

KEY FINDINGS FROM ANALYSES ON THE RELATIONSHIP BETWEEN EDUCATION AND PEACE

Institute for Economics & Peace and the Global Partnership for Education

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Acknowledgments

Contributing authors to this brief from the Institute for Economics & Peace (IEP) include: Karan Menon, Sara Flynn, Paulina Pijacka, Briahna Tandoh, Alex Vedovi and David Hammond. IEP is an independent, non-partisan, non-profit think tank dedicated to shifting the world's focus to peace as a positive, achievable, and tangible measure of human wellbeing and progress. IEP is headquartered in Sydney, with offices in New York, Brussels, The Hague, Mexico City and Harare. It works with a wide range of partners internationally and collaborates with intergovernmental organisations on measuring and communicating the economic value of peace.

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Executive Summary

Existing research indicates that education has a positive correlation with peace and development, and a negative correlation with conflict; indeed, the detrimental effects of conflicts and protracted crises on education are well documented.¹ However, though gaining attention in the 2000s, the nuances of the relationship between education and more peaceful societies remain underexplored, providing only a partial picture for governments and donors when making critical investment decisions.

This report, a collaboration between the Institute for Economics & Peace (IEP) and the Global Partnership for Education (GPE), shares some of the high-level findings from comprehensive research undertaken by IEP to better understand the relationships between education and levels of peacefulness. The research involved regression analyses between *education outcomes* (as measured by six key indicators)² and both *negative peace* (as measured by the Global Peace Index, or GPI) and *positive peace* (as measured by the Positive Peace Index, or PPI³).

The IEP analyses consistently showed correlation between education and peace across most indicators; that is, in most instances, better education outcomes coincided with fewer conflicts and higher levels of peace. While the results of this exploratory study cannot be interpreted causally, they do offer a number of notable correlations that associate better education outcomes with more peaceful and stable societies.⁴

With respect to the relationship between **education indicators** and **levels of peace**, the analysis showed that:

- Countries with higher average *primary school completion rates* are on average more peaceful.
- Countries that have higher *secondary school completion rates* have on average higher peace levels. Countries that have very high peace levels have an average

¹ See, for example, C. L. Thyne, "ABC's, 123's, and the Golden Rule: The Pacifying Effect of Education on Civil War, 1980–1999," *International Studies Quarterly* 50, no. 4 (2006): 733–54; or R. Chamarbagwala and H. E. Morán, "The Human Capital Consequences of Civil War: Evidence from Guatemala," *Journal of Development Economics* 94, no. 1 (2011): 41–61.

² The six education indicators are *primary school completion rates* (male and female); *(lower) secondary school completion rates* (male and female); *share of youth not in education, employment or training* (male and female); *government spending on education as a percentage of GDP*; *harmonized test scores* (male and female) and *learning-adjusted years of school* (male and female).

³ The PPI uses eight distinct but interrelated "Pillars of Positive Peace": *equitable distribution of resources*; *acceptance of the rights of others*; *low levels of corruption*; *high levels of human capital*; *sound business environment*; *free flow of information*; *well-functioning government* and *good relations with neighbors*.

⁴ In addition, alternative explanations, such as the influence of a third, unaccounted factor on both education and violence or conflict, should be considered to avoid biased causal inferences. See H. Best and C. Wolf (Eds.), *The SAGE Handbook of Regression Analysis and Causal Inference* (Los Angeles: SAGE Publications Ltd., 2014).

secondary school completion rate of 99 percent, while for very low peace countries the average rate is 52 percent.

- Countries that have a high percentage of their *youth not engaged in employment, education or training* have lower levels of peacefulness, with youth in very low peace countries not engaged in employment, education or training at an average rate of 34 percent, compared with an average rate of 8 percent for youth in very high peace countries.
- Countries with higher *government spending on education* have on average higher levels of peacefulness. Iceland, for example, consistently ranks as the most peaceful country in the world and spends more on education per capita than almost any other country in the world.
- Countries with higher *harmonized test scores* are on average more peaceful. Very high peace countries on average score 148 points better in harmonized test scores (on a scale from 300 to 625 points) than very low peace countries.
- Countries with higher *learning-adjusted years of schooling* are on average more peaceful. Very high peace countries have on average a six-year difference in learning-adjusted years of schooling from very low peace countries.

Specifically, the analysis found statistically significant correlations between education indicators and certain aspects of negative peace, namely **internal conflict**, **interpersonal violence and violent crime**, and **social and political stability**.⁵

Internal Conflict

The analysis showed that countries with better education outcomes tend to experience fewer deaths from internal conflict⁶ and a lower occurrence and intensity of internal conflict. These are some of the most significant findings:

- *Almost all education indicators* are associated with shorter internal conflicts, meaning that better performance in education coincides with less severe levels of societal violence.
- Higher *primary and secondary school completion rates*, particularly for females, are associated with fewer deaths from internal conflict.
- Countries with higher *harmonized test scores*, particularly for females, tend to have fewer deaths from internal conflict.

⁵ The GPI comprises 23 indicators covering a wide range of measures of both internal and external peace. These three groupings examine internal measures of peacefulness and are put forward here to facilitate the presentation of the study's findings.

⁶ *Internal conflict*, a dimension of negative peace, measures deaths from internal conflict, the intensity of internal conflict (measured by its duration) and the number of internal conflicts fought.

- More than any other education indicator, *learning-adjusted years of schooling* has the strongest associations with the intensity, lethality and number of internal conflicts fought in a country.

Interpersonal Violence and Violent Crime

The analysis showed that countries with better education outcomes are associated with lower levels of interpersonal violence and violent crime.⁷ These are some of the most significant findings:

- Of all assessed measures of peacefulness, violent crime exhibits the strongest relationship with *education outcomes*, meaning that better performance in education is associated with lower rates of the most prevalent form of violence in most societies.
- An improvement in *all education outcomes* is associated with lower levels of violent crime and violent demonstrations.
- An improvement in *almost all education outcomes* is associated with lower homicide rates.
- Of the education measures, *learning-adjusted years of schooling* has the strongest associations with interpersonal violence and violent crime; indeed, this variable has statistically significant relationships with all measures of interpersonal violence and violent crime, particularly the homicide rate.
- Higher *learning-adjusted years of schooling* are associated with lower rates of perceptions of criminality.

Social and Political Stability

The analysis found that countries with better education outcomes are associated with higher levels of *social and political stability*.⁸ These are some of the most significant findings:

- *All education outcomes* have statistically significant relationships with political instability, meaning that better performance in education is associated with reduced levels of societal volatility.

⁷ *Interpersonal violence* refers to the intentional use of physical force or power to threaten the lives of individuals, groups or communities, leading to injury, death or psychological harm. Interpersonal violence and violent crime can be measured by access to small arms, the homicide rate, the prevalence of perceptions of criminality, violent crime rates and the prevalence of violent demonstrations.

⁸ *Social and political stability* refers to the larger structural forces driving or inhibiting peacefulness. Indicators in this dimension include the impact of terrorism within the country, defined as intentional acts of violence or threat of violence by a nongovernment actor, and levels of political terrorism, defined as measures of political violence and terror that a country experiences each year. Other indicators include measures of political instability in the country and the degree to which the country has seen its citizens flee the country or be internally displaced.

- Lower proportions of *young people, specifically females, not engaged in education, employment or training* are associated with lower levels of political instability, terrorism impact and political terror.
- Higher *learning-adjusted years of schooling* and *harmonized test scores* are associated with lower impacts from terrorism.

The analysis also found statistically significant relationships between education indicators and positive peace, as measured by eight “Pillars of Positive Peace.” These are some of the most significant findings:

- *All education indicators* are associated with better equitable distribution of resources, acceptance of the rights of others, free flow of information, well-functioning government and good relations with neighbors scores.
- Both higher *primary school completion* and *secondary school completion rates* exhibit positive relationships with all positive peace measures. Countries with a very high level of positive peace have on average secondary school completion rates of 96 percent, compared with 45 percent for low positive peace countries.
- Of the education measures, *learning-adjusted years of schooling* has the strongest associations with all eight positive peace measures. There is on average a nearly six-year difference in learning-adjusted years of schooling between low and very high positive peace countries.
- Higher levels of *youth not engaged in education, employment or training* are associated with poorer performance across all positive peace measures. Very high positive peace countries on average have disengaged youth rates of 10 percent, compared with 31 percent for low positive peace countries.
- Countries that *invest more in education* tend to have higher levels of positive peace. On average, very high positive peace countries spend nearly twice as much (as a percentage of their gross domestic product, or GDP) on education than low positive peace countries, with the former spending on education the equivalent of about 5.3 percent of GDP and the latter the equivalent of about 2.9 percent of GDP.

1. Introduction

Existing research indicates that education has a positive correlation with peace and development, and a negative correlation with conflict; indeed, the detrimental effects of conflicts and protracted crises on education are well documented.⁹ However, though gaining attention in the 2000s, the nuances of the relationship between education and more peaceful societies remain underexplored, providing only a partial picture for governments and donors when making critical investment decisions.

This report, a collaboration between the Institute for Economics & Peace (IEP) and the Global Partnership for Education (GPE), shares the high-level findings from regression analyses done by IEP between education indicators and measures of both *negative peace* and *positive peace*. The aim of this report is to shed light on the relationship between education and peace, contribute up-to-date data to the research and support governments and donors to make evidence-based investment decisions in education.

