

Afghanistan—William Carter for Mercy Corps

CAN ECONOMIC INTERVENTIONS REDUCE VIOLENCE?

Impacts of Vocational Training and Cash Transfers on Youth Support for Political Violence in Afghanistan

FEBRUARY 2018



Table of Contents

Executive Summary				
Introduction	6			
Rationale	6			
Policy Relevance	7			
Context of Kandahar, Afghanistan	8			
Theories Examined	9			
INVEST in Kandahar	12			
Research Design	15			
Research Questions	15			
Hypotheses	15			
Theory of Change	15			
Outcomes	15			
Methodology	19			
Treatment Assignment: Factorial Design	19			
Data Collection	20			
Estimation Strategy	22			
Limitations	22			
Results	25			
Impacts of Vocational Training	25			
Impacts of Unconditional Cash Transfers	27			
Impacts of TVET plus UCTs	31			
Discussion and Conclusion	33			
Recommendations	35			
References	37			
Appendix	42			

Acronyms

AOGs Armed Opposition Groups

IDP Internally Displaced Person

ITT Intention-to-Treat

OECD Organization for Economic Cooperation and Development

REC Ready to Earn Clubs

TVET Technical and Vocational Education and Training

UCT Unconditional Cash Transfers

VTC Vocational Training Center

Acknowledgments:

We kindly thank the United States Institute of Peace for its generosity in funding this research. We would like to acknowledge the involvement of the following people in this study: Camilla Huggins, Ninette Adhikari, Max Izenberg, Peter Stevenson, Muhammed Ashraf Wahidi, Marco Scagluisi, and Sulaiman Sarwary from Mercy Corps Afghanistan; Keith Ives, Patrick Baxter, and Sangeetha Madasamy from Causal Design; Najia Hyder, Sasha Muench, Matt Streng, Sanjay Gurung, Lynn Hector, Madeline Rose, and Miranda Hurst from the Mercy Corps Headquarters teams; Jason Lyall and Prakhar Sharma from Yale University; and Yang-Yang Zhou and Kosuke Imai from Princeton University.

Suggested Citation:

Kurtz, J., Tesfaye, B., & Wolfe, R.J. (2018). Can economic interventions reduce violence? Impacts of vocational training and cash transfers on youth support for political violence in Afghanistan. Washington, DC: Mercy Corps.



Afghanistan—Toni Greaves for Mercy Corps

Executive Summary

Reducing the growth of violent movements is a perennial challenge for the international community, in large part due to the multitude of reasons why people engage in violence. While there is limited evidence that economic programs—such as those that improve employment—by themselves can curb engagement in political violence, as shown by research by Mercy Corps and others, such interventions are still a preferred approach of numerous development actors working to promote stability in fragile and conflict-affected countries. In places such as Afghanistan, donors and development practitioners invest heavily in youth interventions focused on creating employment as one of the means to dissuade youth from supporting armed opposition groups (AOGs). Additionally, there is often a tendency to lump all types of violence together, not recognizing that political violence may require different solutions than gang-related, criminal, or interpersonal violence. Consequently, the limited amount of evidence from rigorous program impact evaluations relating to political violence makes it difficult to reach definitive conclusions about the causal link between economic conditions and political violence.

In response to this apparent knowledge gap, Mercy Corps, in collaboration with the Political Violence FieldLab at Yale University and Princeton University, and with financial support from the United States Institute of Peace, undertook a randomized controlled trial with 1,590 participants to test the impact of particular economic interventions specifically a youth employability program and cash transfers—on youth attitudes toward and willingness to support political violence. Mercy Corps implemented these economic interventions under a US government-funded project known as INVEST in Kandahar Province, Afghanistan. The program's primary goal is to help vulnerable Afghan youth develop skills that are responsive to local labor market needs and to help them secure economic opportunities rather than reducing political violence specifically. However, we used this opportunity to test whether a program designed explicitly to improve economic outcomes can also affect support for political violence. The main component of the INVEST program is technical and vocational education and training (TVET), which includes three- and six-month courses for young men and women. Unconditional cash transfers were provided as an additional intervention—separate from the INVEST program and solely for the purposes of this research—to a random subsample of participants to test the effects of cash transfers on economic and violence outcomes, both in the short term and six to nine months after the intervention. Additionally, we tested why vocational training and cash transfers may affect support for political violence, beyond the economic reasons, by examining how the interventions affected psychosocial well-being and perceptions of the government in the short term.

In places such as Afghanistan, where there is little evidence of what works to reduce support for political violence, our results begin to point toward what may. Our research demonstrates that when vocational training is paired with the provision of cash, it can reduce young Afghans' willingness to support AOGs six to nine months post intervention. The results indicate that these impacts were not driven solely by economic factors, but also by participants' improved perceptions of their government. Therefore, this study provides strong evidence to support the argument that specific development interventions can indeed shift young people's attitudes toward violent groups and address the underlying causes of these attitudes.

Key Findings

The vocational training by itself had no impact on youth support for political violence, despite helping to improve economic outcomes six to nine months post intervention. Even after experiencing those improvements, youth still showed no change in support for political violence.

Participating in a TVET course improved several key indicators of economic activity, including the number of days youth worked and the amount of money they earned. These economic effects were observed six to nine months after the end of the program, but not immediately after participants' completion of the TVET course. Relying on indirect questioning techniques to delve into young people's attitudes and behaviors relating to political violence, we found that, contrary to the theory that economic improvements can reduce support for violence, vocational training had no impact on any of the violencerelated outcomes, neither in the short term nor six to nine months later.

While the lack of impact on political violence outcomes in the short term can be explained by the fact that economic improvements take time to materialize, the findings at six to nine months post intervention indicate that even when important economic outcomes improve, there is no evident effect on violence-related outcomes. These findings make a strong case against the often-presumed link between vocational training—with its resulting improvements to economic conditions—and political violence.

Cash transfers reduced willingness to support violent groups in the short term; however, these positive effects quickly dissipated.

Providing youth with one-time cash transfers equivalent to \$75 led them to be significantly less likely to support political violence in the short term. However, six to nine months later, the effect is reversed, with youth who only received the cash transfers registering slightly higher support for AOGs. Here again, the changes in economic conditions do not help explain the effect cash transfers have on recipients' attitudes toward violent groups. There were no effects on economic outcomes either in the short term or six to nine months later. The data on psychosocial well-being and perceptions of the government do not explain these findings either. Since recipients spent their money on basic needs, the cash transfer may have affected perceived opportunity costs such that having cash in the short term possibly reduced the lure of financial incentives from AOGs.

The combination of vocational training and cash transfers resulted in a large reduction in willingness to engage in pro-armed opposition group actions six to nine months post intervention.

The combination of cash transfers and TVET led to the largest reduction—17 percent—in willingness to support violent groups six to nine months after the end of the interventions. The economic outcomes alone do not fully explain these results. The addition of the unconditional cash to the TVET did not have any additional economic effects. But in the TVET-only condition, we do not see similar effects on violence outcomes. In examining other possible reasons why the combination of cash transfers and TVET reduces support for pro-AOG actions, we find that youth's perceptions of government responsiveness improve in the short term. While the reduction in support for political violence does not materialize until six to nine months later, taken as a whole, these findings indicate that the combination of cash and vocational training may help dampen support for political violence over the long term by signaling government's ability or willingness to address people's needs.

Conclusions and Recommendations

The findings indicate that specific development interventions are able to shift young people's attitudes related to violent groups and address the underlying causes of these attitudes. Vocational training combined with cash transfers led to a 17 percent decrease in participants' willingness to engage in pro-AOG actions six to nine months after the program ended. Cash transfers were able to increase youth support for the government in the short term, particularly in comparison to support for AOGs, though there are indications of a backlash effect six to nine months after the cash was dispersed. Vocational training alone had little effect on attitudes related to political violence.

The reasons why people changed their willingness to support armed opposition groups remain unclear—in particular, why the vocational training alone did not change attitudes related to political violence—but the combination of cash and vocational training did. One potential hypothesis is that youth who participated in both interventions used their cash to meet basic needs—such as food and housing—and thus were able to spend their time on activities that they learned from the training. Youth may have perceived the government made this opportunity possible, which could explain why youth who received a cash transfer paired with TVET exhibited more favorable perceptions of the government in the short term. Unfortunately, a limitation of our data is that we were able to test perceptions of government only in the short term and not at six to nine months, which would have given us increased confidence in this explanation.

Overall, the research suggests that multifaceted approaches, which concurrently address economic challenges and governance-related grievances, appear to be more effective in reducing the risk of political violence among youth than stand-alone interventions. The results provide important insights for improving development programming and policies aimed at addressing the reasons why young people support AOGs and similar politically motivated movements in conflict-affected contexts. The following recommendations emerge from our research:

Pair short-term and long-term interventions to reduce violence.

Providing young people with more discretionary money, in this case through cash transfers, may have given them a short-term financial boost that helped them realize the potential of the longer-term TVET intervention and thus reduced their support for political violence. In addition, the cash transfers, when combined with the provision of TVET, improved recipients' perceptions of the government, which they saw as being more responsive to their needs. If TVET participants gave credit to the government for the cash transfers they received, and saw that they were able to invest in themselves further as a result, this may explain why we see reduced willingness to support pro-AOG actions from the combined treatment.

Invest in multidimensional interventions to address multifaceted motivations for violence.

The INVEST program was specifically designed to improve the employability of youth in order to harness economic opportunities. Yet policymakers continue to rely on such interventions not only to improve employment outcomes but also to reduce participation and support for violence. An important consideration when designing programs to reduce political violence is the recognition that it is rarely one single motivation that drives people to participate in such groups. An individual's reasons for supporting a violent movement could be ideological, political, self-interested, and/or altruistic, such as the desire to protect one's community or identity group. Often, these motivations interact with one another and with people's identities to determine this support. Consequently, as this research confirms, interventions that focus on only one potential motivation for participating in violence are much less likely to be successful. Interventions to address violence therefore need to respond to multiple motivations, including those related to governance grievances and economic circumstances.

Make intentional use of cash based on awareness of the benefits and risks.

Our research showed that cash transfers—even in small amounts—can yield short-term benefits that can diminish young people's willingness to support violent groups. Initial evidence indicates that this may be because the cash enabled youth to meet immediate financial needs, thereby reducing the ability of AOGs to economically coerce youth to participate in or support violence. However, our finding on the uptick in cash recipients' supportive attitudes toward political violence six to nine months after the transfer serves as an important reminder that donors and governments should not only focus on shortterm solutions but also consider the longer-term ramifications. While further exploration of the impacts of different forms of cash transfers on violence is needed, policy and program decision makers should be aware of the potential for negative effects over the longer term when using small one-time cash transfers by themselves to further violencereduction goals.



Afghanistan—Toni Greaves for Mercy Corps

Introduction

Rationale

Donors and policymakers struggle to identify effective ways to support stability in fragile contexts. The States of Fragility 2016 report by the Organization for Economic Cooperation and Development (OECD) underscores that violence is a central characteristic of fragile states, and if violence is not addressed, these states will be unable to reach their development goals. Mercy Corps's decades of work in conflict-affected countries and a growing body of research indicate that to reduce the factors that contribute to fragility and instability and that lead people to engage in violence, development actors and host countries must tackle the structural factors related to governance, economic development, and social inclusion. However, a disproportionate amount of assistance to fragile, conflictaffected states continues to be allocated largely toward economic growth investments.

The question as to whether employment can contribute to stability—and how—became more prominent in the post-9/11 era. The *Economist* fretted about a growing mass of people who were "young, jobless, and looking for trouble" (2001). Numerous macroeconomic studies showing a correlation between youth bulges, unemployment rates, and civil war were published soon after, providing further support for the theory that if you give young people jobs, they won't become involved in violence (Urdal, 2004, 2006; Collier & Hoeffler, 2004). In response to these concerns, donors funded a range of economic development programs specifically for youth—education initiatives, microbusiness lending, and vocational training programs—with the aim of expanding economic opportunity to dampen the appeal of a range of violent groups, including militias, pirates, and terrorists (Brück, Ferguson, Izzi, & Stojetz, 2016).

Since 9/11, billions of dollars have been invested in economic development programs in conflict and post-conflict states, with the explicit, or often implicit, goal of reducing engagement in violence by providing youth with jobs or other economic opportunities (OECD, 2017). However, the evidence remains mixed—at best—as to whether these interventions are effective in reducing violence, even when they are effective in terms of their primary aim of improving economic outcomes (Blattman & Ralston, 2015; Brück, Ferguson, Izzi, & Stojetz, 2016). Some of the disparate results may be explained by the fact that not all types of violence are the same. For instance, one intervention that reduces a young person's involvement in crime (Blattman & Annan, 2015; Blattman, Jamison, & Sheridan, 2017) may not be as effective at reducing a young person's involvement in political violence. Another reason for the disparate results is a lack of research and understanding about why certain programs are effective in the first place. Many economic interventions directly target financial incentives for supporting or engaging in violence; however, these interventions may have additional effects on other factors such as grievances, confidence, or optimism, depending on the design and implementation.

