

Comment on Alan Krueger and Jitka Maleckova,
“Education, Poverty, and Terrorism: Is There a Causal Connection?”

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The opinions of several Nobel Peace Prize winners on the root causes of terrorism were described in a Dec.10, 2001 article in the Christian Science Monitor (Jai, 2001). Several of the Nobel Laureates quoted highlight the role of low education and poverty in terrorism:

“What is it that seduces some young people to terrorism? It simplifies things. The fanatic has no questions, only answers. Education is the way to eliminate terrorism.” (Elie Wiesel)

“If the mind is more open, that will automatically bring less fear. Education can narrow the gap between appearances and reality. The reality is that we and 'they' are not different.” (Dalai Lama)

“At the bottom of terrorism is poverty. That is the main cause. Then there are other religious, national, and ideological differences.” (Kim Dae Jung)

“External circumstances such as poverty and a sense of grievance and injustice can fill people with resentment and despair to the point of desperation.” (Desmond Tutu)

In this paper, Alan Krueger and Jitka Maleckova take the theory that low education and poverty breed terrorism, and subject it to empirical scrutiny. There are many reasons why this task is difficult. Terrorist incidents are (fortunately) rare enough in most countries that cross-sectional and time-series analyses of how poverty and education are related to terrorism are not easily conducted. Furthermore, terrorism is difficult to define. The line between terrorism and violence that is not politically motivated is often blurry, as is the line between terrorism and valid military action. What is viewed as “terrorism” by one group may be viewed as “freedom fighting” by another. In this comment, I follow Krueger and Maleckova and define “terrorism” as armed attacks on civilians that are designed to achieve political ends.

The authors make four major points. First, they review the literature on hate crimes, (possibly distant) cousins of terrorist acts, and conclude there is no evidence that hate crimes are counter-cyclical or that the fraction of people involved in hate groups is higher in regions with lower education attainment or higher unemployment. Second, they examine public opinion data from the West Bank and Gaza Strip, and conclude that support for armed attacks on Israeli civilians does not decrease among those with more education and better jobs. Third, they compare the education levels of Hezbollah participants with those of “controls”—people of similar ages surveyed in the Lebanese Population and Housing Survey—and conclude that, if anything, Hezbollah participants have better-than-average education levels. Fourth, they conduct a time-series analysis that relates terrorist attacks in Israel to real GDP growth in the West bank and Gaza Strip, and conclude that there is no robust relationship between the incidence of attacks against Israeli citizens and current or lagged GDP growth.

The authors start with the question of how education and economic opportunities might in theory affect the supply of labor to terrorist organizations. Specifically, they ask whether a standard “Becker” approach to the analysis of criminal activity can be extended to cover terrorist activities. In short, the Becker approach says that individuals choose employment in illegal activities if the rewards from doing do exceed the income forgone from working in legal activities. The idea that those with more education are less likely to be criminals hinges on the assumption that education increases the return from legal relative to illegal activities. This assumption is not a theoretical necessity: it is possible that education produces both white-collar employees and white-collar criminals. However, empirical evidence supports the conclusion that education reduces property crime.

As Krueger and Maleckova point out, this is not the case for violent crime nor, apparently, for participation in Hezbollah activities. If we take the authors’ results for the Hezbollah at face

value, they imply that increasing schooling in Lebanon could actually increase the supply of suicide bombers.

These results are interesting, since they are at odds with commonly held beliefs. However, I question whether the labor supply approach is the most sensible starting point when looking at this topic. Organizations that sponsor terrorist activities are akin to corporations that use a complex array of inputs to produce “services”. Scarcity of *any* of these inputs—explosives, other weapons, communication and transportation, as well as suicide bombers—would increase costs and reduce the “output” of terrorist groups. My (uneducated) guess is that labor is a relatively small share of the costs of these organizations, and that there is a lot of scope for substitution between inputs in the production function for terrorism. Even if it were the case that less educated people are more likely to work for terrorist organizations, it would likely take an enormous shift in the distribution of education within countries to make a dent in the costs of producing terror. Therefore, although I agree with the authors that increasing education is unlikely to reduce terrorist activity through a “labor supply” channel, I think this would be true regardless of whether highly educated people are more or less likely to become suicide bombers.

It makes more sense to me to focus on the demand side rather than the supply side. Higher levels of education and consequent reductions in poverty may make individuals less willing to support attacks on civilians to achieve political objectives. And, the governments of richer countries may face stronger incentives to distance themselves from terrorist activities, especially if their access to export markets would be threatened by involvement with terrorism.