The IEP analyses consistently show correlation between education and peace across a majority of the indicators; that is, in most instances, better education outcomes coincide with fewer conflicts and higher levels of peace. This report offers an overview of these findings and highlights statistically significant relationships found between education outcomes and specific aspects of negative peace, namely internal conflict, interpersonal violence and violent crime, and social and political stability, as well as eight “Pillars of Positive Peace.”

1.1. Measuring Peace

As a concept, *peace* is notoriously difficult to define.¹⁰ It is often described by what it is *not*, or by what is *absent*. For example, peace is not war, or peace is an absence of war. Descriptions that rely on the absence of something are termed *negative definitions*. In his seminal work in peace studies, Galtung used the term *negative peace* to describe the aspect of peace that is not violence.¹¹

In 2008, IEP operationalized this concept with the publication of the Global Peace Index (GPI) as a measure of the “absence of violence or fear of violence.” The GPI uses 23 statistical indicators, selected by an international panel of experts, to rank 163 countries on their levels of negative peace, covering 99.7 percent of the world population.¹² Reflecting three domains of peacefulness—*safety and security*, *ongoing conflict* and *militarization*—the indicators are

⁹ See, for example, Thyne, “ABC’s, 123’s, and the Golden Rule”; or Chamraborty and Morán, “The Human Capital Consequences of Civil War.”

¹⁰ K. E. Boulding, *Stable Peace* (Austin: University of Texas Press, 1978).

¹¹ J. Galtung, “Violence, Peace, and Peace Research,” *Journal of Peace Research* 6, no. 3 (1969): 167–91.

¹² Institute for Economics & Peace, Global Peace Index 2022, <https://www.visionofhumanity.org/resources/global-peace-index-2022>.

used to generate banded peace scores from 1 to 5, with 1 representing the highest level of peacefulness and 5 representing the lowest level of peacefulness. Based on the distribution of these scores, the countries are grouped into the following peace quintiles: *very high peace, high peace, medium peace, low peace* and *very low peace*.

While negative definitions are useful for delineating a concept by exclusion, they often do not provide the complete picture. In recognition of this, Galtung introduced the term *positive peace* to capture factors not covered by the negative concept.¹³ In 2011, IEP built on this to create the Positive Peace Index (PPI), measuring the “attitudes, institutions and structures that create and sustain peaceful societies” in the 163 countries.¹⁴ Based on the distribution of these scores, the countries are grouped into the following peace quartiles: *very high peace, high peace, medium peace, and low peace*.

1.2. Literature Review

Quantitative studies investigating the connection between education, peace and development suggest that education has a positive correlation with peace and development, and a negative correlation with conflict. Education can have an impact on both conflict and development, while conflict can also affect education. The association between education and peace/conflict is influenced by various changes within a system that impact individuals’ expectations and actions, by mediating factors and by the level of analysis. Arguments and research regarding these links pertain to levels, inequality and quality of education, among others, as well as type of political violence.

Brief Summary of Current Literature

The literature that explores the influence of conflict on education investigates the relationship between conflict variables—such as civil war, its duration and intensity, as well as different forms of political violence like terrorism, genocide and riots—and changes in education. For example, a study by Lai and Thyne revealed that each year of civil war, on average, is associated with decreased education expenditure at the country level and results in a decline in school enrollments, particularly in tertiary education.¹⁵ In a country-specific study on Tajikistan, Shemyakina established that exposure to civil war, as measured by past damage to household dwellings, has a significant negative effect on the enrollment of girls ages 12 to 15, while its impact on boys and younger girls is relatively minor.¹⁶ The civil war in Guatemala (1960–1996) was found to have substantial negative impact on the

¹³ Galtung, “Violence, Peace, and Peace Research.”

¹⁴ Institute for Economics & Peace (IEP), *Positive Peace Report 2022* (Sydney: IEP, 2022). <https://www.visionofhumanity.org/resources/positive-peace-report-2022/>.

¹⁵ B. Lai and C. Thyne, “The Effect of Civil War on Education, 1980–97,” *Journal of Peace Research* 44, no. 3 (2007): 277–92.

¹⁶ O. Shemyakina, “The Effect of Armed Conflict on Accumulation of Schooling: Results from Tajikistan,” *Journal of Development Economics* 95, no. 2 (2011): 186–200.

educational completion rates.¹⁷ In Bosnia and Herzegovina, the 1992–95 war did not negatively affect the completion of primary school, but it had a detrimental effect on the likelihood of completing secondary education.¹⁸ However, it is important to highlight that in contexts where preexisting educational disparities already exist, there is limited evidence to suggest that conflict exacerbates these inequalities.¹⁹

Education has also been examined as a structural condition prevailing prior to conflict and a fundamental factor concerning conflict's onset and dynamics. One of the most established arguments derives from a focus on the economic causes of war, where education is framed as a factor affecting the opportunity cost of conflict. The literature suggests that large youth cohorts (commonly referred to as *youth bulges*), particularly male, are associated with heightened susceptibility to political violence. This thesis was tested in time-series cross-national statistical models for internal armed conflict, event data for terrorism and rioting.²⁰ For instance, in a study on sub-Saharan Africa, Barakat and Urdal found that large, young male population bulges are more likely to increase the risk of conflict, especially in societies where male secondary education is low.²¹ These findings suggest that increasing male education reduces the pool of potential recruits who participate in conflicts. In a similar vein, a prominent study by Collier and Hoeffler demonstrated that increased enrollment of males in secondary school is associated with shorter war durations, providing further evidence for a positive link between male education and conflict mitigation.²² Importantly, however, research also suggests that when countries respond to large youth cohorts by rapidly expanding access to education, this may produce larger groups of young educated people that the market is unable to absorb, creating frustration and grievances that could motivate political violence.²³ The studies suggest that the connection between education and conflict may be influenced by higher order dynamics, such as demographic transitions, emphasizing the necessity for contextualizing results of statistical analysis.

The relationship between education inequalities and conflict has frequently been examined with respect to gender. Bussmann highlighted that improved access to education for girls

¹⁷ Chamarbagwala and Morán, "The Human Capital Consequences of Civil War: Evidence from Guatemala."

¹⁸ E. L. Swee, "On War Intensity and Schooling Attainment: The Case of Bosnia and Herzegovina," *European Journal of Political Economy* 40, part A (2015): 158–72.

¹⁹ G. Østby, R. Nordås and J. K. Rød, "Regional Inequalities and Civil Conflict in Sub-Saharan Africa," *International Studies Quarterly* 53, no. 2 (2009): 301–24.

²⁰ L. Beehner, "The Effects of 'Youth Bulge' on Civil Conflicts," Council on Foreign Relations, April 13, 2007, <https://www.cfr.org/background/effects-youth-bulge-civil-conflicts>; H. Urdal, "A Clash of Generations? Youth Bulges and Political Violence," *International Studies Quarterly* 50, no. 3 (2006): 607–29, <http://www.jstor.org/stable/4092795>.

²¹ B. Barakat and H. Urdal, "Breaking the Waves? Does Education Mediate the Relationship between Youth Bulges and Political Violence?" (Policy Research Working Paper 5114, World Bank, Washington, DC, 2009), <https://papers.ssrn.com/abstract=1503808>.

²² P. Collier and A. Hoeffler, "Greed and Grievance in Civil War," *Oxford Economic Papers* 56, no. 4 (2004): 563–95.

²³ Urdal, "A Clash of Generations? Youth Bulges and Political Violence."

and women is connected to a reduced risk of conflict,²⁴ arguing that gender equality in education enhances the capacity of the government and promotes good governance, indirectly contributing to peace.

With regard to socioeconomic disparities, Besançon revealed that educational inequalities and low quality of education contribute to higher levels of violence, while tertiary education is associated with a decreased likelihood of ethnic wars and genocides.²⁵ In a specific focus on sub-Saharan Africa, Østby, Nordås and Rød concluded that regions characterized by low education levels and significant intra-regional education inequality are more prone to conflict onset.²⁶ The rapid expansion of higher education does not appear to affect the risk of conflict.

Having a secondary school or higher education has been positively associated in some instances with other forms of political violence, such as terrorism participation in Lebanon.²⁷ Lange partly contradicted the widely held belief that education promotes peace and tolerance. He found that, in some contexts, the expansion of education can increase the risk of ethnic violence by popularizing preexisting views on divisions, and that educated individuals commonly organize ethnically violent movements and actively participate in violence.²⁸

To a limited extent, the current literature has studied the interplay of educational quality and conflict. In one of the few existing quantitative studies on this topic, Thyne looked at the effect of educational expenditures, enrollment levels and literacy rates on the probability of civil war onset. The findings suggest that educational spending can reduce grievances and conflict by stimulating economic development and fostering social equality, and that when considering the relationship between education and peace in the context of educational spending, higher primary enrollment rates are more strongly associated with less probability of civil war than post-secondary enrollment rates.²⁹

²⁴ M. Bussmann, "Gender Equality, Good Governance, and Peace" (paper presented at General Polarization and Conflict (PAC) Meeting, Gaillac, France, June 2007).

²⁵ M. L. Besançon, "Relative Resources: Inequality in Ethnic Wars, Revolutions, and Genocides," *Journal of Peace Research* 42, no. 4 (2005): 393–415.

²⁶ Østby, Nordås and Rød, "Regional Inequalities and Civil Conflict in Sub-Saharan Africa."

