

Data for Youth, Peace and Security: A summary of research findings from the Institute for Economics & Peace

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This input brief, prepared for the Progress Study on Youth, Peace and Security commissioned by Security Council 2250, summarizes data and research findings relevant to youth, peace and security using IEP’s empirical positive peace framework as a lens. It also addresses the data challenges inhibiting further research on youth, peace and security.

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Key Findings

- IEP estimates that nearly 408 million youth live in a state or province where armed conflict took place in 2016. This estimate suggests that nearly 1 in 4 youth globally are affected, in some way, by armed conflict.
- A large youth population should not necessarily be seen as a precursor to violence.
- All of the world’s most peaceful countries have small or medium sized youth populations. But not all of the world’s least peaceful countries have large youth cohorts, and not all of the large youth populations are in the least peaceful places.
- Creating a high positive peace environment for young people can prevent breakdowns in peacefulness.
- Filling data gaps can yield even stronger evidence-based policy recommendations for youth, peace and security – and build institutional capacity along the way.

How many youth are affected by violence?

- IEP estimates that at least 407,840,200 young people, or 23 percent of the global population aged 15 to 29, live in a state or province where armed conflict or other organized violence took place in 2016.
- At least 2.5 million adolescents (aged 12 to 17) were displaced in 2014, or 15 percent of UNHCR's persons of concern. An estimated 3 million were displaced in 2015 and figures for 2016 are likely to show a similar rise.
- These estimates suggest that nearly 1 in 4 youth globally are affected, in some way, by armed conflict.

It is difficult to precisely establish how many youth in the world are affected by violent conflict. A full headcount would be expensive in the best of circumstances, but fragile and conflict-affected countries often have especially low statistical capacity. In addition to operating in insecure settings, these countries lack human, technological and financial resources. This means that they conduct fewer surveys, less often, with less methodological rigour. As a result, measuring armed conflict and the number of individuals involved is always a task of estimation. The last section of this brief suggests some of the indicators that could be used to address this question and discusses current data gaps.

Previous estimates have found that “more than 600 million youth live in fragile and conflict-affected countries and territories.”¹ However, a slightly more precise estimate has been called for, given that the dynamics of modern armed conflict often play out at the local (subnational) level.

IEP used the best available data to narrow the estimate to roughly 408 million youth living in a state or province² where at least one fatality occurred as a result of armed conflict, non-state violence or one-sided violence in 2016.³

Further, UNHCR reports that at least 2.5 million adolescents (aged 12 to 17) were displaced in 2014, or 15 percent of UNHCR's persons of concern. In all likelihood, another 3 million were displaced in 2015.⁴ Figures for youth displacement in 2016 are expected to show a similar rising trend, given that the total number of people forcibly displaced by violence and conflict rose by 300,000 individuals from

¹ United Nations Development Program, *UNDP Youth Strategy 2014-2017: Empowered Youth, Sustainable Future*, New York, 2014, p. 10. Available from: <http://www.undp.org/content/undp/en/home/librarypage/democratic-governance/youthstrategy.html>. (accessed 5 October 2017).

² The first (largest) subnational administrative unit for each country included, usually termed a state, province, district, region or division. This is the unit at which subnational population estimates are available.

³ Fatality counts and definitions of armed conflict, non-state violence or one-sided violence come from UCDP/PRIO's latest available datasets, accessed September 2017. Sub-national population data is sourced from the World Bank's Subnational Population Database. Youth defined as 15-29. At least 1 death from armed conflict, one-sided violence or non-state violence. Assumes the full youth population of Syria, Somalia and Libya because province-level population data is not available. Excludes Ukraine for lack of data. Calculated by applying the national-level ratio of people aged 15-29 to subnational population estimates in the highest level subnational administrative unit.

⁴ Defined by UNHCR as refugees, asylum-seekers or persons of concern aged 12 to 17. Demographic data is last available for 2014, when adolescents made up of 14.9% of total displaced persons. Using the same ratio, it is estimated that 3,153,553 people aged 12 to 17 were displaced in 2015. Data for 2016 is not yet available.

2015 to 2016.⁵ It is worth noting that 84 percent of displaced persons are hosted in developing regions⁶ and seven out of ten of the largest refugee hosting countries are in the bottom quartile of the GPI, meaning that refugees are fleeing to countries where they remain vulnerable.

