for challenges in entering a difficult labor market; young women indicated that soft-skill training gave them the confidence to recognize and diffuse unwanted sexual advances in the process of interviewing for jobs. Compared to the control group, young women in AGI were 14pp more likely to expect to enroll in school and 12.7pp more likely to expect to be engaged in an income-generating activity in two years.

## 6. Conclusions and recommendations

**Like the CONPES 147, this note recognizes that the range of factors that affect teen pregnancy in Colombia is large and that developing effective policy solutions to reduce teen pregnancy depends upon identifying the right mix of programs that relieve constraints and enable teens to live the lives they value and have reason to value.** In particular, interventions that combine strategies to address both *external* constraints (access to quality endowments and opportunities) and *internal* constraints (self-esteem, self-efficacy, grit, etc.) will enable youth to create meaningful life plans and to pursue (or avoid) opportunities based on their aspirations.

**Young women and men need the capacity to aspire and develop meaningful life plans, but they also need practical skills and tools to accomplish their goals.** Higher-order cognitive and socio-emotional skills are critical for both the social and professional development of adolescents, and are highly valued by employers. Practical, well-designed interventions can improve labor market outcomes of young men and women, reduce teenage pregnancy rates, and impact other dimensions of well-being, such as self-esteem and healthy relationships.

**In Colombia, important and currently unexploited synergies exist between the youth labor and teenage pregnancy agendas.** Both strategies seek to relieve the constraints of Colombian youth to opportunities, and to enable them to develop and pursue meaningful life plans. Key components within these strategies, namely, enhance the opportunity for young man and women to develop or strengthen skills (cognitive, non-cognitive, socio-emotional) within the context of their life plans provide important, yet currently unexploited, opportunities for linking the two strategies and enhancing their impact.

**The note presents evidence that targeted youth programs combining technical training along with higher-order cognitive and socio-emotional skills not only can increase economic outcomes, but also can lower incidence of teenage pregnancy.** Interventions that combine training for specific, targeted labor market opportunities with skills that increase confidence, self-esteem, and deliberate planning for the future, such as “Juventud y Empleo” of the Dominican Republic, will equip boys and girls with the educational, technical and social tools necessary to create and pursue meaningful life goals while impacting both teenage pregnancy and labor market outcomes of the youth. Such interventions, however, must be adapted to different groups (in-school and out-of-school) and recognize gender-based differences. With regard to the latter, while youth unemployment and teenage pregnancy are issues that concern both boys and girls, intervention should carefully consider the different needs of girls and boys have when aiming to promote better labor market outcomes for both. A gender-sensitive curriculum can help young men and women

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<sup>51</sup> Negative results could be explained by the limited timeframe of the evaluation, conducted three months after the program's conclusion due to security concerns and shortened period of implementation between the first and second cohort.

think critically about gender norms and confront stereotypes that might limit their expectations for the future.

**It is important to emphasize, however, that boosting life skills could possibly backfire if not combined with tangible economic opportunities.** For instance, while higher-order cognitive and socio-emotional skills can play a positive role in strengthening critical thinking, raising aspirations, and allowing individuals to more successfully navigate life decisions, if economic opportunities are not available after individual agency is raised and future goals and aspirations are set, youth might get frustrated and abandon their life plans. Youth interventions that increase technical and socio-emotional skills can improve individual development outcomes in the long run; however, complementary policies that improve youth labor market opportunities are also necessary.

**Lastly, it is important to be mindful that successful interventions are often context-dependent.** The example programs combining higher-order cognitive, socio-emotional and technical skill development presented in this note provide a good starting point for interventions that can exploit the potential synergies between the COPNES 147 and CONPES Juventud. However, successful programs are not readily replicable across countries; they must be adapted to the local context and their effectiveness must be evaluated rigorously before scaling-up.