²⁷ A. B. Krueger and J. Maleckova, "Education, Poverty, Political Violence and Terrorism: Is There a Causal Connection?" (NBER Working Paper 9074, National Bureau of Economic Research, Cambridge, MA, 2002).

²⁸ M. Lange, *Educations in Ethnic Violence: Identity, Educational Bubbles, and Resource Mobilization* (Cambridge University Press, 2011).

²⁹ Thyne, "ABC's, 123's, and the Golden Rule: The Pacifying Effect of Education on Civil War, 1980–1999." For the qualitative analysis of educational quality and conflict, see J. Stern, "Pakistan's Jihad Culture," *Foreign Affairs* 79, no. 6 (2000): 115–26.

Methodologies Applied in Current Literature

Quantitative studies in the field of education and peace aim to provide robust empirical evidence and identify factors that influence their relationship. These studies use various research designs and methodologies. Regression analysis is a commonly employed approach, encompassing techniques such as linear regression, logistic regression, hazard function analysis and panel fixed-effects regression models. The choice of regression method depends on the research question and data availability. It is important to note that these analyses establish statistical correlations between variables, not causation. Alternative explanations, such as the influence of a third, unaccounted factor on both education and conflict, should be considered to avoid biased causal inferences.³⁰ Existing studies have also employed different time frames and geographical areas.

The current literature on education and conflict exhibits variations in its level of focus, ranging from global and country groupings analyses to cross-country comparisons, country case studies, subnational examinations and micro-level investigations. Regional and micro-level analyses have received relatively less attention than other levels. The predominant focus in studying the relationship between education and conflict has been on civil war or internal conflict, encompassing aspects like onset, duration and casualties. However, there has been a relative lack of emphasis on exploring the connections between education and other forms of political violence, including genocide, riots, protests and participation in terrorism.

In the existing studies, education has been assessed using diverse indicators. The indicator most frequently employed is educational attainment, which can be disaggregated by gender. A particular focus has been placed on secondary education as the specific level of education under examination.³¹ Other common variables related to education include literacy rates and average years of education. Further, disparities in education, gender gaps, ethnic divisions, regional disparities and differences between urban and rural areas have also been considered.

Researchers recognize the importance of considering control variables beyond education to fully capture the multifaceted nature of peace and conflict. It is essential to understand that conflicts can emerge from circumstances unrelated to educational challenges, even if they are present. Conversely, conflicts may be absent despite notable disparities in education. The supplementary factors and intricacies that require additional investigation and comprehension often encompass economic indicators like GDP, as well as other metrics such as fractionalization, regime type, state fragility or proximity to conflict.

³⁰ Best and Wolf (Eds.), *The SAGE Handbook of Regression Analysis and Causal Inference*.

³¹ Barakat and Urdal, "Breaking the Waves? Does Education Mediate the Relationship between Youth Bulges and Political Violence?"

Moreover, experimental and country-specific literature consider country-specific data, including survey findings.³²

The literature reviewed demonstrates the crucial need for further research and understanding of the intricate relationship between education and conflict/peace dynamics. This research seeks to begin to address the existing gaps in the literature and use up-to-date data to shed light on the interplay between education and conflict/peace.

2. Findings: Relationship Between Education and Peace

2.1. Education Indicators and Negative Peace

While education alone cannot guarantee peace, it is a cornerstone for creating the conditions that support peaceful and stable societies. Strong educational outcomes can be a crucial factor in fostering greater levels of peacefulness. Six education indicators were assessed in this study (see also table A1, in the appendix):

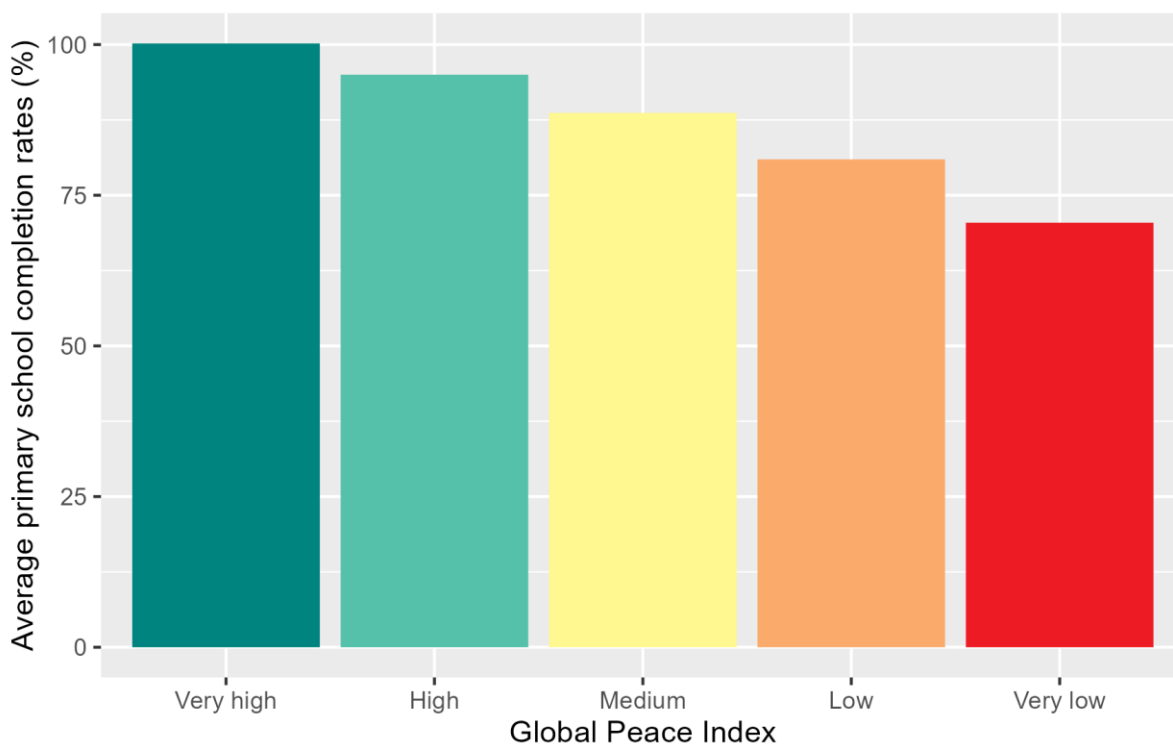
1. Primary school completion rates
2. (Lower) secondary school completion rates
3. Learning-adjusted years of schooling
4. Harmonized test scores
5. Youth not engaged in employment, education or training
6. Government spending on education.

Figure 1 presents the relationship between primary school completion rates and peacefulness, as measured by the GPI. It shows that countries with higher average primary school completion rates are on average more peaceful.

³² Chamarbagwala and Morán, "The Human Capital Consequences of Civil War."

Figure 1. Average primary school completion rates by peace level, 2023

Countries with higher primary school completion rates tend to have higher peace levels.



Source: IEP

On average, countries that have higher secondary school completion rates also have higher peace levels. Countries that have very high peace levels have an average secondary school completion rate of 99 percent; for very low peace countries, the average rate is 52 percent. Countries that have a high percentage of their youth not engaged in employment, education or training have lower levels of peacefulness; in very low peace countries, the average rate of youth not engaged in employment, education or training is 34 percent, compared with 8 percent in very high peace countries.

Further, the analysis revealed that countries with higher learning-adjusted years of schooling, a measure that combines quantity and quality of schooling,³³ are on average more peaceful. There is on average a six-year difference in learning-adjusted years of schooling between very high and very low peace countries. Similarly, emphasizing the learning component of education, harmonized test scores are another measure of quality of education. Countries with higher harmonized test scores are on average more peaceful. Very high peace countries score on average 148 points better in harmonized test scores (on a scale from 300 to 625 points) than very low peace countries.