Two necessary approaches to youth engagement in peacebuilding

- **Explicit engagement:** programs run by youth or that serve youth and directly apply their skills and time to problem solving and peacebuilding in their communities and countries
- **Implicit engagement:** creating the enabling environment for youth to avoid situations of violence, access peacebuilding opportunities and participate in highly functioning societies that allow human potential to flourish

The relationship between peacefulness and large youth populations is a critical question for the coming decades. The most proactive approach envisions youth cohorts as society's source of peace and prosperity – as energetic innovators and implementers for the solutions of tomorrow. Realizing this vision requires approaching the question from two directions. At the same time that civil society organizations, businesses, popular movements, and the like (often led by youth themselves) are directly engaging youth in shaping their world, policy makers and other leaders can create the enabling environment for these activities to lead to peaceful outcomes and stronger societies.

Most young people do not have explicit intentions of participating in violent activities for the sake of violence – or of working to build peace for the sake of peace. However, young people worldwide do share some of the most common human ambitions: to live exciting and fulfilling lives, to provide for and grow their families, and to participate in their society and culture. Peaceful societies are those that channel these energies into productive activities and facilitate the achievement of these goals. Violence, on the other hand, is likely to be a symptom of under-developed positive peace: the attitudes, institutions and structures that reduce the number of grievances in society and facilitate the resolution of remaining grievances without the use of violence. In societies where positive peace is strong, everyone's social engagement – including that of youth – is less likely to manifest as violence.

Positive peace has eight dimensions, or pillars, that have been empirically derived based on their correlation with negative peace, defined as the absence of violence or the fear of violence.⁷ Each of the eight pillars are important in their own right, and overlap significantly with the 17 Sustainable Development Goals (SDGs). Crucially, however, the most peaceful societies in the world demonstrate strength in all eight pillars.

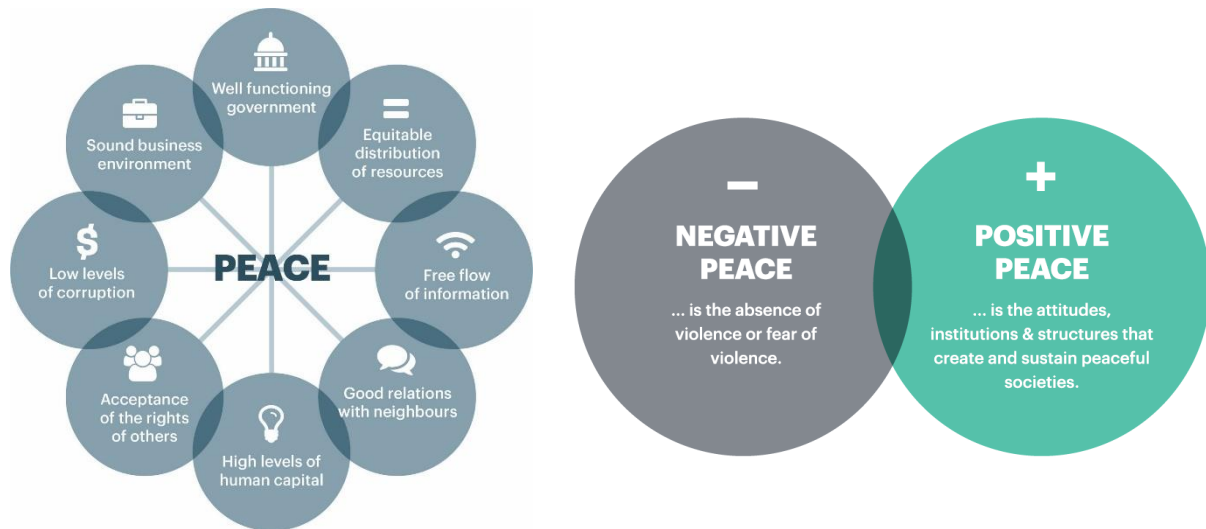
⁵ UNHCR, "Global Trends: Forced Displacement in 2016," Available from: <http://www.unhcr.org/globaltrends2016/>. (accessed on 5 October 2017).

⁶ UNHCR, "Global Trends: Forced Displacement in 2016," Available from: <http://www.unhcr.org/globaltrends2016/>. (accessed on 5 October 2017).

⁷ Correlations to negative peace are measured using the internal peace domain of the Global Peace Index. The internal peace metric measures 14 indicators of violence within a society, rather than just relying on a single metric, such as conflict deaths or homicide rates.

Figure 1: The Dimensions of Peacefulness

Peacefulness has two complementary components: positive peace and negative peace. IEP has identified eight dimensions of positive peace, known as the eight pillars and represented in the diagram on the left.