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Table Annex

Table T1: Life Skills Training and Teen Pregnancy Outcomes

	PROGRAM	COUNTRY	TARGET GROUP	INTERVENTION	RESULTS	METHODOLOGY
1	<b>Abriendo Oportunidades</b>	Guatemala	Mayan girls, ages 8-18	Access to girls' clubs, safe spaces where girls build social networks and receive life skills and leadership training.	e; Increased self-esteem, confidence, autonomy and improved intra household gender norms	Qualitative program evaluation, no comparison group
2	<b>Seattle Social Development Project</b>	USA	Elementary school students, grades 1-6	Classroom-based curriculum to build interpersonal problem-solving and resist peer pressure.	Improved educational outcomes; reduced risky behaviors – fewer sexual partners, lower pregnancy and birth rates, higher rates of condom use, lower incidence of substance abuse and violent/criminal activity.	Nonrandomized control trial, longitudinal panel, long-term follow-up (N=349 students)
3	<b>Juventud y Empleo (JE)</b>	Dominican Republic	Disadvantaged youth (ages 16-29)	Life skills training – planning, cognitive, social and professional skills; technical and vocational training plus internship	Decreased fertility rates, especially among the 16-19 year old cohort; increased optimism for future; increase in formal work (men only).	Randomized Control Trial (N=5,000)
4	<b>Teen Outreach Program</b>	USA	High school students	Community service, classroom	Improved educational outcomes –	20% of the sample was randomly

<b>(TOP)</b>			with high risk of dropout and/or teenage pregnancy	discussions, life skills instruction – coping with stress, relationships, communication and decision-making.	reduction in failed classes, suspensions and dropping out; lower rates of teen pregnancy and reduced levels of repeat pregnancy.	assigned to treatment or control. 80% was hand selected subjectively matching similar characteristics by guidance counselors.
<b>5</b>	<b>Greater New Britain Teenage Pregnancy Prevention's PATHWAYS / Senderos Center</b>	USA	Latino/a middle and high school students (ages 11-18)	Comprehensive 7-year program with daily interactions – academic support, career preparation, recreation, health care referrals, creative expression, and family life, sex and health education.	All graduated high school on time; majority continued to higher education	Comparison group constructed using local administrative data and census data, creating estimates based on geographic location, race, and age. Evaluation does not address potential selection bias into the program. (treatment sample size: 50 students)
<b>6</b>	<b>Empowerment and Livelihood for Adolescents (ELA)</b>	Uganda	Adolescent girls (ages 14-20)	Life skills (leadership, rights awareness, management skills, negotiation and conflict resolution), sexual and reproductive health education, and vocational training in girls' only spaces	Decreased teenage pregnancy rates; increased knowledge of HIV and pregnancy; increased condom use; elimination of reported "unwilling" sex; increased use of health facilities for those with STIs; increased income	Clustered Randomized Control Trial (N=4,800)

7	<b>Economic Empowerment of Adolescent Girls and Young Women (EPAG)</b>	Liberia	Young women (ages 17-21)	Knowledge and behavior skills; livelihoods training to support girls' transition into productive work; childcare during training; cash stipend	Increased earnings and labor force participation; increased empowerment indicators. No impacts on teen pregnancy.	Individual level randomized control trial (N=1,601)
8	<b>Haiti AGI</b>	Haiti	Vulnerable young women (ages 17-21)	Vocational training; life skills training; one month-long internship; psycho-social support throughout; cash stipend	Increased self-confidence and motivation, higher expectations about future labor market opportunities.	Qualitative evaluation: 11 focus groups conducted with 107 stakeholders interviewed  Quantitative Impact Evaluation: Randomized control trial (N=1474)

**Table T2: Case Studies - Components**

	TARGET GROUP		LOCATION			COMPONENTS					
	Gender (M/F)	Age (years)	Schools	NGO or External Org	Girl-Only Space	Life Skills	Professional Skills	Sexual and Reproductive Health	Internship	Service	Mentor
Guatemala: <i>Abriendo Oportunidades</i>	F	8 - 18		X	X	X					
USA: <i>Seattle SD Project</i>	M/F	6 - 12	X			X					
USA: <i>TOP</i>	M/F	14 - 18	X	X		X		X		X	
USA: <i>Pathways</i>	M/F	11 - 18		X		X	X	X			X
Dominican Republic: <i>Juventud y Empleo</i>	M/F	16 - 29		X		X	X		X		
UGANDA: <i>ELA</i>	F	14 – 20		X		X	X	X			
LIBERIA: <i>EPAG</i>	F	17 – 21		X		X	X	X			
HAITI: <i>AGI</i>	F	17-21		X	X	X	X	X	X		