In this study, we examine whether and how programs aimed at improving economic outcomes may also reduce support for and willingness to engage in political violence.1 Based on reports that many violent groups use financial incentives to recruit unemployed youth, some hypothesize that providing economic benefits from other sources—whether directly through cash transfers or indirectly through a training program that leads to improved employment and income—should reduce the recruitment appeal of armed opposition groups (AOGs) (Beazley, Morris, & Vitali, 2016). Alternatively, development programs may in essence help give the government more legitimacy when people see their government acting in ways that benefit them. Consequently, these programs may reduce participation in violence by increasing support for the government and/or reducing support for insurgent groups. Lastly, we examine whether these programs may reduce support for violence via psychosocial mechanisms, such as the promotion of optimism, confidence, and control over one's future (i.e., self-efficacy). People with higher levels of these psychosocial attributes may be less likely to engage in activities that would hamper their future prospects.

We test the above propositions through two interventions: a technical and vocational education and training (TVET) program and a one-time unconditional cash transfer (UCT), the latter of which Mercy Corps added to the INVEST program for research purposes in Kandahar, Afghanistan. This study extends previous research done in Helmand, where we conducted a quasi-experimental impact evaluation. We found that a vocational training program improved economic outcomes among youth; however, it did little to affect their attitudes or propensity to engage in violence (Mercy Corps, 2015). In that study, we did not compare the effects of vocational training and the resulting employment to the effects of providing cash. By including both interventions in this study, we can disentangle more rigorously whether—in the context of violence and insecurity in Kandahar—economic programs can reduce support for and willingness to participate in political violence through financial incentives or alternative mechanisms.

Policy Relevance

Research by Mercy Corps and others shows that economic issues, such as unemployment, do not exist in isolation as the underlying drivers of political violence. Rather, they are only one of the multiple factors that must be addressed to have an impact on violence and insecurity, including political accountability, the provision of basic services such as healthcare and education, social inclusion, and effective governance mechanisms. Yet policy responses continue to emphasize economic drivers.

Additionally, of the small number of rigorous impact evaluations conducted on youth economic conditions and violence, particularly randomized controlled trials, few focus on contexts in which curbing support for an insurgency is an active policy priority. This study contributes to the limited body of evidence on effective ways to mitigate political violence

¹ For the academic version of the paper, please see Lyall, Zhou, and Imai (2017).

by asking the question of whether and how vocational programs and cash transfers affect the propensity for violence and support for AOGs in Afghanistan.

The purpose of this research is to test the causal linkages between vocational programs, cash transfers, and violence outcomes with a focus on youth in Kandahar Province, Afghanistan. We also examine three mechanisms to see how the interventions may reduce willingness to support AOGs: economic conditions, psychosocial well-being, and perceptions of government. By understanding why and how these interventions may or may not be effective in reducing support for political violence, we aim to improve evidence-based investments in TVETs and other programs aimed at contributing to youth development and stability in Afghanistan, as well as in similar fragile states where donors invest development dollars to reduce violence and improve security.

Context of Kandahar, Afghanistan

The INVEST program for youth vocational education and training operates in Kandahar, the second largest city in Afghanistan and an important regional trading center. Kandahar's population has doubled in recent years due to the return of refugees and the influx of internally displaced persons (IDPs), largely the result of drought, conflicts, and unemployment (United Nations Development Programme Afghanistan, n.d.).

Afghanistan is affected by a confluence of factors relevant to this study—specifically a youth bulge, high unemployment, and violence. According to a July 2016 estimate, about 64 percent of the population in Afghanistan is younger than 24 years old, which is considerably higher than the percentages in the country's regional neighbors, including Pakistan (53 percent), Tajikistan (52 percent), Turkmenistan (45 percent), Uzbekistan (43 percent), and Iran (40 percent) (General Statistics Organization, Afghanistan, 2016). Education rates have improved since 2002 when only 13 percent of the male school-age population attended school and women and girls were almost completely excluded from educational opportunities (United States Agency for International Development, 2016; Cortright, 2011). Recent data show that the net enrollment rate for school-age children in Afghanistan is close to 60 percent, with a total of 9 million students enrolled, of which 40 percent are girls (USAID, 2016). However, only 34 percent of the population is literate (49 percent of men and 19 percent of women) (General Statistics Organization, Afghanistan, 2014).

Youth in Afghanistan have limited economic opportunities due to economic underdevelopment, which has been exacerbated by years of war and insecurity. Afghanistan's main employment sectors are agriculture (44 percent) and services (16 percent), which account for 24 percent and 55 percent of the gross domestic product, respectively (General Statistics Organization, Afghanistan, 2014). The economy, while never strong, is now in decline due to the drawdown of international security forces that started in 2014. Economic growth and employment are lower now because a substantial portion of commerce, especially in the services sector, caters to the ongoing international military presence in the country. Unemployment rates averaged 10.4 percent from 1981 to 2014, reaching a record low of 8 percent in 2013 and surging to an all-time high of

40 percent in 2015 following the withdrawal of international security forces (Trading Economics, 2017). Poverty rates have also increased, from 35.8 percent in 2011–12, to 39.1 percent in 2013-14 (Wieser, Ismail, & Silivia, 2017).

Many of the dynamics described above are relevant in Kandahar and further compounded by the troop withdrawal and the influx of refugees returning from Pakistan and IDPs from elsewhere in Afghanistan. All of which affect the local economy and place added strain on the limited employment opportunities for youth. The Kandahar provincial government estimates that 70 percent of its 2.3 million residents are youth.2 The economy is based largely on agriculture, and many people, particularly youth, are unemployed. In 2016, 26,000 people returned from Pakistan, placing greater burdens on government services, infrastructure, and the economy (International Organization for Migration, 2017). There are an additional 223,000 IDPs in Kandahar Province (Amnesty International, 2016).

With regard to violence, Afghanistan—particularly Kandahar—remains one of the most insecure places in the world. Though violence in the country subsided in 2004, it climbed steadily in the next decade, leading to more than 8,000 reported conflict-related deaths in 2014. Violence has since surged, to almost double that level, with more than 15,000 conflict-related deaths reported in 2016 (Uppsala Conflict Data Program, 2017). In 2017, there continued to be numerous high-profile terrorist attacks, raising fears of growing insecurity. Taliban control in Afghanistan has fluctuated over the past 14 years. The Taliban government collapsed after the American invasion and withdrew again after the temporary surge of American troops at the beginning of President Obama's administration. However, the Taliban have been reclaiming territory since 2013 (Almukhtar & Yourish, 2015). Though the government still controls Kandahar City and the neighboring districts of Dand, Daman, and Arghandab, where the INVEST program is implemented, the Taliban's influence remains strong.

Theories Examined

Various disciplines have explored the economic, social, political, and psychological reasons for engagement in violence. However, economic theories have dominated the responses in international development, assuming a rational actor theory (i.e., people weigh the costs and benefits of their actions) to explain why people support and engage in violence. In the limited scope of this study, we identify and test a select number of prominent theories on the relationship between economic outcomes and violence reduction, which underlie many development programs aimed at promoting stability. We explore these theories below.

Opportunity Costs

One theory about why people engage in conflict and violence is that their support is due to the financial incentives that armed groups provide to individuals. If the wages to fight are higher than what one could earn in regular employment, people are more susceptible to recruitment. For example, a recent news article describes how the Islamic State of

² Information provided by the Kandahar Provincial Directorate of the Ministry of Economy.

Iraq and Syria (ISIS) has recruited members in Afghanistan by paying them a salary of \$500 per month (Najafizada, 2017). Moreover, a large pool of unemployed people drives down labor costs, making it cheaper for various armed groups to recruit using financial incentives (Collier & Hoeffler, 2004). Most of the studies providing evidence in support of this theory are large-scale macroeconomic studies that show correlations between economic conditions and civil war (Collier & Hoeffler, 2004), and between youth bulges, unemployment, and civil war (Goldstone, 2010; Urdal, 2004, 2006; Urdal & Hoelscher, 2012).

The underlying assumption of this theory is that employment at a high enough wage will reduce people's likelihood of being recruited by AOGs. While there is some support for a connection at a micro level between employment and engagement in illicit activities (Blattman & Annan, 2015) or political violence (Humphreys & Weinstein, 2008), and for the notion that negative income shocks increase crime and conflict intensity (Beber & Blattman, 2013), other studies question the assumed link between youth joblessness and increased violence. For example, a cash transfer program targeting youth in Uganda increased economic assets but did little to reduce engagement in violence (Blattman, Fiala, & Martinez, 2013). In an analysis of 13 countries in sub-Saharan Africa, a correlation between unemployment and engagement in violence was only found in Liberia (Mercy Corps, 2015). Providing further evidence that financial motives may be overweighted in efforts to reduce support for and participation in violence, insurgents in Nepal and Sierra Leone were found to be more socially than financially motivated (Gilligan, Khadka, & Samii, 2017), and lower classes were less supportive of AOGs than were the middle classes in Pakistan (Blair, Fair, Malhotra, & Shapiro, 2013). Two recent systematic reviews conclude that there is little evidence that jobs reduce participation in violence (Blattman & Ralston, 2015; Brück, Ferguson, Izzi, & Stojetz, 2016).

However, jobs and economic opportunities provide more than wages. In many conflict and post-conflict societies, lack of employment may indicate a lack of government policies to improve labor markets and hiring practices. For example, while many argued that the Arab Spring was about youth unemployment, others argued that it was about the lack of government response to the problem of unfair and non-inclusive economic systems (Ianchovichina, Mottaghi, & Devarajan, 2015). Jobs, independent of wages, satisfy a desire for status (Mercy Corps, 2011) and have been associated with psychological well-being (Flint, Bartley, Shelton, & Sacker, 2013). Therefore, interventions to improve employment may reduce support for and participation in violence through other mechanisms besides improved wages, such as by addressing grievances and improving psychosocial well-being.

Psychosocial Well-being

Living under conditions of poverty and insecurity has numerous psychological effects. Poverty increases stress and depression, as people must worry about meeting basic needs (Lundberg & Wuermli, 2012; Mullainathan & Shafir, 2013). Similarly, exposure to violence, such as being a victim of violence and trauma, increases post-traumatic stress (Panter-

Brick, Eggerman, Gonzalez, & Safdar, 2009). Stress reduces impulse control and makes it more difficult to pay attention to new information (Vohs & Baumeister, 2016). The two interventions in Kandahar may help people manage the effects of this stress, including a sense of powerlessness and loss of control over one's life. TVET interventions may also help people see a positive path for their future, illustrated by greater ambition (Ibarran, Ripani, Taboada, Villa, & Garcia, 2014). Many TVET interventions include not only specific vocational skills—such as mechanics or tailoring—but also interpersonal or life skills to help manage the "softer" aspects of employment. Similarly, cash may immediately alleviate the stress and the subsequent psychosocial effects of poverty. Haushofer and Shapiro (2016) found that giving Kenyans UCTs not only benefited people economically but also improved their psychological well-being, including factors such as happiness, life satisfaction, and optimism.

Few studies have tested whether interventions that address the psychosocial impacts of poverty and violence in turn reduce engagement in violence. Recently, Blattman, Jamison, and Sheridan (2017) found that the combination of cognitive behavioral therapy—which included life skills—and cash reduced the likelihood that male street youth in Monrovia would return to their previous criminal behaviors. Whether similar interventions might reduce participation in other types of violence, such as political violence, remains unclear.

Perceptions of Government

Another potential strategy for reducing support for and participation in violence is providing development aid to address people's concerns, and by doing so increasing their support for their government over AOGs. In many ways, this strategy is related to addressing people's grievances regarding the government's absence in these areas, and this concept is at the center of the "hearts and minds" approach. The evidence of the effectiveness of interventions that aim to shore up citizens' support for governments in (post) conflict contexts and the subsequent effects on reducing support for or engagement in violence remains limited, at best, particularly in Afghanistan (Special Inspector General for Afghanistan Reconstruction, 2016).

A recent systematic review examined a range of development programs, including community-driven development, reconstruction, conditional cash transfers, employment, and humanitarian aid, and their effects on violence (Zürcher, in press). Except for employment programs, which consistently were associated with decreased political violence in India, and humanitarian aid programs, which increased political violence consistently, all other interventions had mixed results. The author concludes that these programs tend to be most successful in areas that are relatively secure, and these interventions may be most effective in preventing conflict from erupting rather than decreasing it where it already exists. Additional research in Iraq demonstrates that small rather than large infrastructure projects tend to reduce violence, and the authors speculate that smaller projects allow for more local input (Berman, Shapiro, & Felter, 2011). None of these studies disaggregate whether it is the provision of services or how the services

are provided (e.g., transparent, participatory) that affects overall—positive or negative—support for violence or stability. Recent studies show that even when service provision improves, perceptions of government may not (Blair, Karim, & Morse, 2017; Blattman, Green, Ortega, & Tobon, 2017; Kadt & Lieberman, 2017). However, when people are given the ability to provide feedback on services, their opinions of the government improve, even if actual service does not (Nixon & Mallett, 2017). Additionally, there is little research currently as to whether providing services, such as formal education and job training, rather than building infrastructure, is more effective at increasing government support and therefore stability. Further, none of these studies analyze violence outcomes, leaving open questions on the links between perceptions of government and actual violence.