Recent research suggests that internal disparities in levels of positive peace – that is, significant strength in some pillars with comparative weaknesses in others – poses a risk for the manifestation of violence.⁸ This is likely to be true for several reasons. First of all, positive peace is a systemic phenomenon, in which society’s encoded norms reinforce a type of homeostasis. Both violence and nonviolence as a means of solving problems or achieving goals create feedback effects in the system, reinforcing the pre-existing patterns of interaction between individuals or groups. Secondly, while both nonviolent and violent patterns can reinforce themselves, violent events and interactions tend to have outsized effects. Violence breaks out more quickly than peace does; societies are damaged more easily and quickly than they are repaired. As such, while a resilient society with diversified strengths can create a ‘peace trap,’ it may take comparatively fewer weaknesses to inspire violence

⁸ Hagerty, T. and Hyslop, D., “The devil is in the details: Overcoming barriers to peace and resilience in West Asia and North Africa.” In *Before, during, after: Sustaining peace in the face of armed conflict in West Asia and North Africa*. Uppsala, June 2017.

and an ensuing ‘conflict trap.’ As a result, building high levels of positive peace requires system-wide effort, approached from all angles.

These findings suggest that youth peacebuilding strategies must address all eight pillars of peace and the ways that they affect the lives of young people. Youth can work directly on improving any of the eight pillars – and they often do. At the same time, other actors in society need to create an enabling environment for youth to operate productively and nonviolently within each positive peace category.

Youth bulges and peacefulness

Much has been made of the (moderate) statistical association between large youth populations and low levels of peacefulness. However, in the context of a positive peace system, so-called ‘youth bulges’ are better thought of as a challenge for society to rise to, rather than a determinant of violence.

There is indeed a moderate correlation between high levels of peacefulness and a smaller portion of the population aged 15 to 29 ($r = 0.54$).⁹ It is true that all of the world’s most peaceful countries have small or medium youth populations. But not all of the world’s least peaceful countries have large youth cohorts, and not all of the large youth populations are in the least peaceful places.

Box 1: How is peace measured?

Peacefulness is a complex concept, and notoriously difficult to measure. IEP has pioneered the multidimensional measurement and analysis of peacefulness using a variety of composite indicators, or indices.

Now in its eleventh year, IEP’s Global Peace Index (GPI) ranks the nations of the world according to their level of peacefulness. The GPI is composed of 23 qualitative and quantitative indicators and covers 163 states and 99.6 per cent of the world’s population. The GPI measures peace within a country’s borders under the domain of internal peace and its engagement with peace in the world under the domain of external peace. GPI scores range from 1 to 5, where 1 is the most peaceful possible and 5 is the least peaceful.

The GPI measures negative peace, or the absence of violence; the Positive Peace Index (PPI) for the same 163 countries, using 24 indicators across eight domains. PPI scores range from 1 to 5, where 1 is the most peaceful possible and 5 is the least peaceful.

IEP’s Global Terrorism Index (GTI) specifically measures the violence and impact associated with terrorism. Terrorism is defined as an intentional act of violence or threat of violence by a non-state actor, per START’s Global Terrorism Database. GTI scores range from 0 to 10, where 0 represents no impact from terrorism and 10 represents the highest measurable impact of terrorism.