**Table T3: Case Studies – Outcomes / Results**

	TARGET GROUP		EDUCATION		EMPLOYMENT		HEALTH			AGENCY		
	Gender (M/F)	Age (years)	Increased School Retention / Decreased Dropouts	Increased School Completion	Increased Paid Employment	Increased Wages	Reduced Adolescent Pregnancy	Increased Condom Use	Decreased Risky Behaviors	Reduced Early Marriage	Increased Self-Esteem & Confidence	Decreased Violent or Criminal Behaviors
Guatemala: <i>Abriendo Oportunidades</i>	F	8 - 18	X	X	X		X			X	X	
USA: <i>Seattle SD Project</i>	M/F	6 - 12					X	X	X			X
USA: <i>TOP</i>	M/F	14 - 18	X	X			X					
USA: <i>Pathways</i>	M/F	11 - 18		X			X					
Dominican Republic: <i>Juventud y Empleo</i>	M/F	16 - 29			X		X					
UGANDA: <i>ELA</i>	F	14 – 20			X	X	X	X		X	X	
LIBERIA: <i>EPAG</i>	F	17 – 21			X	X					X	
HAITI: <i>AGI</i>	F	17-21							X		X	X



Table T4: Econometria – Impact Evaluation

Variable	Direction of correlation	Statistically significant at the 10% level
<b>Economic and Demographic</b>		
Poverty	+	Yes
Economic Stratum	-	Yes
Rural	+	No
<b>Household</b>		
Completion of Secondary School	-	No
Your mother was pregnant in her adolescence	+	Yes
“Your parents know when you leave the house”	-	No
“Your parents impose curfew [ponian horarios]”	+	Yes
<b>Behavior</b>		
Age of first sexual relationship	-	Yes
Use of condom in first sexual relationship	-	Yes
<b>Education and Work</b>		
Interrupted studies before 14	+	Yes
Ever worked before 14	+	No
<b>SRH Information</b>		
Received information about Sexual and Reproductive Rights prior to age 14	+	Yes
Received information about reproductive decisions prior to age 14	+	No
Received information about pregnancy before age 14	-	Yes
Received information about maternity or paternity	-	Yes
Received information about abuse and violence before age 14	-	Yes

\* This table pools findings from different regression. All variables in the table represent right hand side variables, the direction of their correlation with the “ever pregnant” left hand side variable and statistical significance of said correlation. Fixed effects for municipality and region applied in all regressions.

## Data Annex

- **Labor force:** or economically active population (PEA) Proportion of people in working ages that are either working or looking for a job.
- **Unemployment:** Proportion of people in the labor force that are seeking employment.
- **Employment:** Proportion of people in working ages that are employed.
- **Unemployment by educational level:** Proportion of people in working ages that are seeking employment, by highest level of education achieved (none, preschool, basic primary, basic secondary, *media*, superior or university).
- **Underemployment:** DANE's definition. If weekly worked hours in first and secondary employment are less than 48, and if person expresses desire to work more hours.

*Source:* [http://www.dane.gov.co/files/faqs/faq\\_ech.pdf](http://www.dane.gov.co/files/faqs/faq_ech.pdf)

- **Informality:** DANE's definition of informality includes:
  1. *Workers who work in establishments, businesses or enterprises employing up to five persons in all its branches and agencies, including the employer and/or partner;*
  2. *Unpaid family workers;*
  3. *Unpaid workers in companies or businesses from other households;*
  4. *Domestics workers;*
  5. *Day laborers;*
  6. *Self-employed working in establishments up to five people, other independent professionals;*
  7. *Patterns companies or employers in five workers or less;*
  8. *Workers or government employees are excluded.*

*Source:*

[http://www.dane.gov.co/files/investigaciones/boletines/ech/ech\\_informalidad/metodologia\\_informalidad.pdf](http://www.dane.gov.co/files/investigaciones/boletines/ech/ech_informalidad/metodologia_informalidad.pdf)

- **Hours worked:** weekly hours worked in primary and secondary jobs
- **Part time employment:** Weekly hours worked (main + secondary job) less than 40 hours<sup>52</sup>
- **Wages:** Sum of income from main job, income from secondary job, and income in kind (+ each of the imputed estimated figures for each of them) in COP, only for those occupied.
- **Wages by educational level:** Wages by highest level of education achieved (none, preschool, basic primary, basic secondary, *media*, superior or university).

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<sup>52</sup> The highest mode (22 percent of the distribution) in this figure is 48 hours, while 40 is the second highest (11 percent of the distribution).