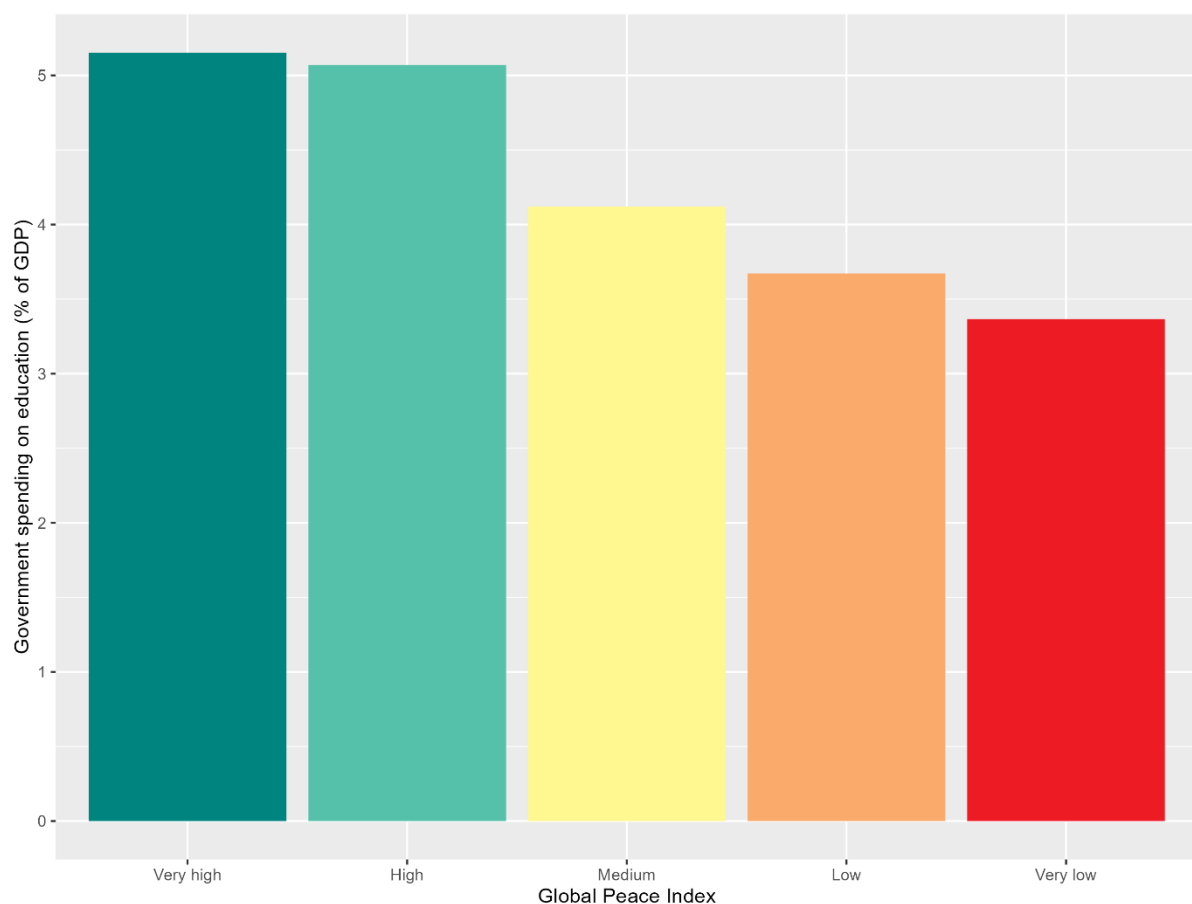
³³ D. P. Filmer et al., "Learning-Adjusted Years of Schooling (LAYS): Defining A New Macro Measure of Education" (Policy Research Working Paper No. 8591, World Bank, Washington, DC, 2018), <http://documents.worldbank.org/curated/en/243261538075151093/Learning-Adjusted-Years-of-Schooling-LAYS-Defining-A-New-Macro-Measure-of-Education>.

Improvements in peacefulness are also associated with a rise in investment in education. As figure 2 shows, countries that invest more in education on average have higher levels of peacefulness. This is reflected in education spending's levels of correlation with peace ($r = -0.31$), as measured by the GPI, and positive peace ($r = -0.44$), as measured by the PPI.

This relationship generally holds true across regions and income levels. For example, in 2020, Namibia, a high peace country and one of the most peaceful countries in Africa, had the sixth highest rate of government investment in education as a percentage of GDP (and the second highest rate among countries included in the GPI). It dedicates about 9 percent of GDP toward education. Similarly, Iceland, which consistently ranks as the most peaceful country in the world, spends more on education per capita than almost any other country in the world. In 2020, Iceland spent roughly US\$4,090 per person on education, the sixth highest amount in the world (and the third highest among countries included in the GPI).

Figure 2. Average government spending on education as percentage of GDP by peace level, 2023

Countries that invest more in education are on average more peaceful.



Source: IEP

The following subsections assess the relationships between education indicators and three dimensions of negative peace: *internal conflict*, *interpersonal violence and violent crime*, and *social and political stability*. The GPI comprises 23 indicators covering a wide range of measures of both internal and external peace. These three groupings examine internal measures of peacefulness and are put forward here to facilitate the presentation of the study's findings.

Section 2.1.1 (internal conflict) broadly examines measures of coordinated violence between groups in a society and the relationships of this type of violence with education. Section 2.1.2 (interpersonal violence and violent crime) broadly examines small-scale acts of violence carried out primarily by individuals and the relationships of this type of violence with education. Finally, section 2.1.3 (social and political stability) broadly examines the structural dynamics of peace and violence and their relationships with education.

A summary of all the assessed peace indicators, along with the assessed education indicators, can be found in the appendix (table A1). In addition, table A2 provides the statistically significant regression coefficients for the relationships between all the GPI measures and the education indicators; table A4 provides the correlation coefficients for these relationships.

2.1.1. Internal Conflict

Across countries, superior educational outcomes are statistically associated with lower levels of internal conflict. *Internal conflict*, a dimension of negative peace, measures deaths from internal conflict, the intensity of internal conflict (measured by its duration) and the number of internal conflicts fought.

Regression analyses found statistically significant relationships between education and internal conflict measures, indicating that countries with worse educational outcomes tend to experience more deaths and a higher occurrence and intensity of internal conflict. Key findings from the analyses include the following:

- Almost all education indicators are associated with shorter internal conflicts, meaning that better performance in education coincides with less severe levels of societal violence.
- Higher primary and secondary school completion rates, particularly for females, are associated with fewer deaths from internal conflict.
- Countries with higher harmonized test scores, particularly for females, tend to have fewer deaths from internal conflict.
- More than any other education indicator, learning-adjusted years of schooling has the strongest associations with the intensity, lethality and number of internal conflicts fought in a country.

2.1.2. Interpersonal Violence and Violent Crime

Better educational outcomes are associated with lower levels of interpersonal violence and violent crime. *Interpersonal violence and violent crime* refers to the intentional use of physical force or power to threaten the lives of individuals, groups or communities, leading to injury, death or psychological harm. Interpersonal violence and violent crime can be measured by access to small arms, the homicide rate, the prevalence of perceptions of criminality, violent crime rates and the prevalence of violent demonstrations.

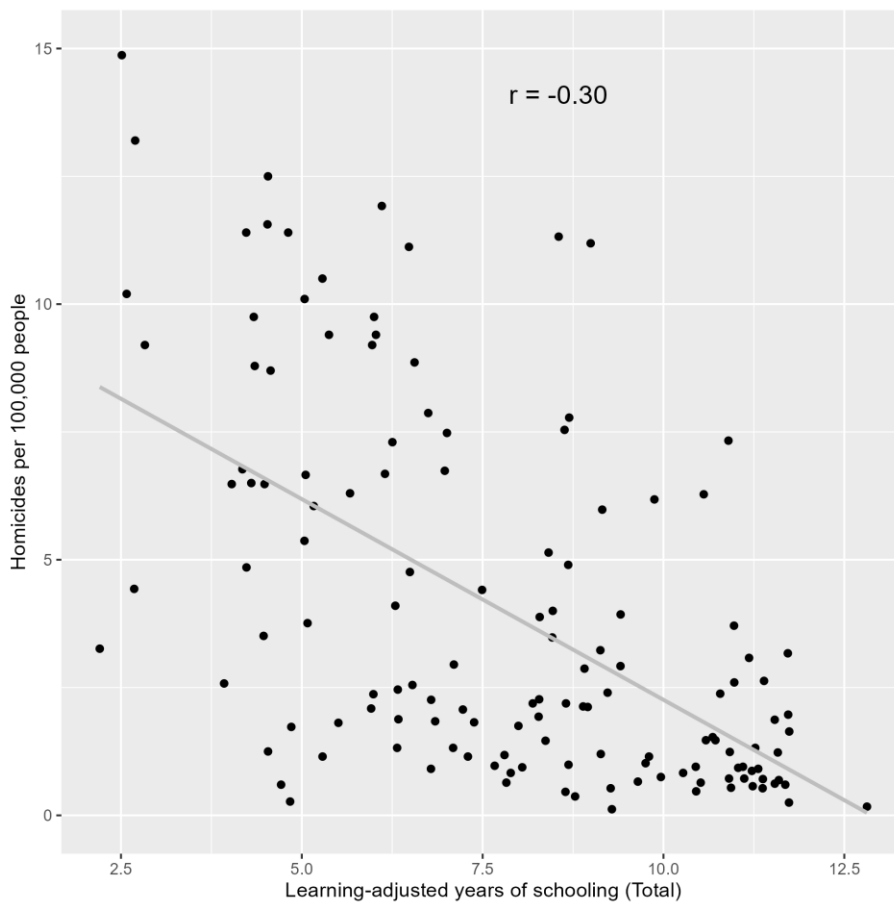
IEP analysis found statistically significant relationships between education indicators and measures of interpersonal violence and violent crime, indicating that better educational outcomes are linked to lower levels of violence and violent crime within a country. These are some of the most significant findings:

- Of all assessed measures of peacefulness, violent crime exhibits the strongest relationship with education variables, meaning that better performance in education is associated with lower rates of the most prevalent form of violence in most societies.
- An increase in all education variables is associated with lower levels of violent crime and violent demonstrations.
- An improvement in almost all education variables is associated with lower homicide rates.
- Of the education measures, learning-adjusted years of schooling has the strongest associations with interpersonal violence and violent crime; indeed, this variable has statistically significant relationships with all measures of interpersonal violence and violent crime, particularly the homicide rate. Higher learning-adjusted years of schooling are also associated with lower rates of perceptions of criminality.

Figure 3 highlights the negative correlation ($r = -0.30$) between learning-adjusted years of schooling and homicide rates (the strength of the correlation increases to -0.5 when using the banded homicide rate scores). These associations suggest that countries with higher quality of education experience lower homicide rates.

Figure 3. Learning-adjusted years of schooling and homicide rates, 2023

Higher learning-adjusted years of schooling are associated with lower homicide rates.