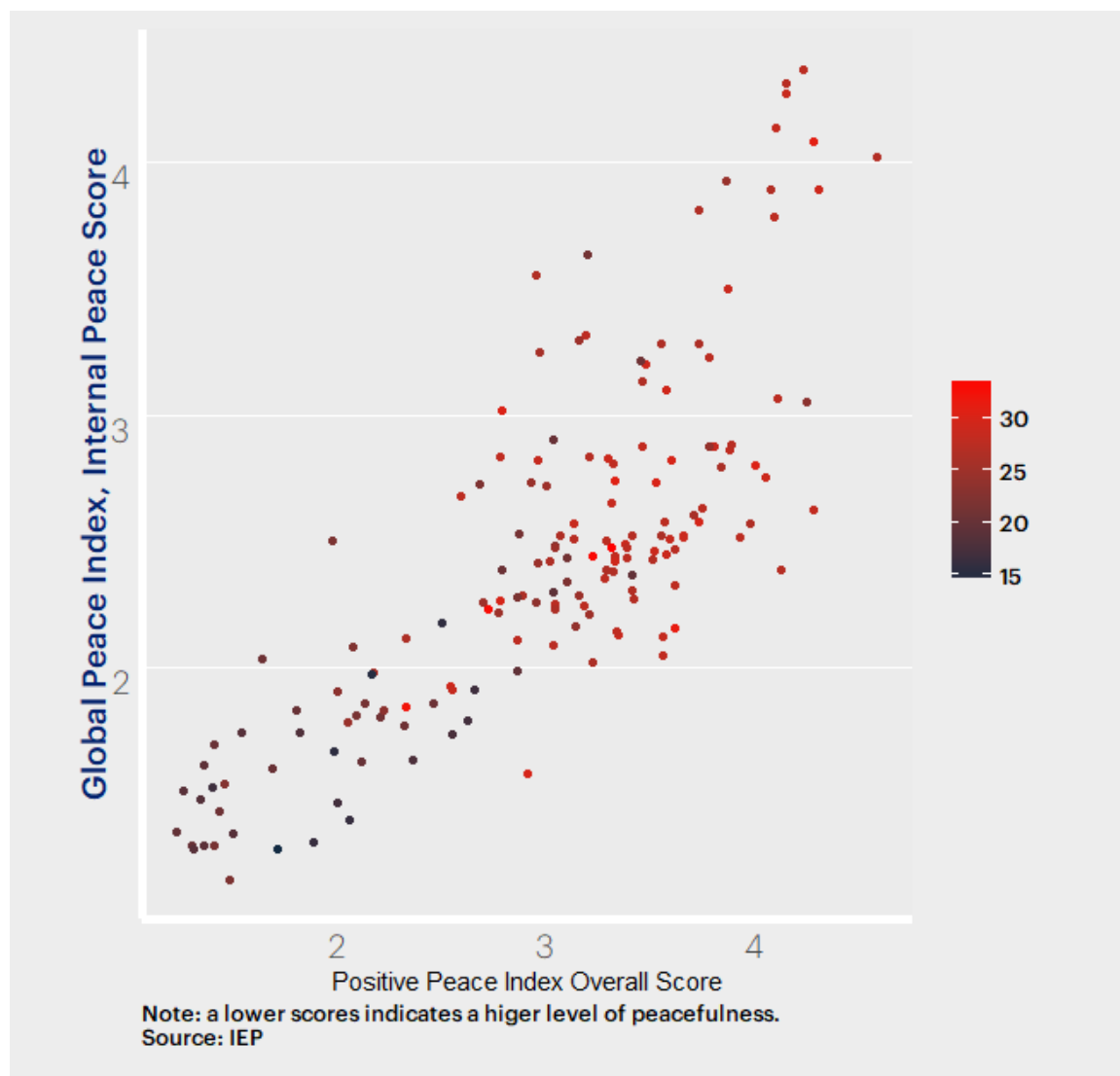
The Youth Development Index (YDI), produced by IEP and The Commonwealth Secretariat, measures multi-dimensional progress for young people between the ages 15 and 29. The YDI’s five domains cover education, health and well-being, employment and opportunity, political participation and civic participation for young people. YDI scores range from 0 to 1, where 0 represents the lowest and 1 represents the highest level of development and progress for youth.

⁹ It is worth noting that the linear correlation between a large youth population and a high impact of terrorism is $r = 0.07$, more or less statistically irrelevant. This is likely because terrorism is highly concentrated in a few places, meaning linear statistical analysis is not the right tool. However, this does indicate that a youth bulge *in and of itself* does not produce terrorism. Context-specific push and pull factors are likely to be more important than the size of the youth population, and are likely to show the appropriate variation in the data needed for meaningful analysis.

Figure 2 plots positive peace and internal negative peace, with the colour of each data point indicating whether the country has a small, medium, large or very large youth population. The chart visualizes three relationships: a clear correlation between negative and positive peace as well as the distribution of large youth cohorts across both positive peace scores and negative peace scores. In fact, there is a stronger correlation between large youth cohorts and weak positive peace ($r = 0.69$) than there is with the presence of actual violence.

Figure 2: Positive and negative peace by youth cohort

All of the world's most peaceful countries have small or medium youth populations. But not all of the world's least peaceful countries have large youth cohorts, and not all of the large youth populations are in the least peaceful places.



There are multiple mechanisms at work here. A high level of positive peace – which includes gender equality, economic prosperity, and access to education and health care – also reduces fertility rates, leading to an older population. This demographic shift takes decades to materialize, and so develops in tandem with the social resilience that also reduces levels of violence. Small youth cohorts and high

levels of peacefulness may well be the products of the same development processes, rather than variables that impact upon each other.

At the same time, large youth populations create very real challenges for societies – much like large elderly populations do. Large generations of any age create a large number of people needing many of the same things all at the same time. Fertility booms can very quickly increase the need for food, schools, hospitals, and jobs, to name a few tangible examples. As these large generations come of age, in addition to providing means for material well-being, society must also find ways to include more and more people in social and political processes. Essentially, high levels of positive peace describe scenarios where these challenges can be met. A *sound business environment* has the capacity to absorb the large population into the economy; a *well-functioning government* can deliver public services in response to society's growing needs; *acceptance of the rights of others* fosters inclusive and legitimate political processes.

