Effect of military operations on physical security

Ariel military operations using U.S.-operated drones had a moderate effect on reducing insurgent attacks and casualties in Pakistan, with surveillance playing a key role in violence reduction.

Geographical region: South Asia

Effect: Moderate effect (g = 0.114)

Confidence in study findings: Low confidence

Short summary

The U.S. drone program in North Waziristan was expected to enhance security by reducing insurgent violence through sustained surveillance and targeted strikes. Mir (2019) finds that the program was associated with a monthly reduction of 9–13 insurgent attacks and 51–86 casualties. Nearly 75% of the violence reduction may be attributed to surveillance and intelligence gathering, while 25% is linked to targeted strikes. Compared to control areas, violence declined only in North Waziristan, suggesting the program's unique impact.

Long summary

The intervention

Any efforts that involve the use of a state's armed forces to prevent, de-escalate or resolve a violent conflict or atrocity. This could be operations where armed forces are engaged in combat and those that do not have primary objectives to engage in combat (i.e. the presence of armed forces in specific locations. This also includes cyberwarfare operations when delivered by a state's armed forces.

How the intervention is expected to work?

A military operation, like the U.S. drone program, is expected to have an effect on the physical security of the targeted region by reducing insurgent attacks and casualties. Sustained aerial surveillance and intelligence gathering may disrupt militant activities, limiting their operational capacity. Targeted strikes are expected to weaken insurgent networks, potentially leading to a decline in violence.

Evidence base

The cell contains 1 quantitative study: Mir (2019). The study employs a difference-in-differences (DID) approach, comparing outcomes (insurgent violence) between treatment and control groups before and after the intervention (the US drone program). Fitzsimmons (2013), Middle East & North Africa and Touray (2019), Sub Saharan Africa are the 2 qualitative studies in this cell.

Evidence findings

The U.S. drone program in North Waziristan was associated with a significant reduction in insurgent violence, with a monthly decrease of 9–13 insurgent attacks and 51–86 casualties. This suggests an improvement in the physical security of the affected population, particularly in terms of reducing the number of violent incidents in the region, which could enhance perceptions of safety in the community. The study highlighted that nearly 75% of the reduction in violence was attributed to the effects of sustained surveillance and intelligence gathering, which reduced the vulnerability of the community to insurgent attacks. This could lead to improved perceptions of the state of peace and a decrease in conflict vulnerability, enhancing the feeling of safety and security in the area.

Included studies

Mir (2019) investigates the impact of the US drone program in Pakistan on insurgent violence from 2008 to 2011. The program involved sustained aerial surveillance, communication interception, intelligence analysis, and rapid drone strikes aimed at insurgent groups like Al-Qaeda and the Pakistani Taliban. The study employs a difference-in-differences approach, comparing monthly insurgent attacks and casualties in North Waziristan (treatment area) with other areas in FATA (control regions) before and after the drone program's implementation. It uses geocoded data on violence, covering 32 tehsils (administrative units) in FATA, further stratified in the treatment region comprising 9 tehsils, while the control region included 23 tehsils. The study documented the drone program was associated with a monthly reduction of 9–13 insurgent attacks and 51–86 casualties in North Waziristan. Before the program, the region experienced an average of 21 attacks and 100 casualties per month. Additionally, it showed that nearly 75 percent of the violence reduction is associated with the drone program period without any strikes, and about 25 percent is associated with aggregated effects of individual strikes. When violence compared to the control group it showed continued to increase or plateau in control areas, while it declined in North Waziristan, suggesting the program's unique impact. The study rated as a medium-to-high confidence in its findings. It uses a robust empirical design and incorporates qualitative (e.g., interviews with officials and insurgents) and quantitative data.

Confidence assessment

Overall, the cell is rated low confidence.

Other outcomes in the study/cell:

- Violence and atrocity prevention/Nature and scale of violence or atrocities