Source: IEP

2.1.3. Social and Political Stability

Better educational outcomes are statistically associated with higher levels of social and political stability. *Social and political stability* refers to the larger structural forces driving or inhibiting peacefulness. Indicators in this dimension include the impact of terrorism within the country, defined as intentional acts of violence or threat of violence by a nongovernment actor, and levels of political terrorism, defined as measures of political violence and terror that a country experiences each year. They also include measures of political instability in the country and the degree to which the country has seen its citizens flee or become internally displaced.

The IEP analysis found statistically significant relationships indicating that higher educational outcomes are associated with stronger social and political stability within a country. These are some of the most significant findings:

- All education variables have statistically significant relationships with political instability, meaning that better performance in education is associated with lower levels of societal volatility.

- Lower proportions of young people, specifically females, not engaged in education, employment or training are associated with lower levels of political instability, terrorism impact and political terror.
- Higher learning-adjusted years of schooling and harmonized test scores are associated with lower impacts from terrorism.

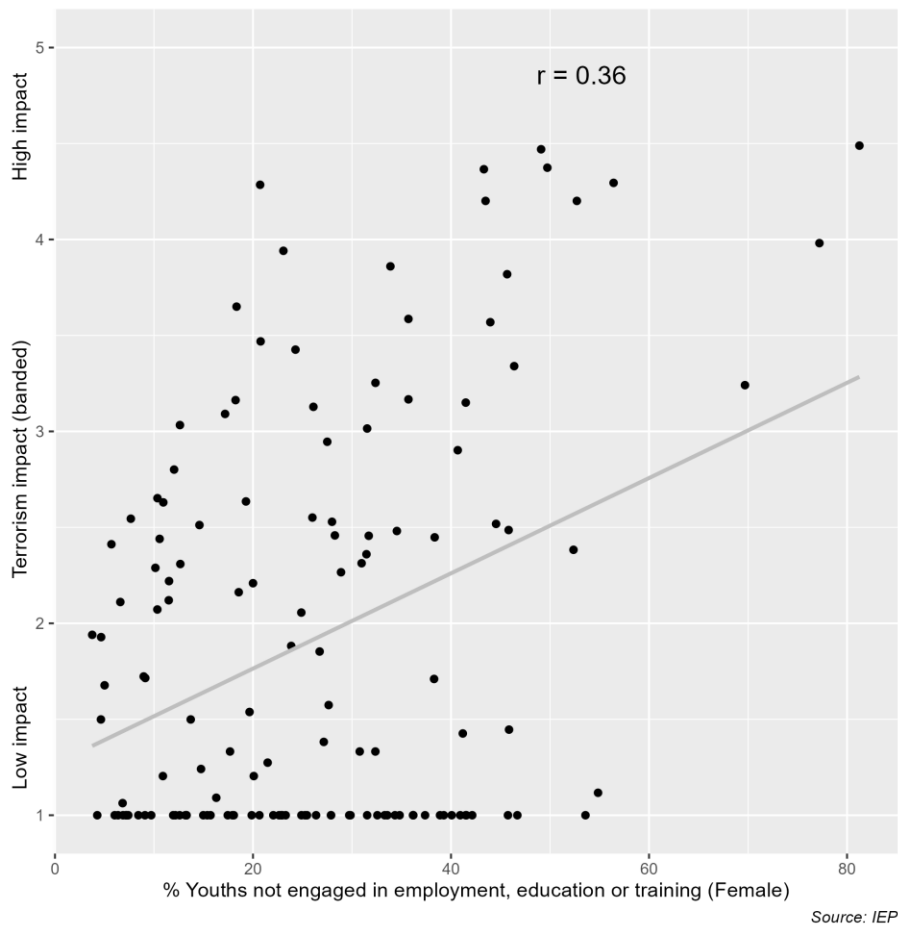
According to the Global Terrorism Index, high levels of idle youth who are not engaged in education, employment or training correlate highly with terrorism.³⁴ A notable driver behind terrorist activities is the lack of inclusion and engagement, as it fosters feelings of isolation and alienation.³⁵

In examining the connection between education and terrorism, the IEP analysis revealed striking dynamics related to gender. For example, overall levels of youth not engaged in employment, education or training show both a statistically significant relationship with terrorism as well as a level of correlation with terrorism ($r = 0.30$). These relationships are stronger in relation to the young female population not economically or educationally engaged. The percentage of females not engaged in education, employment or training shows a statistically significant relationship with levels of terrorism as well as a slightly higher level of correlation with terrorism ($r = 0.36$), as shown in figure 4, than it does for both males and females. There was no meaningful correlation between terrorism and the rates of males not engaged in education, employment or training ($r = 0.14$).

³⁴ Global Terrorism Index 2015.

³⁵ R. Borum, *Psychology of Terrorism* (Tampa: University of South Florida, 2004), <https://www.ojp.gov/pdffiles1/nij/grants/208552.pdf>.

Figure 4. Female youth unemployment and disengagement, and terrorism impact, 2023
Increases in young women’s and girls’ levels of educational and economic disengagement are more strongly associated with increases in terrorism impact than young men’s and boys’ levels of disengagement.



2.2. Education Indicators and Positive Peace

Improved educational outcomes are associated with higher levels of positive peace. IEP has identified eight distinct but interrelated pillars—the eight Pillars of Positive Peace—that comprise positive peace: (1) *equitable distribution of resources*, (2) *acceptance of the rights of others*, (3) *low levels of corruption*, (4) *high levels of human capital*, (5) *sound business environment*, (6) *free flow of information*, (7) *well-functioning government* and (8) *good relations with neighbors*. Table A3 (in the appendix) provides all the statistically significant regression coefficients for the relationships between the pillars and the six education indicators, while table A5 provides the correlation coefficients for these relationships.

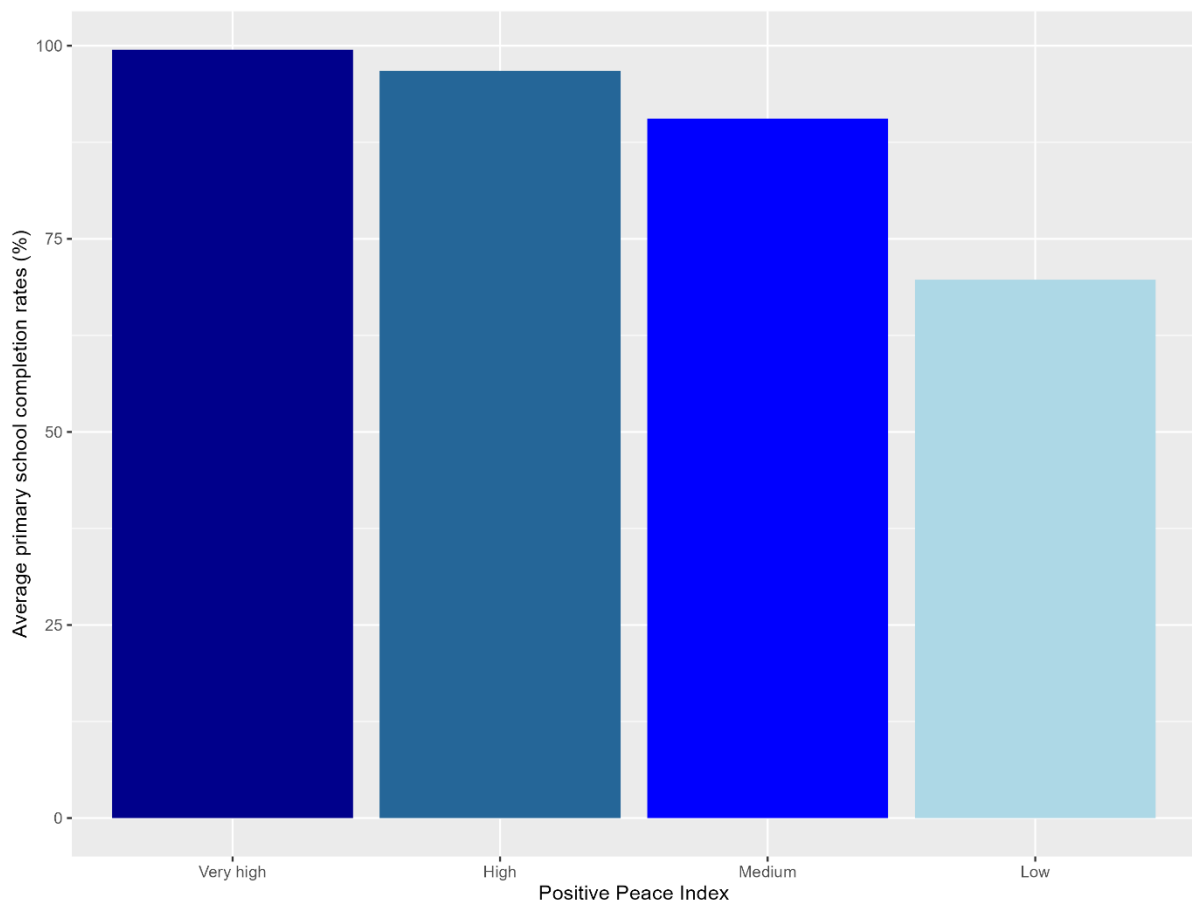
IEP found statistically significant relationships between education outcomes and these positive peace measures. These are some of the most significant findings:

- All education variables are associated with better equitable distribution of resources, acceptance of the rights of others, free flow of information, well-functioning government and good relations with neighbors scores.
- Higher primary and secondary school completion rates exhibit positive relationships with all eight pillars.
- Of the education measures, learning-adjusted years of schooling has the strongest associations with all eight pillars.
- Higher levels of youth not engaged in education, employment or training are associated with poorer performance across all eight pillars.