Large youth populations also facilitate a number of outcomes. Consider the examples of two large-scale social processes: economic growth versus war-making. Both of these can be seen as means to achieving important social and political outcomes, and they share some key ingredients: leadership, innovation, strategy, financial resources, and, critically, human resources. However, one of these outcomes clearly has greater negative externalities than the other, both in quantity and severity.¹⁰

The challenge for peacebuilding is to create a social environment that meets the needs of large generations and channels youth into productive rather than destructive processes. Positive peace provides a framework for assessing strengths and weaknesses across social dimensions and designing locally-applicable solutions to each society's challenges – including a youth boom. One way of implementing a youth peacebuilding engagement strategy is to look across the eight pillars of peace and consider the needs of and the opportunities for young people in each context.

Breakdowns in peacefulness: two youth examples

The data suggests that a youth bulge can increase the risk of violence, but does not in itself create violence and conflict. Rather, the other ingredients of violent conflict must also be present. Youth bulges show some correlation to interpersonal violence and civil unrest, which could exacerbate other breakdowns in peacefulness, but there is no significant pairwise correlation to armed conflict.

A better indicator of future peacefulness, or lack thereof, is the current level of positive peace. The most dramatic deteriorations in negative peace typically occur in countries with very low Positive Peace scores; which is to say, high levels of positive peace reduce the risk of a breakdown in negative peace.

Youth development gaps in the Middle East & North Africa

A consistent characteristic of highly peaceful and highly resilient countries is their strong performance in all eight domains of Positive Peace. The same is true of countries with consistently

¹⁰ The environmental and social externalities of economic growth are not to be neglected, but the greater negative impact of armed conflict on both the environment and the human population is well documented. See, for example, J. Brauer and T. Hagerty, "The Environmental Impacts of War." *World Politics Review*. July 2014.

poor negative peace scores – they often have consistently poor positive peace scores, across all eight pillars. These are the countries at the top and bottom of the Global Peace Index and the Positive Peace Index, where their strong or weak composite scores, respectively, indicate consistent performance across the indicators of each phenomenon. The more difficult dynamics to observe and explain are the realities in countries where this is *not* true – where the same society has both some strengths and some weaknesses.

IEP used principal components analysis (PCA) to identify the positive peace characteristics that are common among different groups of countries in order to help explain deteriorations in negative peace. PCA is a multivariate statistical technique used to determine the indicators that best explain the variance of the data. It is used here to explain the variation in changes in the internal domain of the GPI based on different positive peace factors.

Variation in the PPI can, in some part, be explained by how a country scores in two domain groupings:

Economic and Social Positive Peace Domains

- High levels of human capital
- Equitable distribution of resources

Civil and Political Positive Peace Domains

- Free flow of information
- Good relations with neighbours

The largest deteriorations between 2008 and 2015 occurred in countries with a deficit in civil and political domains. Countries with deficits in the economic and social domains have experienced deteriorations of a lesser magnitude. While many more years of data are needed to establish a general rule, this finding is consistent with the particular weaknesses faced in the Middle East & North Africa (MENA) – the least peaceful region in the world.

Diverging performance on positive peace indicators, including components of the Youth Development Index (YDI), are characteristic of the region. This contradiction is one of the reasons the tensions that gave rise to the Arab Spring were not broadly anticipated. Human development and economic growth were comparatively high relative to civil and political progress in the region. These imbalances appeared most stark in the deficits of opportunity afforded to highly educated and connected youth.

Overall, YDI scores in MENA were fairly steady between 2010 and 2015 (the time series measured). Scores for education and the health and well-being of young people have stayed consistently high across the region. Although the region performs poorly in employment and opportunity, gains were made, as 15 out of 20 countries improved. At the same time, country scores for civic and political participation among young people continued to deteriorate from an already low base. The MENA region has the largest divide between the education, health and well-being provided to its young people and their level of political and civic participation of any region in the world. The gap in development outcomes is a full one and half times larger than that in Europe, the next most disparate region. This disparity between indicators is a critical finding, as it underscores the analysis suggesting that incongruent progress may be as dangerous as the absence of progress all together.

Social exclusion in Mexico

Mexico, a country with 33.8 million youth,¹¹ ranked 142 out of 163 on the 2017 GPI. While analysts debate whether the ‘war on drugs’ constitutes armed conflict or criminality, the country faces election-related violence, overcrowded prisons, forced disappearances, mass graves, and the 16th highest homicide rate in the world.