INVEST in Kandahar

INVEST is a youth vocational training program that trains young men and women—including local residents, returnees, and IDPs—in a range of vocational skills in and around Kandahar City and the three neighboring districts of Dand, Daman, and Arghandab. The program's primary goals are to help vulnerable youth develop skills that are responsive to local labor market needs and to support them with economic opportunities through three- and six-month technical training courses. It is important to note that the INVEST program's original theory of change did not aim to reduce violence; rather, it was designed purely as a youth skills training and employment program. However, given Mercy Corps's interest in understanding how economic interventions may contribute to broader stability goals in the region by targeting an area that has traditionally been susceptible to AOG influence, the program provided a unique opportunity to determine whether improved economic conditions could decrease individuals' support for political violence.

The main component of the INVEST program is TVET. For the purpose of this study, an additional component—UCT—was offered to a random subsample of participants. The cash transfers were not a part of the INVEST program and were delivered independently as part of the research. Each aspect of the program is described in detail below.

Technical and Vocational Education and Training

TVET instructs young men and women in a range of vocational skills that are responsive to local labor market needs through three- and six-month technical training courses, with the intention of improving their employability. The 14 courses (see Table 1) offered at the vocational training centers (VTCs) build practical skills and link participants to various career choices, including tailoring, embroidery, mobile phone repair, English tutoring, motorcycle repair, and other employment or self-employment ventures. The courses are developed and chosen by Mercy Corps based on a market assessment to ensure that the skills being taught are responsive to local market needs. Assessments are conducted at regular intervals, and the courses are updated regularly to reflect changing labor market demands.

 TABLE 1: List of Courses Offered to Participants in the TVET Intervention

>	Sewing/Tailoring	>	Construction Services	>	Metal Works
>	Embroidery	>	Mobile Repair)	Computer Services
>	Petrol Engine Repair	>	Plumbing Services)	Motorcycle Repair
>	Handicrafts	>	English Tutoring)	Electrical Water
>	Calligraphy	>	Wiring Services		Pump Repair

Source: Mercy Corps Afghanistan.

Note: TVET = technical and vocational education and training.

In addition, those involved in the TVET program are given the opportunity to participate in Ready to Earn Clubs (RECs). The RECs aim to provide business skills, basic financial management skills, and other transferable skills to complement the technical skills provided by the TVET intervention. There were five components to the REC: technical design workshops, business development training, transferrable skills curricula, gender-based violence/human rights discussions, and guest speaker sessions featuring key market actors. The transferable skills curricula train youth in life and soft skills such as effective communication, time management, decision making, leadership, and negotiation.

Unconditional Cash Transfers

A second intervention, which was implemented independent of the INVEST program but was included for the purpose of this study, was the provision of a one-time UCT. Cash transfers were chosen to improve immediate economic outcomes and disentangle the economic effects of the TVET from other benefits derived from the TVET. The UCTs, funded by Yale University's Political Violence FieldLab, were distributed to randomly selected research participants—both those currently enrolled and those on the waiting list—near the end of the vocational training course. The cash transfers were distributed through M-PAISA (the mobile cash transfer platform of Roshan, a telecommunications provider in Afghanistan). All research participants were provided with a free SIM card from Roshan and informed that if they registered for M-PAISA and participated in a training session by Roshan, they would be entered into a random lottery through which they might receive a one-time cash transfer. The cash transfers were \$75 each, approximating four months of wages for an unskilled worker in Afghanistan and larger than the annual IDP allowance of \$60 provided by the Office of the United Nations High Commissioner for Refugees and the Afghan Ministry of Refugees and Repatriations (Amnesty International, 2016). UCTs were randomly assigned across two different categories: participants who did not receive TVET and participants who received TVET. Cash transfers to the selected participants were completed in April 2016, prior to the endline survey.3

³ In addition to the cash transfer, all participants were given \$5 as an incentive to participate in the midline and endline surveys. This amount is sufficient to cover local travel costs to come to the VTCs for most participants.



Afghanistan—Toni Greaves for Mercy Corps

Research Design

Research Question

Does improving young people's economic conditions reduce their willingness to support political violence and armed opposition groups?

Hypotheses

HYPOTHESIS 1: TVET and/or UCTs will reduce youth propensity for violence and support for AOGs, through improvements in economic outcomes.

HYPOTHESIS 2: TVET and/or UCTs will reduce youth propensity for violence and support for AOGs, through improved psychosocial well-being.

HYPOTHESIS 3: TVET and/or UCTs will reduce youth propensity for violence and support for AOGs, through improved perceptions of government functioning and responsiveness.

Theory of Change

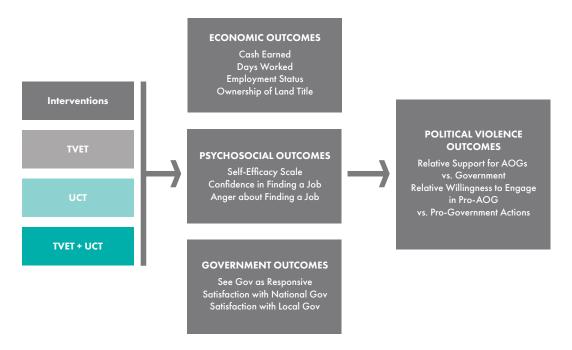
The primary goal of this research is to test the causal linkages between people's improved economic outcomes and their support for political violence in Kandahar Province, Afghanistan. The INVEST intervention (TVET) was strategically designed to improve the economic outcomes of youth in the region. The UCT was designed to improve immediate economic outcomes, but it was unclear how it might improve longer-term outcomes, as this would depend on how people used the cash transfer. It is true that participation in a program like INVEST may reduce one's probability of supporting or engaging in violence through unknown or unobserved social or behavioral pathways. However, the economic outcomes may affect one's propensity for violence in one of two ways: either (1) improved livelihood options and optimism reduce key grievances, as well as provide economic resources, in the working-age population (TVET), and/or (2) the ability to provide for one's immediate financial needs reduces the ability of AOGs to economically coerce youth to participate in violence (UCT). Figure 1 illustrates the pathways tested that may connect TVET and UCT interventions with political violence outcomes.

Outcomes

Intermediate Outcomes

In this research, economic outcomes are explored as the primary mechanism linking the interventions to political violence outcomes, as the goal of the program is to improve the economic conditions of participants. The analysis considers two key indicators—cash earned and number of days worked in the past four weeks—to identify changes in participants' economic conditions. Other economic indicators, such as employment

FIGURE 1: Theory of Change Framework



Source: Authors.

Note: AOG = armed opposition group; TVET = technical and vocational education and training; UCT = unconditional cash transfer.

and ownership of land titles, are also considered but are treated as secondary economic outcomes in the analysis, given the vast number of external factors that may also affect these indicators beyond the interventions.

In addition to economic outcomes, we also tested two alternative explanations of possible program effects on political violence outcomes: psychosocial well-being and perceptions of government. Psychosocial well-being is measured through the Generalilized Self-Efficacy Scale (Schwarzer & Jerusalem, 1995). While self-efficacy is only one dimension of psychosocial status, previous research has shown that it is a strong predictor of psychosocial well-being (Roos et al., 2013). In addition, two secondary outcomes, related to anger about not finding a job and confidence in finding a job, are also considered as measures of psychosocial well-being.

Perceptions of government were measured by the following three indicators: (1) the perceived effectiveness of the national government across various services (e.g., employment, security, education, healthcare, fighting corruption); (2) the perceived effectiveness of the local government across those same services; and (3) the perceived responsiveness of the national and local government to people's needs.

Full descriptions of how each of these outcomes is defined and constructed are included in the Appendix.

Political Violence Outcomes

The primary outcomes of interest in this study are support for and willingness to engage in political violence, measured through the indicators described below. We define political

violence as violence primarily targeted at the state. In Afghanistan, this is meant to describe violence perpetrated by AOGs, such as the Taliban. Therefore, ideological support for and willingness to undertake actions to aid AOGs are defined, in this study, as forms of political violence.

We recognize that correlations between attitudes toward violence and actual violent actions are often weak. However, as an individual's engagement in violence, particularly political violence, is a rare event even in Afghanistan, it is difficult to gain a reliable measure of participation in violence. Our best approximation of engagement in political violence is therefore obtained by asking people about their willingness to engage in behaviors in support of the government or AOGs. We do this through indirect survey methods, as discussed below.

Given the sensitive nature of the behaviors and attitudes asked about on the survey (e.g., violence and support for AOGs), social desirability bias presented a concern. To avoid this problem, the analysis employs two methods of indirectly assessing people's attitudes and behaviors: an endorsement experiment and a random response experiment.

Endorsement Experiment

The first indirect method we used to assess people's attitudes was an endorsement experiment. In this type of experiment, survey respondents are asked about how much they endorse a hypothetical policy. Half the survey respondents are asked about the policy with no indication given of who is advocating for it; the other half are told that an actor of interest—typically of a sensitive nature—is said to endorse the policy. The difference in rates of endorsement for the policy is interpreted as evidence of the level of support (or lack thereof) for the actor of interest (Blair, Imai, & Lyall, 2014).

For this study, the analysis compares differences in the degree to which survey respondents endorsed a policy seen as being supported by the government of Afghanistan (control), compared to when it was said to be endorsed by AOGs (treatment). Respondents were asked about four hypothetical policies (on issues related to prisons, election fraud, anticorruption, and government jobs for former fighters), and these responses were pooled.4

Random Response Experiment

The second indirect method we used was a random response experiment. This approach asks respondents to use a randomized device (in our case, a spinner) whose outcome is unobserved by the enumerator. By introducing random noise, the method conceals individual responses, consequently protecting respondents' privacy and thus making them more likely to report their true beliefs or actions on sensitive issues (Blair, Imai, & Zhou, 2015). Survey respondents were asked about supporting the government of Afghanistan and AOGs in the form of the following actions: paying taxes to the government / donating to AOGs, sending a pro-government or pro-AOG SMS, providing information to the government / AOGs, enlisting in the Afghan army, reporting corruption, and sheltering AOG members.

⁴ These questions were adapted from Lyall, Blair, and Imai (2013).



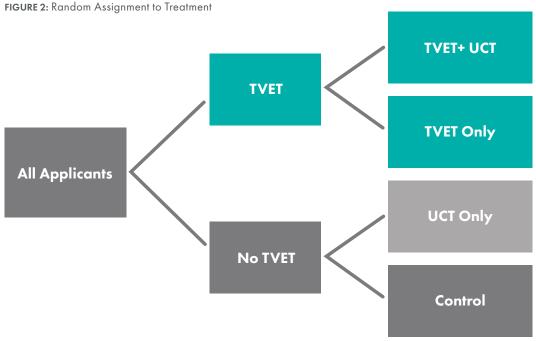
Afghanistan—Toni Greaves for Mercy Corps

Methodology

Treatment Assignment: Factorial Design

This evaluation is based on a factorial design to test the effects on political violence of the interventions and their combination. The three treatment conditions and control condition were (1) TVET, (2) a one-time UCT, (3) TVET with a one-time UCT, and (4) control (no intervention). A factorial design such as this allows the comparison of more than one intervention without reduced loss of power relative to multiple-arm trials (Grimshaw, Campbell, Eccles, & Steen, 2000).

The Yale Political Violence FieldLab worked with the wireless provider Roshan to register all study participants with Roshan SIM cards. Participants in a random subsample were then each sent a one-time UCT worth \$75 via Roshan. However, the UCT was rerandomized, as only 1,165 participants with the Roshan SIM card could be matched with participants in the study. When receiving the cash transfer, recipients were told it was from a foreign donor.



Note: TVET = technical and vocational education and training; UCT = unconditional cash transfer.

This note has been taken directly from the pre-analysis plan of the impact evaluation of INVEST in Kandahar, Afghanistan (Imai, Lyall, & Zhou, 2016). After the registration process, in which more than 2,000 people were registered, many unique IDs were lost and only 1,165 participants registered with the Roshan SIM card could be matched with the participants in the study. Given the reduction in sample size, the UCT treatment was re-randomized for only this subset of participants with the Roshan SIM card.

Figure 2 shows how the treatment interventions were assigned. Note that because of the rerandomization, there is a group of people from the initial pool that had to be dropped from the analyses. For a more detailed description of treatment assignment, see the Appendix.

We used a "waiting list" approach for the randomization, so that all applicants eventually received the TVET. Using the program eligibility criteria, village councils (*shuras*) and Mercy Corps staff identified 3,000 youth to participate in the TVET program in mid-2015, twice as many as there are spaces per semester. One half of the eligible youth were randomly assigned to enter the program immediately (Cohort 1); the other half were invited to participate the following year (Cohort 2) after being wait-listed to serve as the control group (see Figure 3). The TVET intervention was implemented in a series of three- and sixmonth vocational training courses between November 2015 and April 2016.

Oct 2015 May 2016 Nov 2016 **Baseline Endline Post Program** Cohort 1 Job TVET/UCT Seeking Treatment (T) Cohort 2 **Waiting for** Job TVET/UCT Control (C) Seeking **Program** R1 \mathbb{R}^2 \mathbb{R}^3

FIGURE 3: Research Timeline

Source: Authors.

Note: TVET = technical and vocational education and training; UCT = unconditional cash transfer.