Krueger and Maleckova take up the first of these arguments by examining the results of a public opinion poll recently conducted in the West Bank and Gaza Strip. The results are disturbing, because they indicate that those with more education are more likely to *support* attacks against Israeli civilians. However, an interesting feature of the data is that they also show

the converse: those with more education are also more likely to *oppose* these attacks. How can both be true? The answer is that more educated people are less likely to fall into the “no opinion” category. For example, in response to the question of whether there are “circumstances under which you would justify the use of terrorism to achieve political goals,” 32.3% of those who are illiterate say “yes”, 45.3% say “no” and 22.4% have no opinion. In contrast, 36.4% of those with post-secondary-schooling say “yes”, 56.7% say “no”, and only 6.9% have no opinion. One firm conclusion that can be drawn from the polling data is that education makes people more opinionated! However, the polling data do not provide evidence on whether those who are more educated are more willing to engage in dialogue or accept compromise. More importantly, the poll reflects public opinion at a very difficult time period, after years of tension and violence between Palestinians and Israelis. A key question—whether more education and affluence at some point in the past could have prevented the current situation from emerging—is not addressed.

To answer this question, it is useful to examine sentiment in a country that is on the brink of resorting to terrorism. The “Northern Ireland Loyalty Survey,” conducted by Richard Rose in Ulster in 1968, presents such an opportunity. The survey asked approximately 1,200 adults—both Catholics and Protestants—their opinions about religion and politics, and also collected socioeconomic information from the respondents.

The survey could not have been better timed. The civil rights movement for equal rights in housing and voting for poorer Catholics began in 1968. British troops were sent to Northern Ireland in 1969. Violence in Northern Ireland escalated after 1971, the year that marked the first shooting of a British soldier in Northern Ireland and the introduction of internment without trial for suspected extremists. The data provide a window on opinions held just before the situation in Northern Ireland went dramatically downhill.

The survey asked Protestants and Catholics two similar questions that measure whether the respondent has “extreme” views. The question asked of Catholics was:

“Sometimes you hear people say today that it would be right to take any measures necessary in order to end partition and bring Ulster into the Republic. Are you inclined to agree or disagree with that view?”

Protestants were asked:

“Sometimes you hear people say today that it would be right to take any measures necessary in order to keep Northern Ireland a Protestant country. Are you inclined to agree or disagree with that view?”

Respondents to both questions could answer “Agree”, “Disagree”, “Depends” or “Don’t know”. Respondents identified their religion, and also expressed the intensity of their religious identity by indicating whether they were “strong” or “average” Catholics or Protestants.

How do the answers to these two questions differ across Catholics and Protestants with differing degrees of religious identity? Table 1 shows a breakdown of answers by religion:

Table 1: Do you agree it is right to take “any measures necessary”? By religion.

	“strong” Catholic (n=198)	“average” Catholic (n=315)	“average” Protestant (n=390)	“strong” Protestant (n=331)
Agree	13.64%	11.75%	38.97%	64.95%
Depends	4.55%	4.76%	9.49%	6.65%
Disagree	79.80%	81.59%	50.51%	27.49%
Don’t know	2.02%	1.90%	1.03%	0.91%

Table 1 highlights the fact that Protestants, especially “strong” Protestants, were much more likely to take a hard-line position than those in other groups. Furthermore, since Protestants had higher education levels and incomes, it would not be surprising to find that “hard line” views were positively correlated with these variables when members of both religious groups are pooled.

How do political views vary by education and income group within religious groups?

Table 2 presents tabulations by whether the respondent left school prior to the age of 14 (12.74% of Catholics and 6.99% of Protestants), at ages 14 or 15 (64.64% of Catholics and 60.75% of Protestants) or at age 16 or higher (22.62% of Catholics and 32.26% of Protestants.)

Table 2: Do you agree that it is right to take “any measures necessary”? By age at leaving school.