Nonetheless, Mexico’s burgeoning civil society increasingly brings youth peacebuilding efforts to the fore. For example, in May of 2017, 300 Mexican youth joined IEP and Rotary International in the state of Puebla, to develop and implement positive peace programming across the country. IEP’s Positive Peace workshops, which have specifically engaged youth in the Mexico and Libya programs, focus on tangible, achievable interventions for building strength in each of the eight pillars of peace. In Mexico, the focus on youth is critical for the *good relations with neighbors* pillar.¹²

Most Mexicans aged 12 to 29 report that they trust their neighbors (63 percent).¹³ While this is usually a positive sign, social cohesion can sometimes be problematic in two regards:

1. Survey respondents may think of trust in terms of trusting their neighbors not to report illegal or violent behavior to authorities deemed illegitimate by the community.
2. Where neighborhoods are homogenous, strong bonds between individuals of the same identity group can be used to operationalize conflict with other groups.

The extent to which these things are true specifically in Mexico warrants further study. Mexico does not currently face major ethnic tensions (although Indigenous Peoples in the country are often disenfranchised), but affiliations with violent organizations can become a matter of community or religious identity.

Whatever the driving force, the majority of young Mexicans reported on the same survey that neither community members nor police intervene in “uncivil” situations, including violence. On average, 70 percent of youth reported that events garnered no community response.¹⁴ Culiacán, the capital city of Sinaloa, makes a useful case study. Sinaloa is home to one of Mexico’s largest drug trafficking organizations and was the third least peaceful state in the country in 2016.

¹¹ People aged 15 to 29 make up 26 percent of Mexico’s total population, putting the country above IEP’s threshold for a youth bulge. Definitions of a youth bulge vary, but IEP analysis typically sets the threshold at 20 percent of the population. See Commonwealth Secretariat, *Global Youth Development Index and Report*, 2016, London, available from www.youthdevelopment.org.

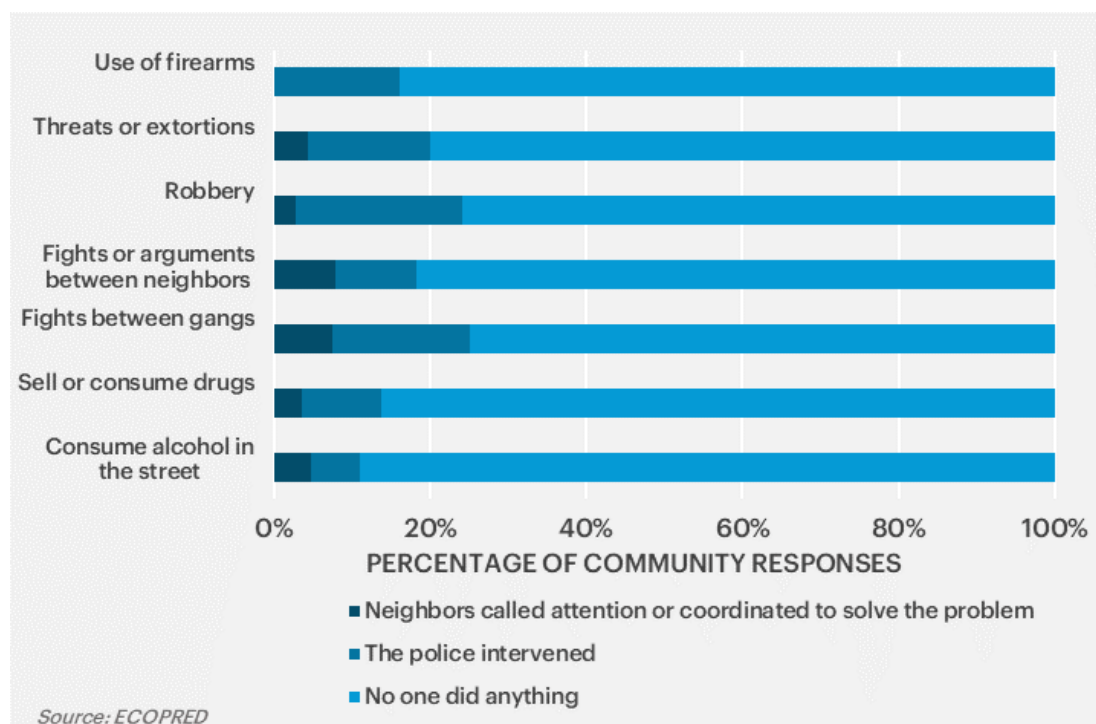
¹² When measured at the country-level, good relations with neighbours refers to international relations. At the subnational level, good relations with neighbours captures social cohesion and relations between communities.

¹³ Instituto Nacional de Estadísticas y Geografía, (2014), Encuesta de Cohesión Social para la Prevención de la Violencia y la Delincuencia (ECOPRED) 2014 [tabulados básicos], available from: <http://www.beta.inegi.org.mx/proyectos/enchogares/especiales/ecopred/2014/> (accessed 10 October 2017).