Random assignment into the treatment arms was blocked based on VTC location, gender, and course duration. Participants were additionally matched on employment, displacement, and exposure to violence.⁶

Data Collection

Three rounds of longitudinal data were collected: baseline in October 2015, endline in April–May 2016 upon participants' completion of the TVET courses (six-month courses ended in May 2016), and a post-program survey in October–November 2016—

⁶ Refer to the Appendix for a full description of the sampling strategy.

approximately six to nine months after course completion. Every participant in the baseline study was contacted again for an interview at both endline and post-program. By using the same observations, we were able to leverage more powerful analysis tools on the panel data and the original random assignment. Data collection took place at four VTCs-Mirwais Mina (all male), Sufi Sahib (all male), Mahmood Tarzai (all female), and Aino Mina (mixed gender)—before the start of the three-month and six-month TVET courses. Both six- and three-month courses began in November 2015, with the threemonth courses ending in February 2016 and the six-month courses ending in May 2016. The endline survey was conducted in April-May 2016, after the conclusion of the TVET courses but before the members of the wait-listed control group began their courses. UCTs were distributed to randomly selected youth in April-May 2016, two weeks prior to the end of the TVET intervention for the six-month cohort and three months and two weeks after the conclusion of the three-month cohort, both for participants in the TVET and for those who only received the cash transfer. The final round of data collection (post-program survey) was in November 2016 to enable analysis of any effects of the interventions six to nine months later.

During data collection, the enumerators identified themselves as working with researchers from Mercy Corps, and the surveys were conducted on tablets using Open Data Kit (ODK), a suite of open-source tools that help manage mobile data. In December 2016, the data from all three rounds of the survey were merged to create a final post-program survey sample of 1,590 participants for analysis (see Table 2).

TABLE 2: Sample Size and Compliance of Participants

	TVET treatment		TVET control		Totals	
	size (n)	compliance (%)	size (n)	compliance (%)	size (n)	compliance (%)
UCT treatment	313	35.5	273	59.7	586	59.4
UCT control	312	60.9	270	99.6	582	100
Others	673	47.5	756	98.3	1429	100
Totals	1298	54.5	1299	98.7	2597	69.2

Source: Lvall, Zhou, and Imai, 2017.

Balance across Treatment Groups

Balance tests were conducted on both the treatment and control groups to identify any statistically significant differences for a range of baseline characteristics (see Appendix). The results showed that treatment and control groups, for both TVET and UCT, were balanced as we would have expected from a properly conducted randomization

Estimation Strategy

An intention-to-treat (ITT) non-parametric analysis is used to estimate the impacts of each intervention arm on the outcomes of interest at endline and post program. The model estimates the marginal ITT effect of the TVET and UCT, estimating the average difference in means in the block randomization groups between participants who were assigned to an intervention and participants in the re-randomized control group for all outcomes of interest. For the interaction effect, it is the average of when UCT is paired with TVET and when it is not.

(1)
$$Y_i = \beta_1 treat_assign - \beta_2 treat_control$$

Where *treat_assign* is an abbreviation for the expanded treatment assignments β_1 TVET+ β_2 UCT++ β_3 TVET*UCT.

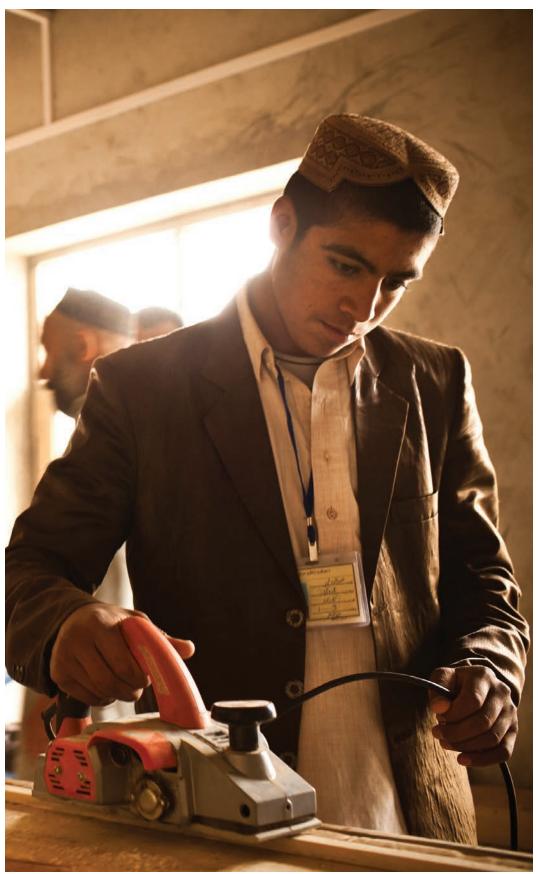
For additional details on the estimation strategy, see Lyall, Zhou, and Imai (2017).

Limitations

Despite our best attempts to design a rigorous impact evaluation, this study nonetheless suffers from the following limitations:

1) Missing Data: Due to the length of the survey, which posed some difficulties during the first and second rounds of data collection, some survey modules were removed for the post-program survey. Namely, measurements of self-efficacy, government responsiveness, and satisfaction with the government were not included in the post-program survey and thus these data cannot be analyzed for the six- to nine-month period following the end of the interventions. Additionally, our self-efficacy scale only included four out of the ten questions, raising concerns about the robustness of the measure. Since we did not use the full validated self-efficacy scale, it is difficult to make definitive conclusions on the program's impacts on this key psychosocial outcome.

- 2) Generalizability: As with all impact evaluations, this study is limited in its ability to generalize beyond the population that participated in it: youth from Kandahar. Although Kandahar presents a context in which youth recruitment into AOGs, such as the Taliban, is an ongoing problem, the findings might differ in other contexts in which groups with different objectives recruit youth who may participate in violence due to other motivations. Additionally, the macroeconomic conditions, specifically the withdrawal of US forces and the resulting impact on labor markets, may limit the generalizability of these findings to other contexts. Though we cannot say definitively that the findings from this research will apply in other contexts, when the results are presented together with research and evaluation findings from different contexts we can begin to develop more generalizable conclusions about the causal relationships examined in our study.
- 3) **Attrition:** A significant challenge for the study was the rate of attrition from both treatment and control groups through the three phases of data collection. Given the highly mobile nature of youth in Kandahar, including many youth who were displaced and temporarily living in the area, it is not surprising to see high rates of attrition. We intentionally sampled a large number of youth—more than 2,000—at baseline, with the assumption that high attrition would be likely at endline and post program. We further analyzed attrition rates to determine whether they led to imbalances in key demographic and outcome variables across groups. There were differences on a number of variables, such as whether or not the person was a student, personal assets, and being married. This was corrected through multiple imputation. For details on their analyses and these corrections, see Lyall, Zhou, and Imai (2017).



Afghanistan—Toni Greaves for Mercy Corps

Results

In this section, we summarize the findings of the data analysis examining the impact of the two interventions (TVET and UCTs) and their combination on the outcomes of interest. We also present results on the hypotheses outlined above, linking the interventions to these outcomes. The full results for all the outcomes examined are presented below, followed by our analysis of the hypotheses we tested linking the interventions to political violence outcomes. We also analyzed the data by gender and found that most of the results relating to the political violence outcomes are driven by male participants. For further details on the gender findings, please see the Appendix.

As described above, the notion that economic development interventions can reduce support for political violence by improving employment and other economic conditions for vulnerable youth is a common assumption in policy and practice. Taken as a whole, our results shed light on the nature of this proposed relationship and point to other possible reasons that may explain why and how economic interventions—in our case, in the form of TVET programming and cash transfers—may reduce support for AOGs, thereby improving stability.

Impacts of Vocational Training

Vocational training by itself had no impact on participants' support for political violence, despite helping to improve economic outcomes six to nine months post intervention.

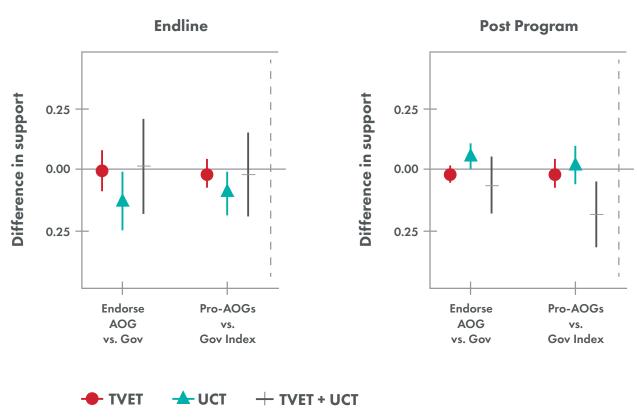
Relying on the survey experiments (endorsement and random response), the analysis first examined the extent to which participation in the TVET-only treatment impacted supportive attitudes for AOGs versus the government, as well as willingness to engage in actions that aid one or the other. The first indicator in both graphs in Figure 4 reflects the findings for the endorsement experiment, indicated with the label "Endorse AOG vs. Gov." As described above, the analysis compares the difference in the degree to which survey respondents endorsed a policy seen as being supported by the government of Afghanistan (control) compared to being endorsed by the AOGs (treatment). The second indicator in the graphs in Figure 4 represents the combined results of the random response questions. These findings are summarized in the variable labeled "Pro-AOGs vs. Pro-Gov Index."

At both the endline (immediately after the end of the program) and the post-program survey (six to nine months after the end of the program), a null effect of the TVET was observed, indicating no impact on violence outcomes (see Figure 4).⁷ In examining how participation in the TVET program affected the primary economic outcomes—cash earned

⁷ For the coefficients for all analyses related to the figures, please see the Appendix.

and days worked—we again find no effects at endline. This may be because there was insufficient time between the end of the training course and the endline survey (which took place immediately after the courses ended) for the participants to put their new skills to use to improve their economic conditions. However, when youth who received TVET were surveyed six to nine months after the end of the courses, both cash earned and number of days worked increased compared to the control group (see Figures 5 and 6). While the magnitudes of these changes were modest, they are practically significant when put into the context of the low baseline levels of economic activity among the targeted youth. For example, by six to nine months post program, the TVET course led to an additional 1.3 days of work per month compared to the control group—starting from an average at baseline of less than 10 days total of work per month—a more than ten percent increase. Similarly, as a result of participating in the TVET, youth were five percent more likely to have earned income from any source in the past month compared to the control group. These gains are notable given the challenging employment environment in Kandahar. These results indicate that overall, the TVET program led to several positive economic outcomes for participants six to nine months post intervention, despite the known limitation of TVET addressing only the employability of participants.

FIGURE 4: Differences in Relative Support for AOGs versus Government



Confidence intervals are at 95%. **Source:** Lyall, Zhou, and Imai, 2017. **Note:** AOG = armed opposition group.

While the vocational training's lack of impact on violence outcomes at endline may be explained by the fact that economic improvements had not yet materialized, the post-program findings suggest that even when indicators of economic activity—cash earned and days worked—improve, there is no effect on violence-related outcomes. These null findings relating to violence are consistent across both the indirect survey experiments, making a strong case that a link between vocational training, the resulting increase in economic outcomes, and political violence may not exist.

We hypothesized that the TVET would improve people's psychosocial well-being and perceptions of government, which could partially explain the relationship between the TVET and political violence beyond economic explanations. If there was no relationship between the TVET and these variables, this could explain why we see no overall effect of the TVET on political violence outcomes.

The results from our data analysis partially explain why there is no direct relationship between the TVET and political violence outcomes. The vocational training had limited impacts on psychosocial factors. The TVET decreased participants' anger about their ability to find a good job post program, but did not affect self-efficacy.

Perceptions of the responsiveness and effectiveness of the local and national government did not change at endline for TVET participants (see Figure 8). This was surprising given that the TVET program was implemented in government facilities and supported by the government. Participants completing the TVET do not appear to credit the government with making available or delivering the courses. Taken together, the limited effects of the TVET on psychosocial well-being and the null effects on perceptions of government may explain why the TVET alone does little to reduce willingness to support AOGs.

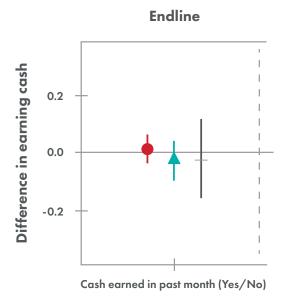
Impacts of Unconditional Cash Transfers

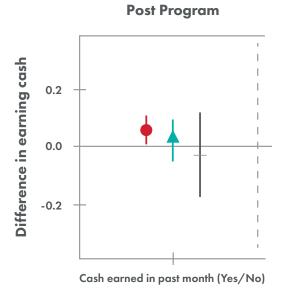
Cash transfers reduced willingness to support violent groups in the short term; however, these positive effects quickly dissipated.

While the effects of TVET on violence have been more widely studied, the degree to which a one-time UCT might influence attitudes and behaviors related to violence is less understood. Our experiment found that UCTs delivered by themselves reduced recipients' support for political violence and AOGs in the short term. Specifically, at the endline, UCT-only recipients demonstrated a 13-percentage-point decrease in relative support for AOGs in the endorsement experiment and a ten-percentage-point decrease in willingness to undertake pro-AOG actions in the random response experiment.