Much like with negative peace, countries that have better educational outcomes exhibit higher levels of positive peace. Figure 5 illustrates this relationship for primary school completion rates.

Figure 5. Average primary school completion rates by positive peace levels, 2022

Countries with higher primary school completion rates tend to have higher positive peace levels.



Source: IEP

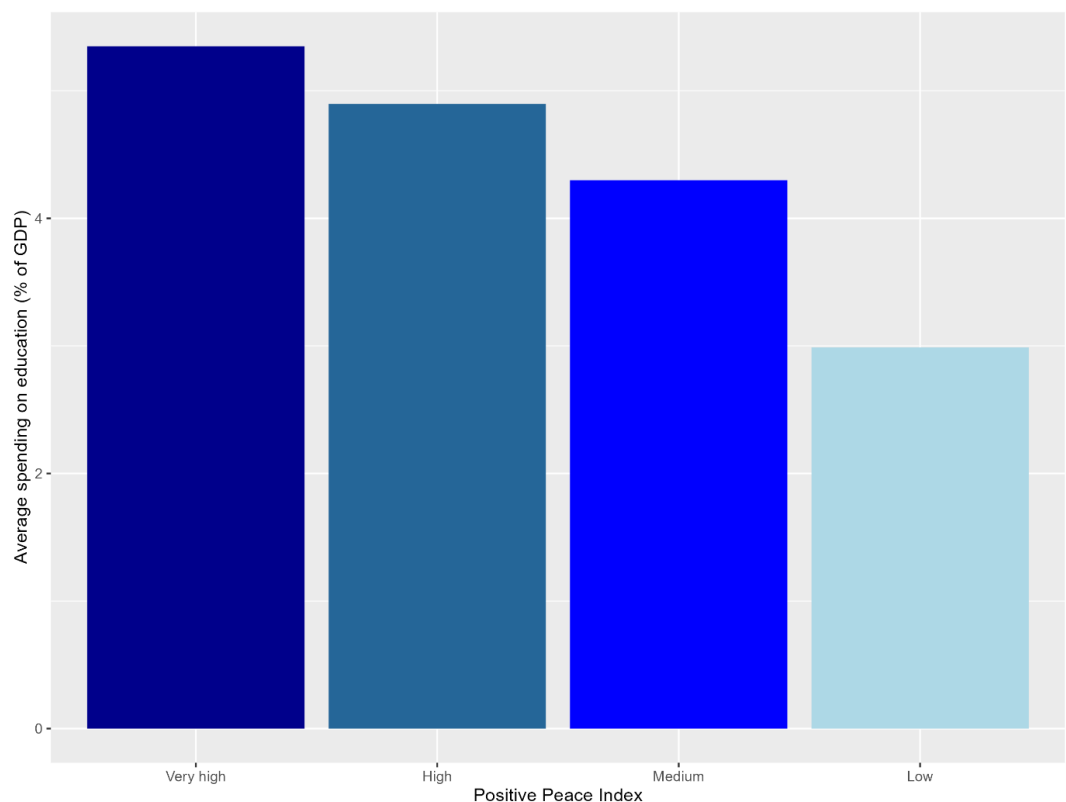
Countries with a very high level of positive peace have on average secondary school completion rates of 96 percent, compared with 45 percent for low positive peace countries. Similarly, very high positive peace countries on average have disengaged youth rates of 10 percent, compared with 31 percent for low positive peace countries.

The same trend holds true for learning-adjusted years of schooling and harmonized test scores. For harmonized test scores, there is on average a nearly 143-point difference between low to very high positive peace countries (on a scale from 300 to 625 points). Similarly, there is on average a nearly six-year difference in learning-adjusted years of schooling between low and very high positive peace countries. These substantial differences suggest that the quality of education is associated with the overall level of positive peace.

Investment in education is also associated with higher levels of positive peace. Figure 6 shows that countries that invest more in education tend to have higher levels of positive peace. On average, very high positive peace countries spend nearly twice as much (as a percentage of their GDP) on education than low positive peace countries, with the former spending the equivalent of about 5.3 percent of their GDP on education and the latter about 2.9 percent of their GDP.

Figure 6. Average government spending on education as a percentage of GDP by positive peace levels, 2022

Countries that invest more in education tend to have higher levels of positive peace.



Source: IEP

Box 1. Education and peace in Nepal

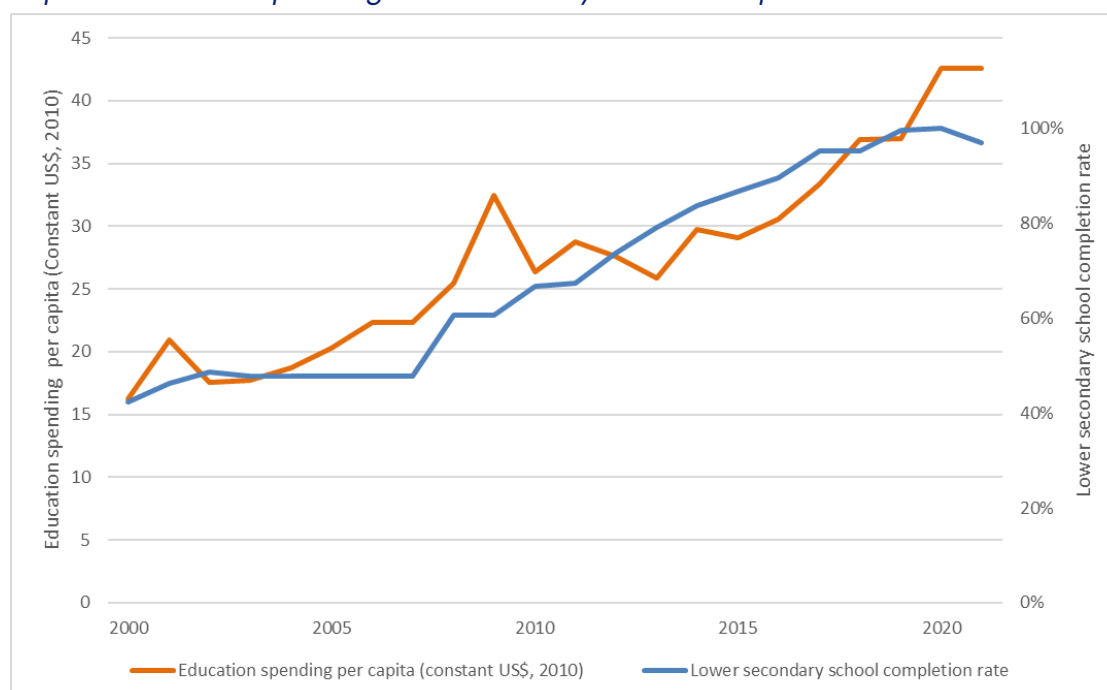
The first formal education policy in Nepal was implemented in 1956. Since then, 11 education plans have been implemented, all recognizing education as a key variable in the development process.^a Preceding Nepal's transition to democracy, the country experienced a civil war between the Nepalese Royal Government and the Communist Party of Nepal from 1996 to 2006.^b In 2015, Nepal approved a new constitution to transform the government from a unitary state to a federal democratic republic.

Nepal's ratification of a federal constitution was expected to have major implications for decentralizing education and emphasizing inclusion, with the new government structure sharing education governance between all levels of government. Nepal's vision to achieve high-income country status by 2043 has driven policy makers to make education a top priority.^c

Nepal has invested significantly in education over the past two decades, with education spending per capita more than doubling. Education spending rose from \$16.3 to \$42.6 per capita in the period 2000–2021, and secondary school completion rates rose over the same period, from 42.3 percent in 2000 to 96.9 percent in 2021 (figure B1.1). This investment in education did not just impact completion rates for males: secondary school completion rates for females either outpaced or were on par with total completion rates between 2011 and 2021.

Figure B1.1. Education spending and secondary school completion rates in Nepal, 2000–2021

Nepal's education spending and secondary school completion rates have both doubled.



More recently, Nepal's government partnered with 10 joint financing partners between 2017 and 2022 to launch the World Bank–supported School Sector Development Program. The program identified many of Nepal's shortcomings in education policy implementation and was largely successful in improving learning outcomes as well as equitable access to education.^d

Investing in education has likely contributed to Nepal's progressive improvement in peace over time. In tandem with improved secondary school completion rates, Nepal has moved up 30 places in the GPI since 2008, equivalent to a 4.4 percent improvement in score, which was driven by significant reductions in levels of internal conflict. Similarly, the country has moved up eight places in the PPI rankings since 2009, equivalent to a 3.2 percent improvement in score. This change includes a 5.8 percent improvement in the equitable distribution of resources Pillar of Positive Peace, which comprises indicators on education and equality of opportunity.

A. I. Gurung, "A Review of Nepalese Public Education Policy: A History of Implementation and Achievements," *Education Policy and Equal Education Opportunities*, January 1, 2012: 109–34, <http://www.jstor.org/stable/resrep27130.8>.

b. T. McNeil, "Education Policy and Practice in Nepal: An Exploration of Education Quality of Private Primary and Secondary Education in the Context of a Decentralized Education System in Kathmandu, Nepal" (thesis, SIT Graduate Institute, Capstone Collection, 2023), <https://digitalcollections.sit.edu/cgi/viewcontent.cgi?article=4327&context=capstones>.

c. McNeil, "Education Policy and Practice in Nepal."

d. World Bank, "Nepal Makes Rapid Improvements in Quality and Inclusiveness of Education," Results Briefs, August 23, 2023, <https://www.worldbank.org/en/results/2023/08/23/nepal-makes-rapid-improvements-in-quality-and-inclusiveness-of-education>.