¹⁴ At the national level, the rate at which youth responded that “*No se hace nada*,” or, “They didn’t do anything,” averaged 70 percent over 12 types of events, including those listed in figure 3. Instituto Nacional de Estadísticas y Geografía, (2014), Encuesta de Cohesión Social para la Prevención de la Violencia y la Delincuencia (ECOPRED) 2014 [tabulados básicos], available from: <http://www.beta.inegi.org.mx/proyectos/enchogares/especiales/ecopred/2014/> (accessed 10 October 2017).

Young people in Culiacán seem to lack support from their communities in general, and from the police specifically. Youth were asked about typical community responses for six types of situations, with the possible responses: police intervened, community members called attention to or organized to resolve the situation, or nothing was done. For all types of incident reporting, the overwhelming community response was to do nothing. The least common response was organization amongst neighbors, followed by police intervention. Youth reported police intervention only 22 percent of the time when a robbery was reported and 16 percent of the time when a firearm was used or in cases of threats or extortion, respectively.

Figure 3: Community responses to incivility affecting youth in Culiacán, Mexico, 2014
 On average across events, 70 percent of youth reported that community members and police “didn’t do anything” in situations of incivility and violence.



Youth may often find themselves in these situations out of sight or reach from other community members, indicating the need to integrate young people into safe community spaces, activities and workplaces. And/or, these statistics could reflect the Mexican reality of widespread impunity for criminal behavior. Impunity reflects weakness in the positive peace pillar *well-functioning government*. Most likely, both dynamics are at play, reflecting the systemic nature of positive peace and the need to create an environment where youth can access both support and opportunities.

Strong youth development and improvements in peace

IEP's analysis shows that while weak societal environments for youth can contribute to breakdowns in peacefulness, strong youth development contributes to improvements in peacefulness.

Analysis from the 2017 GPI looked at the ten-year changes in peacefulness for three groups of countries based on their 2008 scores: low, mid, and high peace countries.¹⁵ Between 2008 and 2016, eight countries improved from the low to the mid-peace group. When compared to other countries with low levels of peacefulness in 2008, the improving countries had lower access to small arms and light weapons, more economic freedom, better international relations, less hostility to foreigners and performed better in youth development. This combination of factors provides a useful avenue out of violence. As most violence is thought to be perpetrated by young males, youth development in terms of health, education, employment, and engagement both in the civic and political arenas is critical in reducing push and pull factors for this cohort to resort to violence. Higher levels of economic freedom offer educated youths options for legitimate income generation.¹⁶ It further avoids feelings of disillusionment and isolation that have been shown to be key to recruitment into rebel or violent extremist groups.¹⁷ Less hostility to foreigners and lower access to small arms and light weapons both contribute to reducing the motives and the means of violence.

Data gaps in analysing youth, peace and security

The analysis above makes use of the best data currently available. However, limited data yields limited knowledge, and the existing data on youth, peace and security is indeed limited. Below are a few examples of how global estimates for youth affected by armed conflict could be measured, if the data were collected and made available to organizations like IEP.

With complete data, we might measure how many young people are directly affected using the number of youth:

- Engaged in armed conflict or organized violence
- Engaged in direct peacemaking, peacekeeping or peacebuilding activities
- Living in subnational districts where armed conflict is taking place
- Displaced by armed conflict
- Killed or injured by armed conflict (including psychological injury)
- Unable to attend work or school because of armed conflict
- Having lost a loved one to armed conflict

However, the data for these precise measurements is challenging for reasons that arise all throughout the data creation process. Figure 4 visualizes the data creation process.

¹⁵ Institute of Economics and Peace. *Global Peace Index 2017: Measuring Peace in a Complex World*, Sydney, June 2017, p. 90. Available from: <http://visionofhumanity.org/app/uploads/2017/06/GPI-2017-Report-1.pdf>

¹⁶ H. Urdal, 'A Clash of Generations? Youth Bulges and Political Violence', *International Studies Quarterly* 50, no. 3, 2006.

¹⁷ Özerdem and Podder.

Figure 4: Process for creating peace datasets



Quantitative empirical analysis for peace begins at the indicator design stage. Most peace indicators are conceived of as counts of violence at the country level. This type of data is useful and oft used, but it only allows us to answer a limited set of questions. However, while violence indicators abound, peace indicators are rare.

An example from Afghanistan’s forthcoming fragility assessment, borne of the Peacebuilding and Statebuilding Goals process, provides a useful example. The framework includes a survey question asking which entity (state or non-state) provides security in the community, as an effort to measure the geography of government legitimacy.¹⁸ The conception of this indicator has an explicit positive peace focus, representing the first step in *indicator design*.