The question is: why did the UCTs have this effect? One possible explanation is that people used the cash to invest in economic activities. This explanation seems unlikely based on our analysis. At endline, which was approximately two weeks after receiving the UCT, cash had no effect on indicators of economic welfare—namely, number of days worked

FIGURE 5: Differences in Cash Earned

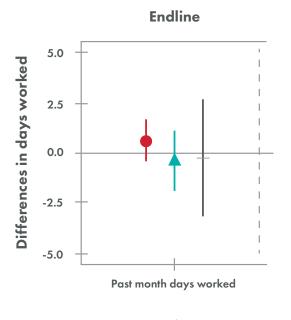


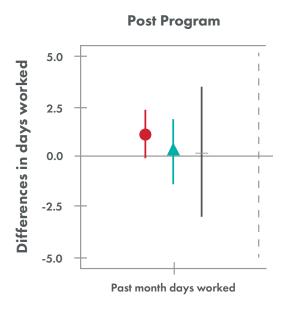


Confidence Intervals are at 95%. **Source:** Lyall, Zhou, & Imai (2017).

Note: TVET = technical and vocational education and training; UCT = unconditional cash transfer.

FIGURE 6: Differences in Days Worked





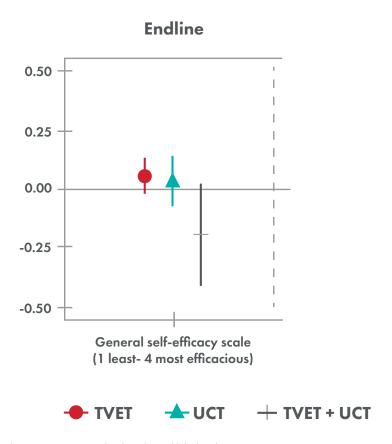
28

lacktriangle TVET lacktriangle UCT + TVET + UCT

Confidence Intervals are at 95%. **Source:** Lyall, Zhou, & Imai (2017). **Note:** TVET = technical and vocational education and training; UCT = unconditional cash transfer.

and cash earned from livelihood activities compared to the control group. Additionally, in our qualitative data, participants reported using the UCT on consumables rather than investing it in economic activities, suggesting that much daily work may be motivated by meeting basic needs.

FIGURE 7: Self-Efficacy



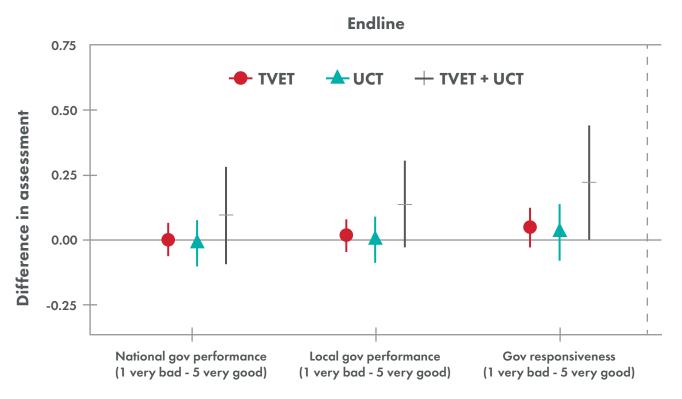
Confidence Intervals are at 95%. **Source:** Zhou (2017). Unpublished analyses **Note:** TVET = technical and vocational education and training; UCT = unconditional cash transfer.

Alternative explanations of the effect of the UCT on violence outcomes are the psychological impact that receiving such a gift may have on the recipient, and the potential for recipients to credit the government for making the cash transfer possible. However, we find no effect of the UCT on either the psychosocial outcomes or perceptions of government effectiveness and responsiveness, which may explain why cash reduced support for AOGs in the short term.

Six to nine months after the end of the program, the effects of UCTs on violence-related outcomes dissipate. Post program, UCT recipients are no more or less likely than non-recipients to express willingness to engage in pro-government or pro-AOG actions. Surprisingly, UCT recipients are slightly more likely (4.5-percentage-point increase) to support AOGs post program, according to the endorsement experiment. This might be

because UCT recipients feel let down when the benefits of the one-time cash disbursement dissipate and blame the government, which they might perceive to have been behind the cash transfer.





Confidence Intervals are at 95%. **Source:** Zhou (2017). Unpublished analyses **Note:** TVET = technical and vocational education and training; UCT = unconditional cash transfer.

When we examine the economic effects of the UCTs six to nine months post intervention, the results indicate again that economic factors are not the main conduits for influencing violence outcomes. Had economic factors been the mechanism linking UCTs to a spike in pro-AOG support during the post-program survey, we would have expected economic outcomes to decline as well. Yet this is not the case. Six to nine months after the end of the program, we continue to see no impact of the UCT on economic outcomes.

Due to the lack of data on self-efficacy and perceptions of government at six to nine months post program, it is not possible to test whether the UCT affected those variables six to nine months after the cash was received. We do not find effects related to confidence about finding a job or anger over the job search process post program. Thus, we are limited in the conclusions we can draw about the links between longer-term improvements in psychosocial well-being and perceptions of government outcomes and changes in the support for political violence resulting from a one-time cash transfer.

Impacts of TVET plus UCTs

The combination of vocational training and cash transfers resulted in a large reduction in willingness to engage in pro-AOG actions over six to nine months post intervention.

Although TVET participation on its own does not affect violence outcomes, UCTs appears to have a short-term positive effect. Does the combination of the two interventions affect support for and participation in violence differently than each intervention on its own? Receiving the combination of TVET and UCTs has no effect on attitudes and behaviors related to violence in the short term. However, six to nine months after the end of the program, we find that the combination of TVET and UCT yields the largest reduction in willingness to engage in pro-AOG actions—a 17-percentage-point decrease—amplifying and extending the immediate effects of UCTs by themselves. Since development approaches aim to produce lasting effects, the results indicate that the combination of TVET and UCTs seems to be a promising approach to reduce attitudes of support for political violence.

To understand what may be driving this positive outcome, we assess the extent to which economic outcomes are behind the effect—that is, if the two interventions yield larger economic benefits combined as compared to individually. Recall that TVET had no economic impact at endline and modest positive impacts post program, while UCTs had no effect on economic outcomes in the short term or six to nine months later, compared to the control group. When the two interventions are combined, overall, there are no additional effects of the UCT beyond those brought about by the TVET alone on the main economic indicators at either endline or post program (see Figures 5 and 6). Thus, since post-program economic outcomes do not improve in tandem with reductions in violence outcomes, little support is provided for the hypothesis that the economic impacts are driving young people's willingness to support AOGs in Kandahar.

The alternative explanations we explored, including improved perceptions of government and psychosocial well-being, also do not fully explain the effect on violence outcomes observed when TVET and UCTs are combined. At endline, receiving the UCT in addition to being a participant in the TVET led to a decrease in self-efficacy, which ran contrary to what we expected. However, the combined treatment led to an improvement in participants' perceptions of government responsiveness. If perceptions of government responsiveness were driving changes in violence outcomes, we would expect to see a reduction in support for political violence at the endline for participants who received both TVET and UCTs, which we do not. One possible explanation is that changes to support for political violence lag behind changes to perceptions of government. Once again, because we do not have government perception measures at six to nine months post program, we are unable to assess whether improved views of government responsiveness persists after the end of the intervention, which would explain the post-program reduction in support for AOGs for those in the combined treatment.



Afghanistan—Toni Greaves for Mercy Corps

Discussion & Conclusion

The above findings indicate that specific development interventions are able to shift attitudes related to violence outcomes. UCTs were able to increase support for the government compared to AOGs immediately after the intervention, though there are indications of a backlash effect months after the cash was dispersed. Additionally, combining UCTs and TVET led to a decrease in participants engaging in pro-AOG actions six to nine months post intervention.

The economic benefits of the INVEST program do not clearly explain the results. The TVET intervention was successful in terms of the primary economic outcomes of days worked and cash earned six to nine months after the intervention, demonstrating that it helped participants become more economically productive; however, it did not contribute to changing attitudes related to political violence. Additionally, with the UCT, we saw no effect on the economic outcomes at the same point that we saw increased support for the government compared to AOGs; therefore, economic outcomes do not explain that attitude shift. The UCT also had no effect on perceptions of the government and psychosocial well-being immediately after the intervention, providing no support that cash is affecting attitudes towards political violence through those mechanisms.

The picture is less clear in the combined condition of UCT and TVET. For participants who received both these interventions, receiving cash did not have additional effects on economic outcomes beyond what the TVET provided either immediately after the intervention or six to nine months later. Participants' perceptions of government responsiveness improved immediately after receiving the combined intervention, but we do not see the corresponding change in attitudes related to political violence until later. Unfortunately, we do not know whether improvement in perceptions of government responsiveness at six to nine months can help explain the large reduction in willingness to engage in pro-AOG actions post program.

The reasons why people changed their attitudes toward supporting AOGs remain unclear. Specifically, why did the vocational training alone, which improved economic outcomes, not change attitudes relating to political violence, but the combination of cash and vocational training did? One potential hypothesis is that since the TVET program was in government-sponsored schools, the cash may have been seen as a gift from the government or made possible by the government, which could explain why youth who received cash in addition to the TVET exhibited more favorable perceptions of the government in the short term. For example, in both Bangladesh and the Democratic Republic of Congo, citizens credited their local government for foreign aid directed to their communities (Dietrich, Mahmud, & Winters, forthcoming; Winters, Dietrich, & Mahmud, 2017; van der Windt, Humphreys, Timmons, & Voors, 2017). Consequently, participants in the combined treatment may have perceived the government as beginning to address their economic grievances through both the short-term cash transfers and the longer-term vocational training. In contrast, the UCT alone may have worked more through changing recipients'

opportunity costs—such that having the cash in the short term possibly reduced the lure of financial incentives from AOGs. Additionally, since the UCT recipients were not in the government-sponsored TVET schools, they may not have attributed the cash to the government. Future research should better identify these mechanisms to explain why this combination of TVET and UCT appears to reduce support for political violence after six to nine months, but UCT alone only has short-term effects on political violence outcomes.

Though representing very different contexts, the results presented here in many ways parallel what Blattman et al. (2017) find in Liberia, where the combined treatment of cognitive behavioral therapy and UCTs reduced participants' likelihood of returning to their previous criminal behaviors. One possible explanation the authors give for these results is that the cash allowed the youth to provide for themselves in the short term and delayed the need to engage in illicit activities for survival. During this period of time, they were able to more fully adopt the new behaviors they learned through the therapy, such as self-control.

Unlike the participants in the Liberia case, the recipients of vocational training and cash transfers in our study were not selected based on previous criminal or violent behavior. Additionally, that study was carried out in a post-conflict setting, not in the midst of conflict. However, perhaps the combination of TVET and UCT in Kandahar worked in a similar way by helping participants spend time further developing the skills they gained through vocational training into longer-term livelihood activities, since they had cash in hand to meet their basic needs. Our qualitative data support this notion, indicating that the youth spent the cash largely on consumable goods. If participants gave credit to the government for the cash, and saw that they were able to invest their time on activities that would help them in the future, this might explain why we see reduced willingness to engage in pro-AOG actions.

Future research needs to explore why short-term cash appears to boost the violence-reducing effects of longer-term interventions such as cognitive behavioral therapy and vocational training. Another open question for further research is whether providing larger and/or multiple cash transfers over time—as is more typical of interventions aimed at bringing about economic benefits—would produce different political violence outcomes over the longer term. Cash can be used as a safety net or as a means for promoting economic gains. In this case, we hypothesized that cash would reduce the attractiveness of the financial incentives used by AOGs, since youth would have cash to address immediate basic needs (i.e., a safety net). In this study, those in the UCT condition received approximately \$75, which is less than the amount distributed in other studies on cash transfers that have shown positive economic benefits (Blattman, Faye, Karlan, Niehus, & Udry, 2017). Consequently, it is not surprising that no economic effects were seen from the UCTs six to nine months post intervention. However, to test whether cash could improve economic outcomes as a way of reducing support for political violence, the amount and disbursement pattern of the cash would likely need to change.

What the above research does illustrate is that combined approaches—not solely one type of intervention or another—appear to be more effective at reducing the risk of political violence among youth. Because young people support AOGs for multiple reasons, it may be that to promote longer-term changes in attitudes related to violence, interventions need to be multidimensional to address the economic- and governance-related motivations for violence. Moreover, the ways these various motivations work may differ depending on the type of violence—whether motivated by political, inter-ethnic, criminal, or interpersonal reasons. This research examined one type of violence, political violence, which is largely ideological. Therefore, care should be taken in extrapolating the findings from our research to other types of violence.

Recommendations

Our results point to a number of opportunities for improving development programming and policies aimed at addressing political violence among youth:

Pair short-term and long-term interventions to reduce violence.

Providing young people with more discretionary money, in this case through UCTs, may have given them a short-term financial boost that helped them realize the potential of the longer-term TVET intervention and thus reduced their support for political violence. In this case, recipients of cash used it mostly on consumable goods, such as food and rent. In addition, the combination of TVET and UCT improved recipients' perceptions of the government, which they saw as being more responsive to their needs. If TVET participants gave credit to the government for the cash they received, and saw that they were able to further invest in themselves as a result, this may explain why we see reduced willingness to support pro-AOG actions from the combined treatment.

Invest in multidimensional interventions to address multifaceted motivations for violence.