3. Conclusion

Findings from this analysis indicate that better educational outcomes are associated with fewer conflicts and greater levels of peacefulness. Countries that allocate more government funds to education tend to have greater political stability. Higher rates of school completion are associated with lower levels of conflict. Further, education quality has implications for patterns of peace and conflict, with learning-adjusted years of schooling in particular showing the strongest associations with a wide range of measures of peace. Countries with a higher quality of education tend to have fewer, less intensive and less lethal internal conflicts.

The study also indicates that positive education outcomes are related to higher levels of positive peace. Higher rates of school completion show positive correlations with the eight Pillars of Positive Peace. Conversely, the proportion of disengaged youth negatively correlates with positive peace, suggesting that as the proportion of disengaged youth increases, positive peace decreases.

Future research should build on the findings from this analysis, further contributing to the body of evidence by exploring the relationship between education and peace in various regional and geopolitical contexts.

Appendix: Methodology and Tables

The main model used to assess the effects of education on peacefulness was a linear regression model. The linear model was used because of the type of data available and the type of research question seeking to be answered.

Regression models are a standard statistical tool used to predict the relationship between one variable and another. This is done to infer a causal relationship between the predictor variable and the dependent variable. In the context of this study, the predictors were various education indicators and various conflict indicators. The goal of the study was to investigate a causal link between education and conflict.

A linear regression model describes the situation where the dependent variable is continuous or a real number. The linearity of the model is explained by the fact that the model is linear in its parameters.

$$(1) y_i = \alpha + \beta_1 x_i + X' \beta_2 + \varepsilon_i$$

Here, y_i represents the various peace indicators from the GPI and x_i represents the various education indicators. β_1 is the coefficient of interest, representing the magnitude of increase or decrease in the peace indicators with a per unit increase in the education indicators.

As outlined in table A1, the analysis comprised six education variables (with most disaggregated by females and males) and 33 peace variables, including the overall Global Peace Index (GPI) scores and the index's 23 underlying indicators as well as overall Positive Peace Index (PPI) scores and the eight Pillars of Positive Peace. The analysis also included one control variable.

Table A1. Indicators included in the analysis

Indicator	Years available	Source
Education variables		
Primary school completion rates (male and female)	1970–2021	World Bank World Development Indicators
Lower secondary school completion rates (male and female)	1970–2021	World Bank World Development Indicators
Share of youth not in education, employment or training (male and female)	1976–2021	World Bank World Development Indicators
Government spending on education as a percentage of GDP	1970–2021	World Bank World Development Indicators
Harmonized test scores (male and female)	2020	Human Capital Index 2020

Learning-adjusted years of schooling (male and female)	2020	Human Capital Index 2020
Peace and conflict variables		
Global Peace Index	2008-2023	IEP
access to small arms	2008-2023	IEP
armed services personnel rate	2008-2023	IEP
deaths from external conflict	2008-2023	IEP
deaths from internal conflict	2008-2023	IEP
external conflicts fought	2008-2023	IEP
homicide rate	2008-2023	IEP
incarceration rate	2008-2023	IEP
intensity of internal conflict	2008-2023	IEP
internal conflicts fought	2008-2023	IEP
military expenditure (% GDP)	2008-2023	IEP
neighboring country relations	2008-2023	IEP
nuclear and heavy weapons	2008-2023	IEP
perceptions of criminality	2008-2023	IEP
police rate	2008-2023	IEP
political instability	2008-2023	IEP
political terror scale	2008-2023	IEP
refugees and IDPs	2008-2023	IEP
terrorism impact	2008-2023	IEP
UN peacekeeping funding	2008-2023	IEP
violent crime	2008-2023	IEP
violent demonstrations	2008-2023	IEP
weapons exports	2008-2023	IEP
weapons imports	2008-2023	IEP
Positive Peace Index	2009-2022	IEP
acceptance of the rights of others	2009-2022	IEP
well-functioning government	2009-2022	IEP
sound business environment	2009-2022	IEP
good relations with neighbors	2009-2022	IEP
free flow of information	2009-2022	IEP
high levels of human capital	2009-2022	IEP
low levels of corruption	2009-2022	IEP
equitable distribution of resources	2009-2022	IEP
Control variable		
Electoral Democracy Index	1789-2020	V-Dem

Note: IDPs = internally displaced persons; IEP = Institute for Economics & Peace; V-Dem = V-Dem Institute.

Table A2 outlines the regression coefficients between the education variables and the 23 indicators used in the GPI, while table 3 shows the regression coefficients with the eight

Pillars of Positive Peace. Only statistically significant relationships ($p < 0.05$) have been included in the tables. The vast majority of education variables showed statistically significant relationships with these measures of both negative peace (GPI) and positive peace (PPI).

Table A2. Education and GPI indicators: regression coefficients

	Access to small arms	Armed services personnel rate	Deaths from external conflict	Deaths from internal conflict	External conflicts fought	Homicide rate	Incarceration rate	Intensity of internal conflict	Internal conflicts fought	Military expenditure (% GDP)	Neighboring country relations	Nuclear and heavy weapons	Perceptions of criminality	Police rate	Political instability	Political terror scale	Refugees and IDPs	Terrorism impact	UN peacekeeping funding	Violent crime	Violent demonstrations	Weapons exports	Weapons imports
Primary school completion rates (total)	-0.020	0.008		-0.012		-0.020	0.019	-0.013	-0.016	0.008		0.012	-0.018	0.011	-0.013	-0.009	-0.016		-0.027	-0.030	-0.017		0.014
Female	-0.021	0.007		-0.014		-0.019	0.018	-0.014	-0.018	0.006		0.010	-0.017	0.010	-0.014	-0.011	-0.018		-0.025	-0.030	-0.017		0.014
Male	-0.019	0.008		-0.012		-0.020	0.018	-0.011	-0.012	0.009		0.012	-0.017	0.013	-0.010	-0.013	-0.013		-0.027	-0.028	-0.016		0.014
Secondary school completion rates (total)	-0.016	0.006	0.003	-0.008	-0.007	-0.017	0.011	-0.012	-0.011	0.005		0.009	-0.015	0.010	-0.010	-0.008	-0.009		-0.019	-0.025	-0.016	0.006	0.012
Female	-0.016	0.006	0.002	-0.008	-0.007	-0.015	0.012	-0.011	-0.011	0.004		0.008	-0.015	0.010	-0.010	-0.007	-0.009		-0.019	-0.024	-0.016	0.005	0.012
Male	-0.015	0.006	0.003	-0.006	-0.008	-0.017	0.010	-0.011	-0.009	0.005		0.009	-0.015	0.011	-0.009	-0.008	-0.007		-0.018	-0.024	-0.016	0.007	0.013
Harmonized test scores (total)	-0.010	0.003	0.001	-0.004		-0.010		-0.006	-0.005	0.002		0.004	-0.008		-0.004	-0.005			-0.007	-0.013	-0.008	0.006	0.007
Female	-0.009	0.003	0.001	-0.004		-0.010		-0.006	-0.005	0.002		0.004	-0.008		-0.004	-0.005		-0.003	-0.006	-0.013	-0.008	0.006	0.007
Male	-0.009	0.003	0.001	-0.004		-0.010		-0.006	-0.005	0.002		0.004	-0.007		-0.004	-0.005			-0.006	-0.013	-0.008	0.006	0.006
Learning-adjusted years of schooling (total)	-0.249	0.088	0.034	-0.101		-0.278	0.068	-0.166	-0.129	0.055		0.116	-0.221	0.079	-0.123	-0.129	-0.077		-0.209	-0.323	-0.221	0.139	0.199
Female	-0.244	0.094	0.034	-0.110	-0.090	-0.258	0.072	-0.161	-0.137	0.053		0.107	-0.207		-0.105	-0.123		-0.096	-0.198	-0.316	-0.224	0.139	0.206
Male	-0.245	0.093	0.038	-0.093		-0.265		-0.166	-0.120	0.052		0.124	-0.208		-0.104	-0.120			-0.196	-0.328	-0.219	0.157	0.202
Youth not in employment, education or training (total)	0.043	-0.010		0.022		0.043		0.023	0.025				0.029		0.025	0.019	0.020	0.022	0.025	0.057	0.035	-0.020	-0.024
Female	0.037	-0.009		0.021		0.037		0.024	0.024				0.024		0.020	0.019	0.017	0.021	0.021	0.048	0.031	-0.017	-0.020
Male	0.040					0.038							0.026		0.025				0.020	0.048	0.027	-0.019	-0.022
Government spending on education (% of GDP)										0.101										-0.173	-0.128	-0.085	0.091

Note: Statistically significant results only.