	Catholics			Protestants		
	age 13 or less	age 14 or 15	age 16 or more	age 13 or less	age 14 or 15	age 16 or more
Agree	22.73%	11.94%	8.40%	52.94%	55.01%	40.25%
Depends	3.03%	5.37%	3.36%	11.76%	6.68%	10.59%
Disagree	68.18%	80.90%	88.24%	33.33%	37.19%	48.31%
Don't know	6.06%	1.79%	0.00%	1.96%	1.11%	0.85%

Table 2 indicates that, within religious groups, those with more education were less likely to agree and more likely to disagree that “any measures necessary” should be taken. Highly educated Catholics, in particular, overwhelmingly took a moderate view. Interestingly, differences in opinions across income groups are not pronounced for Catholics: Among Catholics, 15% of those with weekly incomes of £10 per week or less (roughly 25% of Catholics interviewed) agree that “any measures necessary” should be taken, and 13% of those with weekly incomes of £26 per week or more (roughly 16% of Catholics interviewed) agreed. Among Protestants, however, 53% of those with £10 or less agreed, whereas only 42% of those with £26 or more agreed.

Opinions may be affected by a variety of other factors, including age and gender, that could be correlated with education or income. As a final step, I selected samples of Catholics and Protestants who either agreed or disagreed with the questions regarding “any measures necessary,” leaving out those who answered “depends” or “don’t know”, and estimated probit

models that included controls for age, gender, the strength of religious affiliation, as well as the age at leaving school and/or income.¹ The results are shown in Table 3:

Table 3: Determinants of agreement that “any measures necessary” should be taken.

	Catholics (n=466)		Protestants (n=632)			
age at leaving school (years)	-0.032 (.011)	-0.033 (.011)	-0.033 (.012)		-.0202 (.014)	
weekly income (£)		-0.001 (.002)	0.0001 (.002)		-0.006 (.002)	-0.005 (.002)
indicator: strongly religious	0.007 (.032)	0.004 (.032)	0.007 (.032)	0.263 (.040)	0.269 (.040)	0.264 (.040)
indicator: male	-0.071 (.031)	-0.073 (.031)	-0.071 (.030)	0.071 (.041)	0.096 (.041)	0.087 (.042)
current age (years)	-0.001 (.001)	-0.0002 (.001)	-0.001 (.001)	-0.0001 (.001)	-0.0007 (.001)	-0.008 (.0014)
F (p-value): Income & schooling jointly significant			8.11 (.0174)			11.35 (.0034)

Notes: Probit regressions. The dependent variable equals 1 if the respondent agrees that “any measures necessary” should be taken, either to end partition (for Catholics) or to keep Northern Ireland Protestant (for Protestants). It equals 0 if he or she disagrees. The estimates for age at leaving school, income and age show changes in the probability of agreeing with respect to the independent variable, evaluated at sample means. The estimates of the indicator variables “strongly religious” and “male” show the change in the probability of agreeing associated with a discrete change in the indicator from 0 to 1. Standard errors in parentheses.

These results indicate that, among Catholics, more education is negatively related to having a “hard line” opinion. Remaining an extra year in school is associated with a 3.2 percentage point reduction in the probability of agreeing that “any measures necessary” should be taken to end partition. Income appears to not matter, whether it is entered alone or with schooling; neither does age nor the intensity of religious identity. Interesting, Catholic males are 7 percentage points

¹Weekly family income was coded in 8 categories: £5 or less, £6-10, £11-15, £16-20, £21-25, £26-30, £31-38, or more than £38. Income values were coded at the midpoints of each range. Those in the lowest category were arbitrarily assigned to £4, and those in the highest category were assigned to £45. Results from ordered probits that included the group who said “depends” are similar.

less likely than Catholic females are to support the use of “any measures necessary” to achieve the end of partition.

The results for Protestants are similar in that higher education levels are associated with more moderate views. However, there are several notable differences between Catholics and Protestants. First, for Protestants, both higher income and higher education are associated with more moderate views. An additional £10 per week is associated with a 5 percentage point reduction in the probability of supporting “any measures necessary” to keep Northern Ireland a Protestant country. Second, in contrast to Catholics, Protestant males are more likely than Protestant females to agree that “any measures necessary” should be taken. Third, being a “strong” Protestant has a large (26 percentage point) effect on the probability of agreeing that any measures necessary should be taken to keep Northern Ireland a Protestant country. To put this effect in context, it would take roughly 10 years of additional schooling to offset the effect of being a “strong” Protestant.

Overall, these results indicate that, in 1968, more highly educated Ulster residents held more moderate views. Krueger and Maleckova caution that their results for the West Bank and Gaza Strip cannot be generalized to other regions and time periods. The same caution applies to these results from Ulster. However, the Ulster results are consistent with the ideas voiced by the Nobel Peace Prize winners, that those with more education are often more broad-minded—at least before conflict escalates. It is possible that an escalation of violence, and resulting sense of grievance and injustice, quickly alters the opinions of even the most moderate.

References:

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