The INVEST program was specifically designed to improve employability in order to lead to better economic outcomes. Yet policymakers continue to rely on such interventions not only to improve economic outcomes but also to reduce participation in and support for violence. An important consideration when designing programs to reduce political violence is that people do not participate in these groups due to a single motivation. There are often ideological reasons, political reasons, self-interested reasons, and even altruistic reasons, such as a desire to protect one's group, for why people support violent groups. Often, these motivations interact with one another and people's identities to determine this support. Consequently, as this research confirms, interventions that focus on only one potential motivation for participating in violence are much less likely to be successful. Interventions to address violence need to respond to multiple motivations—including those related to governance grievances and economic circumstances. While multi-sectoral approaches are more expensive than single-sector approaches, the United Nations and

World Bank (2017) report Pathways for Peace demonstrates that investing in these types of programs would save the international community \$5 billion per year.

Make intentional use of cash based on awareness of the benefits and risks.

Our research shows that cash transfers—even in small amounts—can yield short-term benefits that can diminish young people's willingness to support violent groups and causes. These findings mirror those of the World Bank (2011), showing that targeted cash (for work) programs for youth can serve as quick wins for stabilizing (potentially) violent situations—such as during tense pre-election periods. However, our finding that cash recipients' supportive attitudes toward political violence increase six to nine months after the transfer serves as an important caution. Future research needs to explore why short-term cash appears to boost the violence-reducing effects of longer-term interventions such as vocational training. Another open question is whether providing larger and/or multiple cash transfers over time—as is more typical of interventions aimed at bringing about economic benefits—would produce different violence outcomes over the longer term. While further exploration of the impacts of different forms of cash transfers on violence is needed, policy and program decision makers should be aware of the potential negative effects of using small one-time cash transfers by themselves to further violence-reduction goals over the longer term.

In places such as Afghanistan, where there is little evidence of what works to reduce support for political violence, our results begin to point toward what may. Our research demonstrates that vocational training, when paired with provision of cash, can reduce young Afghans' willingness to support AOGs. The results indicate that these impacts are driven not solely by economic factors, but also by changes to participants' improved perceptions of their government. Thus, our findings challenge the narrative that improving economic conditions through job training, by itself, is an effective solution to reducing violence. Our findings and recommendations shed new light for development practitioners and policymakers on the efficacy of various aid instruments—whether cash and/or employment programs—in reducing young people's support for political violence.

References

Almukhtar, S., & Yourish, K. (2015, September 29). More Than 14 Years After U.S. Invasion, the Taliban Control Large Parts of Afghanistan. *The New York Times*. Retrieved from https://www.nytimes.com/interactive/2015/09/29/world/asia/afghanistan-taliban-maps.html

Amnesty International (2016). *My Children Will Die This Winter: Afghanistan's Broken Promise to the Displaced*. Washington DC: Amnesty International.

Beazley, R., Morris, R. & Vitali, A. (2016). *Designing Public Works Programs and Cash Transfers to Promote Growth and Mitigate Violence*. Oxford, UK: Oxford Policy Management.

Beber, B., & Blattman, C. (2013). The Logic of Child Soldiering and Coercion. *International Organization 67*, 65-104. doi:10.1017/s0020818312000409

Berman, E., Shapiro, J. N., & Felter, J. H. (2011) Can Hearts and Minds Be Bought? The Economics of Counterinsurgency in Iraq. *Journal of Political Economy*, 119(4), 766-819.

Blair, G., Fair, C., Malhotra, N., & Shapiro, J. (2015). Poverty and support for militant politics: Evidence from Pakistan. *American Journal of Political Science*, *57*(1), 30–48.

Blair, G., Imai, K. & Lyall, J. (2014). Comparing and Combining Endorsement and List Experiments: Evidence from Afghanistan. *American Journal of Political Science* 58(4), 1043-1063.

Blair, G., Imai, K., & Zhou, Y. (2015). Design and analysis of the random response technique. *Journal of the American Statistical Association*, *110*(511), 1304-1319.

Blair, R., Karim, S. & Morse, B. (2017). Building Trust in the Reformed Security Sector: Evidence from a Field Experiment with the Liberian National Police. London, UK: International Growth Centre.

Blattman, C., & Annan, J. (2015). Can employment reduce lawlessness and rebellion? A field experiment with high-risk men in a fragile state. *American Political Science Review,* 110(1), 1–17.

Blattman, C., Faye, M., Karlan, D., Niehus, P., & Urdy, C. (2017). Cash as capital. *Stanford Social Innovation Review* (Summer), 57–58. Retrieved from https://ssir.org/articles/entry/cash_as_capital?utm_source=Enews&utm_medium=Email&utm_campaign=SSIR_Now&utm_content=Title

Blattman, C., Fiala, N., & Martinez, S. (2013). *The economic and social returns to cash transfers: Evidence from a Ugandan aid program.* New York, NY: Columbia University.

Blattman, C., Green, D., Ortega, D., & Tobon, S. (2017). *Pushing crime around the corner: Experimental impacts of large-scale security interventions*. Retrieved from SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3050823

Blattman, C., Jamison, J., & Sheridan, M. (2017). Reducing crime and violence: Experimental evidence from cognitive behavioral therapy in Liberia. *American Economic Review, 107*(4), 1165–1206.

Blattman, C., & Ralston, L. (2015). Generating employment in poor and fragile states: Evidence from labor market and entrepreneurship programs. Retrieved from SSRN: https://ssrn.com/abstract=2622220

Brück, T., Ferguson, N., Izzi, V., & Stojetz, W. (2016). *Jobs aid peace*. Berlin, Germany: International Security and Development Center.

Collier, P., & Hoeffler, A. (2004). Greed and grievance in civil war. *Oxford Economic Papers*, *56*(4), 563–595.

Cortright, D. (2011). Ending Obama's war: Responsible military withdrawal from Afghanistan. Boulder, CO: Paradigm Publishers.

Dietrich, S., Mahmud, M., & Winters, M. (in press). Foreign aid, foreign policy, and domestic government legitimacy: Experimental evidence from Bangladesh. *Journal of Politics*.

Flint, E., Bartley, M., Shelton, N., & Sacker, A. (2013). Do labour market status transitions predict changes in psychological well-being? *Journal of Epidemiology and Community Health*, 67, 796–802. doi:10.1136/jech-2013-202425

General Statistics Office, Afghanistan (2014). http://cso.gov.af/en/page/1500/4722/2014-2015

Gilligan, M., Khadka, P., & Samii, C. (2017, May 11–12). *Social incentives in state and non-state armed groups*. Paper presented at Empirical Studies of Conflict, Washington, DC.

Goldstone, **J.** (2010). The new population bomb: The four megatrends that will change the world. *Foreign Affairs*, 89(1), 31–43.

Grimshaw, J., Campbell, M., Eccles, M., & Steen, N. (2000). Experimental and quasi-experimental designs for evaluating guideline implementation strategies. *Family Practice*, *17*, S11–S16. doi:10.1093/fampra/17.suppl_1. s11

Haushofer, J., & Shapiro, J. (2016). The short-term impact of unconditional cash transfers on the poor: Experimental evidence from Kenya. Retrieved from https://www.princeton.edu/~joha/publications/Haushofer_Shapiro_UCT_2016.04.25.pdf

Humphreys, M., & Weinstein, J. M. (2008). Who fights? The determinants of participation in civil war. *American Journal of Political Science*, *52*(2), 436–455.

Ianchovichina, E., Mottaghi, L., & Devarajan S. (2015, October). *Middle East and North Africa economic monitor: Inequality, uprisings, and conflict in the Arab world.* Washington, DC: World Bank. doi:10.1596/978-1-4648-0735-0

Ibarran, P., Ripani, L., Taboada, B., Villa, J. M., & Garcia, B. (2014). Life skills, employability and job training for disadvantaged youth: Evidence from a randomized evaluation design. *IZA Journal of Labor and Development, 3*(1), 1–24.

Imai, K., Lyall, J., & Zhou, Y. (2016). *Pre-analysis plan of impact evaluation of INVEST in Kandahar, Afghanistan*. Princeton, NJ, and New Haven, CT: Princeton University and Yale University.

International Organization Migration (January 2017). Weekly Situation Report.

Kadt, D., & Lieberman, E. (2017). Nuanced accountability: Voter responses to service delivery in southern Africa. British Journal of Political Science, pp. 1-31; doi:10.1017/S0007123417000345.

Lyall, J., Zhou, Y., & Imai, K. (2017). Reducing insurgent support among at-risk populations: Experimental evidence from cash transfers and livelihood training in Afghanistan. SSRN: https://ssrn.com/abstract=3026531 or http://dx.doi.org/10.2139/ssrn.3026531

Lundberg, M., & Wuermli, A. (2012). *Children and youth in crisis: Protecting and promoting human development in times of economic shocks.* Washington, DC: World Bank.

Lyall, J., Blair, G., & Imai, K. (2013). Explaining support for combatants in wartime: A survey experiment in Afghanistan. *American Political Science Review, 107*(4), 679-705.

Mercy Corps. (2011). Understanding political violence among youth: Evidence from Kenya on the links between youth economic independence, social integration and stability. Portland, OR: Mercy Corps.

Mercy Corps. (2015, February 17). Does youth employment build stability? Evidence from an impact evaluation of vocational training in Helmland, Afghanistan. Retrieved from https://www.mercycorps.org/research-resources/does-youth-employment-build-stability

Mullainathan, S., & Shafir, E. (2013). Scarcity: Why having too little means so much. New York, NY: Holt.

Najafizada, E. (August 12, 2017). ISIS taps Afghanistan's unemployed for recruits. Arkansas Democrat-Gazette. http://www.arkansasonline.com/news/2017/aug/12/isis-tapsafghanistan-s-unemployed-for-/?f=news

Nixon, H., & Mallett, R. (2017). Service delivery, public perceptions and state legitimacy: Findings from the Secure Livelihoods Research Consortium. London, UK: Secure Livelihoods Research Consortium.

Organization for Economic Cooperation and Development. (2017). Aid statistics by donor, recipient and sector. Retrieved from https://public.tableau.com/views/ OECDDACAidataglancebyrecipient new/Recipients?:embed=y&:display count=yes&:show Tabs=y&:toolbar=no?&:showVizHome=no

Panter-Brick, C., Eggerman, M., Gonzalez, S., & Sarah, S. (2009). Violence, suffering and mental health in Afghanistan: A school-based survey. The Lancet, 774(9692), 807-816.

Roos, S., Potgieter, J., & Temane, M. (2013). Self-efficacy, collective efficacy and the psychological well-being of groups in transition. Journal of Psychology in Africa, 23(4), 561-567.

Schwarzer, R., & Jerusalem, M. (1995). Generalized self-efficacy scale. In J. Weinman, S. Wright, & M. Johnston (Eds.), Measures in health psychology: A user's portfolio. (pp. 35-37). Windsor, UK: NFER-NELSON.

Special Inspector General for Afghanistan Reconstruction. (2016). Lessons from the coalition: International experiences from the Afghanistan coalition. Arlington, VA: Special Inspector General for Afghanistan Reconstruction.

Trading Economics. (2017). Afghanistan unemployment rate 1991–2017. Retrieved February 2, 2017, from http://www.tradingeconomics.com/afghanistan/unemployment-rate

United Nations & World Bank. (2017). Pathways for peace: Inclusive approaches to preventing violent conflict. Washington, DC: World Bank. Retrieved from https:// openknowledge.worldbank.org/handle/10986/28337

United Nations Development Programme Afghanistan. (n.d.). About Afghanistan. Retrieved May 25, 2017, from http://www.af.undp.org/content/afghanistan/en/home/ countryinfo.html

Uppsala Conflict Data Program. (2017). http://ucdp.uu.se/

United States Agency for International Development. (2016, July). Afghanistan: Education. Retrieved May 24, 2017, from https://www.usaid.gov/afghanistan/education **Urdal, H.** (2004). The devil in the demographics: The effect of youth bulges on domestic armed conflict, 1950-2000 (Social Development Papers: Conflict Prevention and Reconstruction, No. 14). Washington, DC: World Bank.

Urdal, H. (2006). A Clash of generations? Youth bulges and political violence. International Studies Quarterly, 50(3), 607-630.

Urdal, H., & Hoelscher, K. (2012). Explaining urban social disorder and violence: An empirical study of event data from Asian and sub-Saharan African cities. International Interactions, 38(4), 512-528. doi:10.1080/03050629.2012.697427

van der Windt, P., Humphreys, M., Timmons, J., & Voors, M. (2017). Does foreign aid undermine traditional authority? Evidence from a randomized aid program in the Congo. Manuscript submitted for publication.

Vohs, K., & Baumeister, R. (2016). Handbook of self-regulation (3rd ed.). New York, NY: Guilford Press.

West, S. G., Duan, N., Pequegnat, W., Gaist, P., Des Jarlais, D. C., Holtgrave, D., Szapocznik, J., Fishbein, M., Rapkin, B., Clatts, M., & Mullen, P. (2008). Alternatives to the randomized controlled trial. American Journal of Public Health, 98(8), 1359–1366. doi:10.2105/AJPH.2007.124446

Wieser, C., Rahimi, I., & Redaelli, S. (2017). Afghanistan poverty status update: progress at risk. Washington, D.C.: World Bank Group. http://documents.worldbank.org/curated/ en/667181493794491292/Afghanistan-poverty-status-update-progress-at-risk

Winters, M., Dietrich, S., & Mahmud, M. (2017). Aiding the virtuous circle? International development assistance and citizen confidence in government in Bangladesh. Research and Politics, 4(4), 1–6. https://doi.org/10.1177/2053168017735200

World Bank. (2011). World development report 2011: Conflict, security, and development. Retrieved from https://openknowledge.worldbank.org/handle/10986/4389

Young, jobless and looking for trouble. (2011, February 3). The Economist. Retrieved from http://www.economist.com/blogs/schumpeter/2011/02/youth_unemployment

Zürcher, C. (in press). What do we (not) know about development aid and violence? A systematic review. World Development.