In order to be useful for youth, peace and security analysis, the survey tool will also need to capture the indicators *age* and *gender*¹⁹ for each survey respondent in order to allow for properly disaggregated data. This is where *indicator design* overlaps with *data collection* – the data collection tool needs to be designed at the outset for rich data as the final product. The data becomes even more useful if the collection tool captures additional positive peace indicators at the same unit of observation, such as household income, education level, indicators of formal employment and community engagement, other perceptions indicators, etc. Additional indicators facilitate analysis; without additional information about each respondent, it is impossible to know what other factors are associated with, for example, perceptions of government legitimacy, limiting the ability to actively improve legitimacy.

High-quality indicator design and data collection is detailed, technical and resource intensive. Often, limited resources mean that associated or additional analysis is conducted by a third party, rather than only by the entity collecting the data. Third-party analysis also allows for comparative analysis. In the case of Afghanistan, it might be useful to compare metrics of government legitimacy among youth to other countries facing similar challenges. Comparative analysis requires comparable data – meaning that the same survey question and associated details need to be collected in places like Pakistan, Nigeria and Mexico.

¹⁸ Presentation by the Ministry of Finance of Afghanistan, 29 September 2017, Institute for Economics and Peace, The Hague.

¹⁹ Sex can be considered a close proxy for gender when necessary, but is not the same concept.

Once the data is collected, *data reporting* becomes critical. Even well-collected data can be rendered useless at the data reporting stage because of:

- Aggregation – only total numbers are publically available, rather than individual-level data (microdata)
- Formatting – data tables stored in PDFs or similar documents that cannot be efficiently analysed
- Collation – or rather, the lack of: survey data like perceptions of legitimacy might be collected in many countries, but these indicators are arduous to harmonize

Finally, most *indicators* are composed of more than one *variable*. For example, calculating the percentage of youth who perceive the government to be a legitimate source of security requires two variables: the number of youth who answered ‘yes’ to the survey question and the total number of youth in the area of interest (municipality, district, region, etc.). These denominator variables (usually population statistics) often come from separate datasets, meaning that the final indicator for quantitative analysis can be waylaid by not just one data creation process, but issues in all of the processes required to build the multiple datasets needed.

IEP encountered all of these problems in generating an estimate of the number of youth affected by violent conflict. First, global population datasets are not disaggregated by age (or sex/gender) *and* subnational units, but only one or the other. As such, IEP used the national-level ratio of youth to non-youth to estimate the youth population in subnational units. This is somewhat imprecise, because urban areas are likely to have higher proportions of young adults than suburban and rural areas. Next, armed conflict fatalities are rarely collected as an official government indicator. No global datasets of official data exists, and the methodology for third-party collection makes it impossible to reliably disaggregate these figures by age or gender. Finally, UCDP/PRIO’s datasets are coded at the first administrative level, making it possible to combine them with subnational youth population estimates, but harmonizing these datasets was rendered imperfect due to formatting issues. Setting aside the fact that national and subnational borders have changed since the subnational population data was last published, the data files themselves are encoded in incompatible formats and the transliteration of Arabic place-names to English is not standardized. To overcome this, IEP built a bespoke dictionary of place-name spellings in multiple encodings in order to match observations in the two datasets. Necessarily, places that could not be matched were not included in the final figure.

Of course, all of this effort still only yields an indicator of violence. There is no global data on youth participation in peacebuilding.

None of these challenges is insurmountable. However, reaching the next level of empirical analysis, knowledge generation and evidence based policy for youth, peace and security will require new levels of investment and coordination. The Global Partnership for Sustainable Development Data initiative estimates that an investment of at least \$1.2 billion annually will be required.²⁰ Yet, it is useful to note

²⁰ This figure represents the cost of collecting data on only the Tier I and Tier II indicators of the SDGs for the 77 countries eligible for International Development Assistance (IDA). Seven of the 23 indicators of SDG16 (peace, justice, and strong institutions) are Tier III, meaning they will require even greater investment; see, IEP, SDG16 Progress Report, 2017, for more detail. Investment estimate from: Global Partnership for Sustainable Development Data “The State of Development Data Funding 2016”, Global Partnership for Sustainable Development Data, 2016.

that the global economic impact of violence – of breakdowns in peace and sustainable development – was \$14.3 trillion last year.²¹ As the world embarks on the Sustainable Development Agenda and seeks to operationalize Resolution 2250, building statistical capacity is nothing less than critical groundwork for peace and security.

²¹ Institute of Economics and Peace. *Global Peace Index 2017: Measuring Peace in a Complex World*, Sydney, June 2017. Available from: <http://visionofhumanity.org/app/uploads/2017/06/GPI-2017-Report-1.pdf>.