Table A3. Education and Pillars of Positive Peace: regression coefficients

	Equitable Distribution of Resources	Acceptance of the Rights of Others	Well-Functioning Government	Sound Business Environment	Good Relations with Neighbors	Free Flow of Information	High Levels of Human Capital	Low Levels of Corruption
Primary school completion rates (total)	-0.022	-0.019	-0.014	-0.015	-0.010	-0.012	-0.016	-0.011
Female	-0.021	-0.019	-0.015	-0.014	-0.010	-0.011	-0.015	-0.011
Male	-0.022	-0.018	-0.014	-0.015	-0.010	-0.012	-0.016	-0.011
Secondary school completion rates (total)	-0.017	-0.016	-0.011	-0.013	-0.008	-0.010	-0.014	-0.010
Female	-0.016	-0.015	-0.011	-0.013	-0.008	-0.010	-0.013	-0.010
Male	-0.016	-0.016	-0.011	-0.014	-0.008	-0.011	-0.014	-0.010
Harmonized test scores (total)	-0.008	-0.009	-0.006	-0.008	-0.004	-0.005	-0.008	-0.007
Female	-0.008	-0.009	-0.006	-0.008	-0.004	-0.004	-0.008	-0.007
Male	-0.008	-0.008	-0.006	-0.008	-0.004	-0.004	-0.008	-0.007
Learning-adjusted years of schooling (total)	-0.218	-0.229	-0.164	-0.211	-0.119	-0.136	-0.226	-0.166
Female	-0.207	-0.228	-0.156	-0.203	-0.109	-0.127	-0.218	-0.161
Male	-0.212	-0.232	-0.160	-0.217	-0.115	-0.128	-0.231	-0.169
Youth not in employment, education or training (total)	0.031	0.032	0.022	0.027	0.018	0.019	0.042	0.023
Female	0.025	0.028	0.018	0.021	0.014	0.016	0.032	0.020
Male	0.028	0.025	0.020	0.026	0.016	0.017	0.044	0.020
Government spending on education (% of GDP)	-0.085	-0.088	-0.070		-0.046	-0.062		-0.085

Note: Statistically significant results only.

Tables A4 and A5 show the Pearson correlation coefficients between the education variables and both the GPI and PPI scores, along with the 23 indicators of the GPI and the eight pillars of the PPI.

Table A4. Correlations between educational variables and peace indicators

	Global Peace Index score	Access to small arms	Armed services personnel rate	Deaths from external conflict	Deaths from internal conflict	External conflicts fought	Homicide rate	Incarceration rate	Intensity of internal conflict	Internal conflicts fought	Military expenditure (% GDP)	Neighboring country relations	Nuclear and heavy weapons	Perceptions of criminality	Police rate	Political instability	Political terror scale	Refugees and IDPs	Terrorism impact	UN peacekeeping funding	Violent crime	Violent demonstrations	Weapons exports	Weapons imports
Primary school completion rates (total)	-0.42	-0.43	0.14	0.09	-0.30	-0.19	-0.30	0.29	-0.38	-0.35	0.05	-0.14	0.18	-0.41	0.14	-0.43	-0.37	-0.34	-0.12	-0.50	-0.47	-0.35	0.23	0.22
Female	-0.47	-0.46	0.13	0.08	-0.36	-0.17	-0.31	0.29	-0.41	-0.42	0.02	-0.18	0.17	-0.43	0.12	-0.46	-0.41	-0.38	-0.17	-0.50	-0.51	-0.38	0.23	0.23
Male	-0.36	-0.39	0.15	0.10	-0.24	-0.20	-0.30	0.27	-0.33	-0.28	0.08	-0.09	0.18	-0.39	0.16	-0.37	-0.33	-0.27	-0.07	-0.47	-0.44	-0.32	0.22	0.21
Secondary school completion rates (total)	-0.46	-0.49	0.22	0.14	-0.31	-0.21	-0.37	0.27	-0.44	-0.36	0.06	-0.15	0.23	-0.52	0.23	-0.45	-0.40	-0.29	-0.17	-0.53	-0.57	-0.48	0.29	0.30
Female	-0.48	-0.51	0.22	0.13	-0.34	-0.21	-0.36	0.31	-0.44	-0.39	0.04	-0.17	0.22	-0.51	0.22	-0.47	-0.41	-0.31	-0.19	-0.53	-0.57	-0.49	0.28	0.29
Male	-0.44	-0.47	0.23	0.15	-0.27	-0.22	-0.38	0.25	-0.42	-0.32	0.09	-0.13	0.24	-0.52	0.25	-0.43	-0.39	-0.26	-0.15	-0.51	-0.57	-0.48	0.30	0.30
Harmonized test scores (total)	-0.57	-0.66	0.29	0.12	-0.37	-0.15	-0.48	0.12	-0.56	-0.41	0.00	-0.19	0.21	-0.56	0.06	-0.55	-0.55	-0.22	-0.20	-0.47	-0.66	-0.57	0.49	0.31
Female	-0.57	-0.67	0.34	0.12	-0.39	-0.15	-0.50	0.10	-0.57	-0.42	0.01	-0.16	0.19	-0.60	0.05	-0.54	-0.55	-0.21	-0.24	-0.47	-0.66	-0.59	0.49	0.34
Male	-0.56	-0.65	0.28	0.11	-0.37	-0.15	-0.47	0.09	-0.56	-0.40	-0.05	-0.19	0.20	-0.54	0.00	-0.54	-0.55	-0.18	-0.22	-0.44	-0.64	-0.55	0.49	0.26
Learning-adjusted years of schooling (total)	-0.60	-0.67	0.32	0.11	-0.38	-0.22	-0.50	0.15	-0.59	-0.42	-0.02	-0.20	0.24	-0.61	0.11	-0.59	-0.58	-0.28	-0.21	-0.55	-0.65	-0.58	0.48	0.36
Female	-0.59	-0.68	0.37	0.10	-0.40	-0.26	-0.51	0.16	-0.58	-0.44	-0.03	-0.20	0.21	-0.62	0.07	-0.56	-0.57	-0.25	-0.27	-0.56	-0.67	-0.61	0.48	0.37
Male	-0.56	-0.65	0.34	0.11	-0.36	-0.24	-0.49	0.13	-0.56	-0.39	-0.05	-0.20	0.22	-0.58	0.05	-0.56	-0.56	-0.21	-0.23	-0.53	-0.65	-0.56	0.50	0.33
Youth not in employment, education or training (total)	0.58	0.61	-0.18	-0.05	0.39	0.14	0.43	-0.12	0.49	0.40	0.22	0.25	-0.11	0.45	0.09	0.55	0.49	0.32	0.30	0.40	0.60	0.50	-0.36	-0.30
Female	0.66	0.65	-0.20	-0.03	0.45	0.14	0.45	-0.11	0.58	0.46	0.23	0.31	-0.06	0.46	0.10	0.60	0.58	0.34	0.36	0.43	0.63	0.55	-0.38	-0.30
Male	0.37	0.46	-0.13	-0.07	0.22	0.09	0.33	-0.10	0.30	0.22	0.16	0.12	-0.16	0.36	0.06	0.40	0.29	0.23	0.14	0.27	0.44	0.35	-0.28	-0.24
Government spending on education (% of GDP)	-0.31	-0.25	-0.05	-0.02	-0.15	-0.14	-0.08	0.05	-0.31	-0.22	0.11	-0.21	0.05	-0.12	-0.02	-0.36	-0.33	-0.16	-0.12	-0.38	-0.29	-0.22	0.19	0.14

Table A5. Correlations between educational variables and the Pillars of Positive Peace

	Positive Peace Score	Equitable Distribution of Resources	Acceptance of the Rights of Others	Well-Functioning Government	Sound Business Environment	Good Relations with Neighbors	Free Flow of Information	High Levels of Human Capital	Low Levels of Corruption
Primary school completion rates (total)	-0.57	-0.66	-0.56	-0.52	-0.51	-0.48	-0.51	-0.55	-0.44
Female	-0.58	-0.67	-0.58	-0.54	-0.51	-0.50	-0.52	-0.56	-0.46
Male	-0.53	-0.62	-0.52	-0.47	-0.49	-0.45	-0.48	-0.53	-0.41
Secondary school completion rates (total)	-0.66	-0.74	-0.65	-0.57	-0.62	-0.54	-0.60	-0.66	-0.53
Female	-0.66	-0.74	-0.66	-0.58	-0.61	-0.55	-0.61	-0.66	-0.53
Male	-0.65	-0.72	-0.64	-0.55	-0.63	-0.52	-0.60	-0.66	-0.52
Harmonized test scores (total)	-0.82	-0.83	-0.80	-0.72	-0.80	-0.67	-0.69	-0.86	-0.73
Female	-0.83	-0.60	-0.54	-0.48	-0.56	-0.46	-0.61	-0.63	-0.50
Male	-0.82	-0.60	-0.53	-0.47	-0.55	-0.47	-0.60	-0.62	-0.49
Learning-adjusted years of schooling (total)	-0.85	-0.88	-0.84	-0.76	-0.81	-0.71	-0.76	-0.90	-0.73
Female	-0.85	-0.71	-0.66	-0.59	-0.65	-0.56	-0.69	-0.73	-0.58
Male	-0.84	-0.70	-0.65	-0.58	-0.65	-0.56	-0.68	-0.72	-0.58
Youth not in employment, education or training (total)	0.69	0.70	0.66	0.59	0.62	0.58	0.62	0.82	0.58
Female	0.74	0.75	0.74	0.65	0.65	0.63	0.68	0.82	0.64
Male	0.49	0.51	0.44	0.42	0.47	0.41	0.42	0.70	0.40
Government spending on education (% of GDP)	-0.44	-0.45	-0.42	-0.44	-0.35	-0.41	-0.44	-0.29	-0.44

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