Appendix

Sample Block Randomization Overview	43
Detailed Random Assignment to Treatment	44
Primary Outcomes Dissagregated by Gender	45
Variable Construction	59

Sampling Block Randomization Overview

The following sampling note is adapted from the impact evaluation of INVEST in Kandahar, Afghanistan (Imai, Lyall, & Zhou, 2016).

Random assignment into the three interventions was based on block randomization. First, we blocked on the vocational training center (VTC) location. There were four INVEST training centers in this study: Mirwais Mina (all male), Sufi Sahib (all male), Mahmood Tarzai (all female), and Aino Mina (mixed gender). Participants were not randomly assigned to these centers but rather registered at the center most convenient for them.

Second, we blocked on three-month versus six-month courses, since participants chose whether they wanted to take a three-month or six-month course. Within these two course types, participants also expressed preference for a specific course. While the majority were placed in the specific course of their expressed preference after treatment assignment, some participants might not have been due to limited space. Third, since Aino Mina has both male and female participants, we blocked on gender for this VTC. Thus, we have 10 unique blocks, which we account for when calculating standard errors.

Within each of these ten blocks, we additionally matched on three factors known to affect the outcomes of interest: (1) employment status—employed, self-employed, or unemployed; (2) displacement—whether refugee, returnee, IDP, or native resident of Kandahar; and (3) exposure to violence in the past year by armed opposition groups, Afghan security forces, or the International Security Assistance Force. The Mercy Corps enrollment form was used to obtain information on these and other participant characteristics. Participants were not informed of their INVEST program treatment status until after they had completed the baseline survey; thus, there was no selection or bias in the baseline based on treatment status.

Detailed Random Assignment to Treatment

Study Timeline

10/23/15

Enrollment, blocked randomization into TVET

10/30/15 - 11/13/15Baseline survey

11/14/15 - 2/15/16

TVET 3 month courses

11/14/15 - 5/14/16

TVET 6 month courses

2/15/16

SIM card signup, blocked randomization for UCT

4/22/16

UCT transfer

4/27/16 - 5/14/16

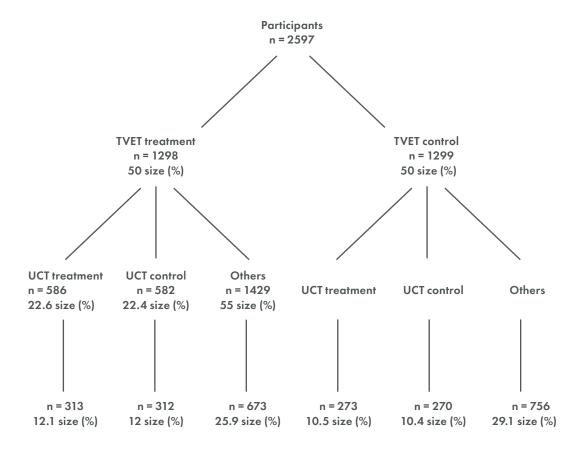
Endline 1 survey

5/15/16

TVET control courses

11/10/16 - 12/05/16

Endline 2 survey



Factorial research design and study timeline. Participants (n = 2597) are first block randomized into TVET skills training treatment or control. Then, for those participants who registered for SIM cards and are therefore eligible for UCT (n = 1168), participants were block randomized into UCT treatment or control. The sample size and proportion for each group are shown.

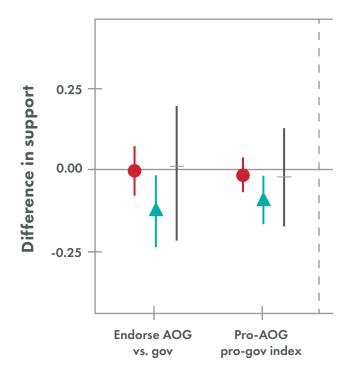
Source: Lyall, Zhou, & Imai (2017).

Primary Outcomes Disaggregated by Gender

Violence Outcomes

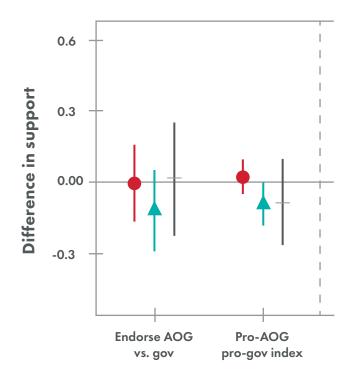
ENDLINE: All





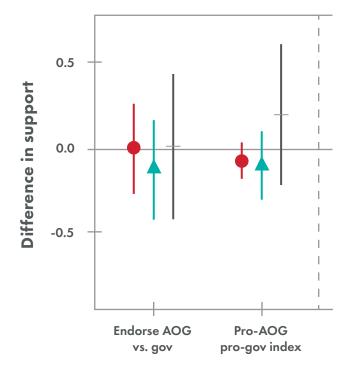
	Endorse	Pro-AOG vs. Pro-Gov
TVET	-0.0050 (0.0404)	-0.0166 (0.0288)
UCT	-0.1278** (0.0590)	-0.0960** (0.0410)
TVET + UCT	0.0119 (0.0962)	-0.0204 (0.0836)

ENDLINE: Men



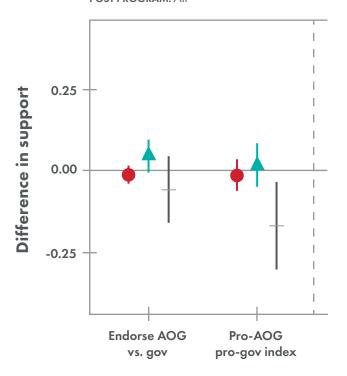
	Endorse	Pro-AOG vs. Pro-Gov
TVET	-0.0013 (0.0805)	0.0209 (0.0332)
UCT	-0.1144 (0.0844)	-0.0917** (0.0441)
TVET + UCT	0.0164 (0.1199)	-0.0794 (0.0892)

ENDLINE: Women



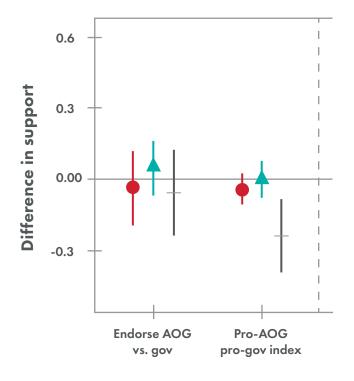
	Endorse	Pro-AOG vs. Pro-Gov
TVET	-0.0063 (0.1352)	-0.0830 (0.0538)
UCT	-0.1318 (0.1484)	-0.1103 (0.0998)
TVET + UCT	0.0056 (0.2186)	0.1946 (0.2125)

POST PROGRAM: All



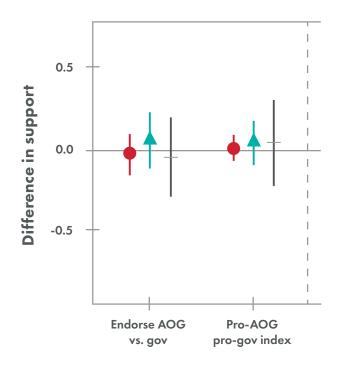
	Endorse	Pro-AOG vs. Pro-Gov
TVET	-0.0141 (0.0132)	-0.0150 (0.0238)
UCT	0.0452* (0.0250)	0.015 <i>7</i> (0.0334)
TVET + UCT	-0.0571 (0.0512)	-0.1669** (0.0672)

POST PROGRAM: Men



	Endorse	Pro-AOG vs. Pro-Gov
TVET	-0.0296 (0.0769)	-0.0331 (0.0304)
UCT	0.0546 (0.0563)	0.0057 (0.0382)
TVET + UCT	-0.0487 (0.0900)	-0.2311 * * * (0.0770)

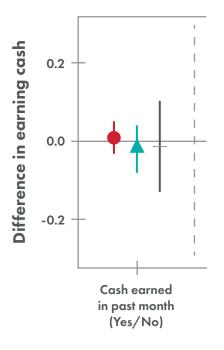
POST PROGRAM: Women

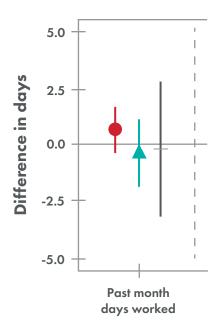


	Endorse	Pro-AOG vs. Pro-Gov
TVET	-0.0219 (0.0628)	0.0170 (0.0382)
UCT	0.0624 (0.0864)	0.0493 (0.0685)
TVET + UCT	-0.0408 (0.1230)	0.0487 (0.1369)

Economic Outcomes

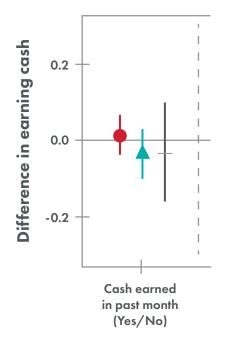
ENDLINE: All

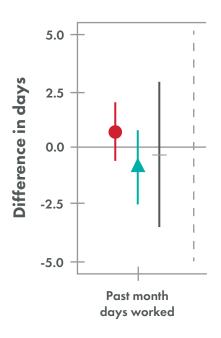




	Cash Earned	Days Worked
TVET	0.0095 (0.0206)	0.6064 (0.5085)
UCT	-0.0229 (0.0299)	-0.4177 (0.7392)
TVET + UCT	-0.0195 (0.0601)	-0.2411 (1.4876)

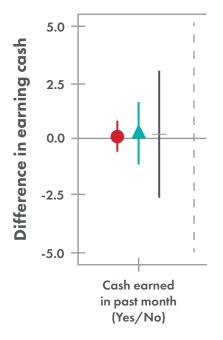
ENDLINE: Men

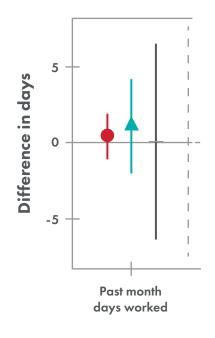




	Cash Earned	Days Worked
TVET	0.0115 (0.0260)	0.6638 (0.6341)
UCT	-0.0355 (0.0327)	-0.9095 (0.8054)
TVET + UCT	-0.0308 (0.0658)	-0.3352 (1.6000)

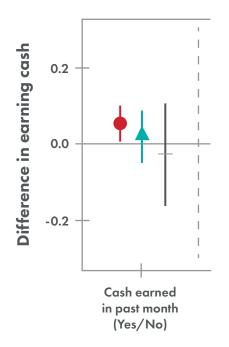
ENDLINE: Women

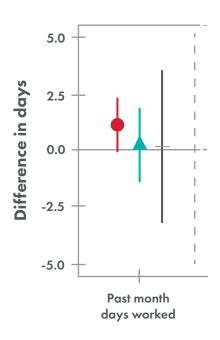




	Cash Earned	Days Worked
TVET	0.0061 (0.0336)	0.5050 (0.8512)
UCT	0.0195 (0.0701)	1.2340 (1.7503)
TVET + UCT	0.0185 (0.1406)	0.1018 (3.7059)

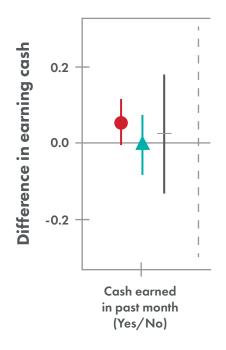
POST PROGRAM: All

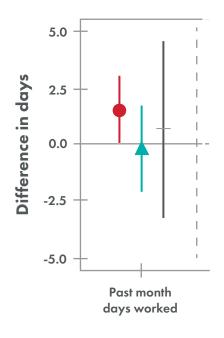




	Cash Earned	Days Worked
TVET	0.0527** (0.0231)	1.1301 * (0.5834)
UCT	0.0194 (0.0336)	0.2290 (0.8358)
TVET + UCT	-0.0282 (0.0676)	0.1641 (1.6910)

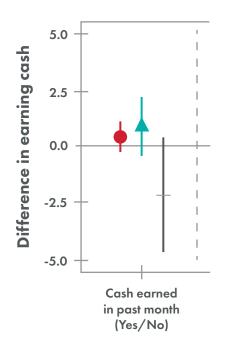
POST PROGRAM: Men

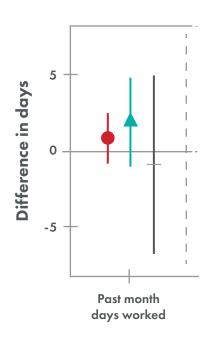




	Cash Earned	Days Worked
TVET	0.0587* (0.0306)	1.4618** (0.7446)
UCT	-0.0011 (0.0392)	-0.2390 (0.9625)
TVET + UCT	0.0273 (0.0790)	0.6523 (1.9493)

POST PROGRAM: Women

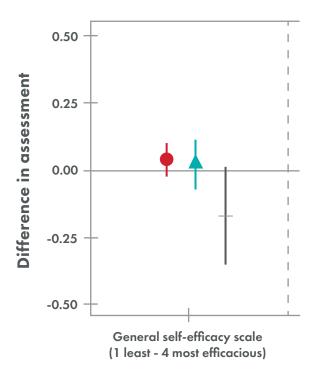




	Cash Earned	Days Worked	
TVET	0.0422 (0.0341)	0.5440 (0.9352)	
UCT	0.0879 (0.0636)	1.8007 (1.6793)	
TVET UCT	-0.2146* (0.1283)	-1.4754 (3.3856)	

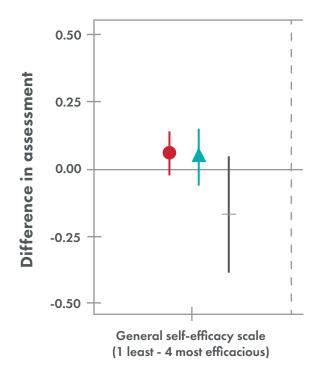
Psychosocial Outcomes - Self-efficacy

ENDLINE: All



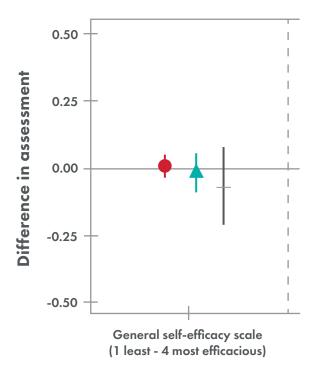
	Self-Efficacy Scale		
TVET	0.0462 (0.0315)		
UCT	0.0253 (0.0461)		
TVET + UCT	-0.1649* (0.0931)		

ENDLINE: Men



	Self-Efficacy Scale
TVET	0.0583 (0.0409)
UCT	0.0422 (0.0538)
TVET + UCT	-0.1668 (0.1089)

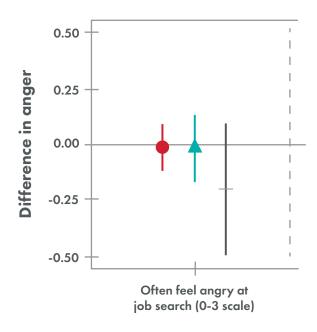
ENDLINE: Women



	Self-Efficacy Scale		
TVET	0.0247 (0.0486)		
UCT	-0.0317 (0.0882)		
TVET + UCT	-0.1588 (0.1763)		

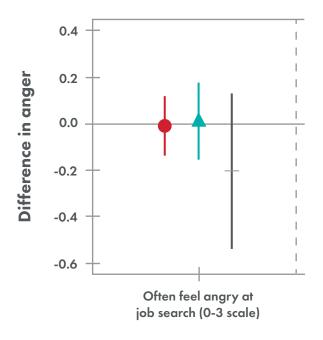
Psychosocial Outcomes - Angry about Job Search

ENDLINE: All



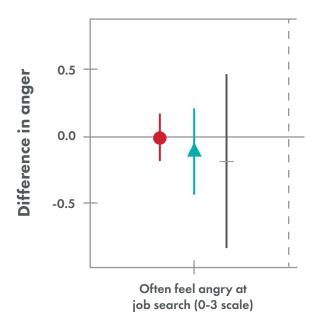
	Angry about Job Search	
TVET	-0.0105 (0.0520)	
UCT	-0.0166 (0.0739)	
TVET + UCT	-0.1995 (0.1498)	

ENDLINE: Men



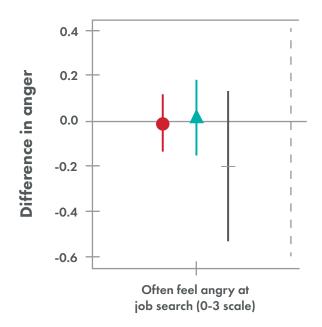
	Angry about Job Search
TVET	-0.0111 (0.0641)
UCT	0.0119 (0.0836)
TVET + UCT	-0.2036 (0.1682)

ENDLINE: Women



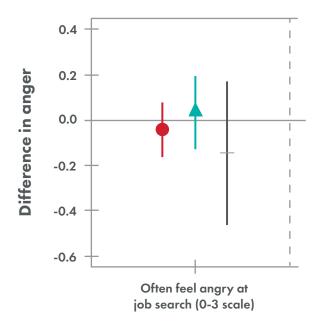
	Angry about Job Search
TVET	-0.0095 (0.0888)
UCT	-0.1121 (0.1582)
TVET + UCT	-0.1860 (0.3270)

POST PROGRAM: All



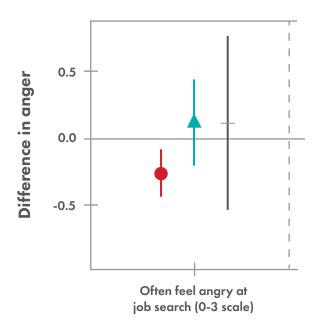
	Angry about Job Search
TVET	0.0247 (0.0486)
UCT	-0.0317 (0.0882)
TVET + UCT	-0.1588 (0.1763)

POST PROGRAM: Men



	Angry about Job Search	
TVET	0.0247 (0.0486)	
UCT	-0.0317 (0.0882)	
TVET + UCT	-0.1588 (0.1763)	

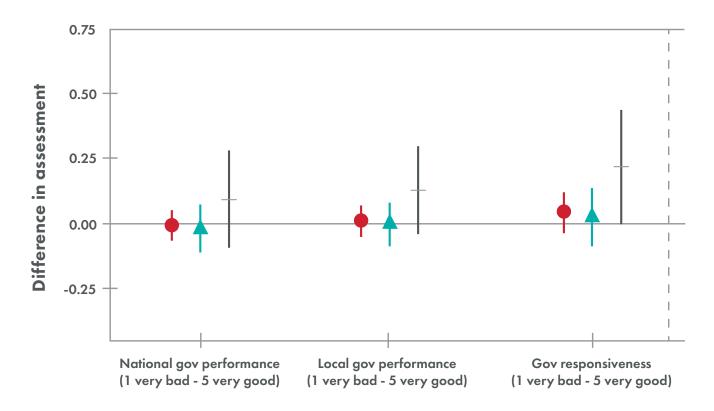
POST PROGRAM: Women



	Angry about Job Search		
TVET	-0.2546*** (0.0802)		
UCT	0.11 <i>7</i> 3 (0.1507)		
TVET + UCT	0.1078 (0.2988)		

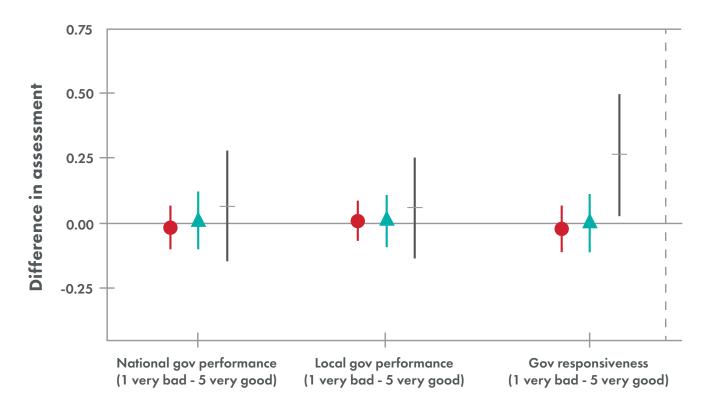
Governance Outcomes

ENDLINE: All



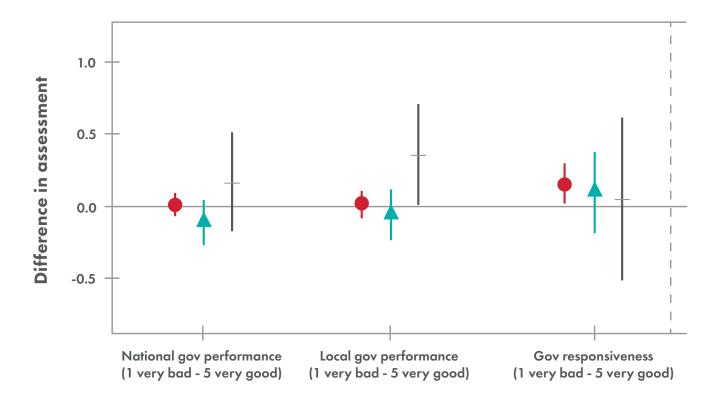
	National gov performance	Local gov performance	Local gov performance
TVET	-0.0044	0.0122	0.0448
	(0.0300)	(0.0293)	(0.0387)
UCT	-0.0156	-0.0029	0.0258
	(0.0456)	(0.0425)	(0.0557)
TVET	0.0937	0.131 <i>7</i>	0.2182*
+ UCT	(0.0931)	(0.0860)	(0.1122)

ENDLINE: Men



	National gov	Local gov	Local gov
	performance	performance	performance
TVET	-0.0138	0.0118	-0.0167
	(0.0426)	(0.03 <i>77</i>)	(0.0454)
UCT	0.0140	0.0145	0.0044
	(0.0544)	(0.0488)	(0.0588)
TVET	0.0714	0.0641	0.2696**
+ UCT	(0.1089)	(0.0981)	(0.1178)

ENDLINE: Women



	National gov	Local gov	Local gov
	performance	performance	performance
TVET	-0.0122	0.0129	0.1534**
	(0.0354)	(0.0465)	(0.0707)
UCT	-0.1148	-0.0611	0.0976
	(0.0781)	(0.0868)	(0.1416)
TVET	0.1688	0.3585**	0.0452
+ UCT	(0.1 <i>7</i> 55)	(0.1788)	(0.2872)

Variable Construction

Variable Construction	Survey Tool	Analysis
Variable construction	Continuous	Continuous and binary
) Did you earn any cash from [say activity] in the last 4 weeks?) 1 = Any cash earned) 0 = No cash earned
Days worked	Continuous	Continuous
	In the past 4 weeks, about how many days did you work at [say activity]?) Total days worked
Self-efficacy	Categorical	Index
Optimistic about finding job	 This statement completely describes my current situation This statement mostly describes my current situation This statement partly describes my current situation This statement does not reflect my current situation at all Categorical Very confident Somewhat confident 	 Index is a composite 1–4 score of individual scores for each statement. Scale 3 = Very confident 2 = Somewhat confident
	Not very confident	1 = Not very confident
Angry about job search	Not confident at all Categorical	> 0 = Not confident at all Scale
) Never	3 = Oftentimes
) Rarely) Sometimes	2 = Sometimes1 = Rarely
) Oftentimes) 0 = Never

Variable Construction	Survey Tool	Analysis
Government responsiveness	Categorical	Index
) How responsive do you think your [insert item] is/are to the needs of the local people in this area?) Very responsive) Somewhat responsive) Neither responsive nor unresponsive) Somewhat unresponsive) Very unresponsive) Index is a composite 0–4 score including responses for the district governor, district government, local village/neighborhood leaders, and government in Kabul.
National government performance	Categorical	Index
) Please tell me if you think the national government is doing a very good job, somewhat good job, somewhat bad job, or a very bad job in the following fields?) Education) Healthcare) Creating job opportunities) Roads) Fighting corruption) Security) Dispute resolution) Electricity) Agricultural assistance) Refugee resettlement) Index is a composite 0–10 score including responses to all fields listed.

Variable Construction	Survey Tool	Analysis
Local government performance	Categorical	Binary
	 Please tell me if you think the local government is doing a very good job, somewhat good job, somewhat bad job, or a very bad job in the following fields? Education Healthcare Creating job opportunities Roads Fighting corruption Security Dispute resolution Electricity Agricultural assistance Refugee resettlement 	 1 = somewhat or very good job 0 = other Index is a composite 0-10 score including responses to all fields listed.
Formal or informal land deed	Categorial	Binary
) Yes, formal one issued by court) 1 = Yes, formal one issued by court
) Yes, informal one) Yes, informal one
) No, we own no land) 0 = No, we own no land
Unemployment	Categorical	Binary
) Paid work for someone else) 1 = Unemployed—looking for work
) Self-employment) 0 = Paid work for someone else
) Have job, but temporarily absent from work) Self-employment
) Unpaid family work) Have job, but temporarily absent from work
	› Attending school or training) Unpaid family work
) Unemployed—looking for work) Attending school or training
) Unemployed—not looking for work) Unemployed—not looking for work

Source: Authors.

CONTACT

JON KURTZ

Senior Director of Research and Learning jkurtz@mercycorps.org

BEZA TESFAYE

Senior Research and Learning Advisor btesfaye@mercycorps.org

REBECCA WOLFE, PHD

Director of Evidence and Influence – Peace and Conflict rwolfe@mercycorps.org

About Mercy Corps

Mercy Corps is a leading global organization powered by the belief that a better world is possible. In disaster, in hardship, in more than 40 countries around the world, we partner to put bold solutions into action — helping people triumph over adversity and build stronger communities from within. Now, and for the future.



Global Headquarters

45 SW Ankeny Street Portland, Oregon 97204 888.842.0842 mercycorps.org

European Headquarters

40 Sciences Edinburgh EH9 1NJ Scotland, UK +44.131.662.5160 mercycorps.org.uk