A CENTER OF EXCELLENCE OF THE U.S. DEPARTMENT OF HOMELAND SECURITY BASED AT THE UNIVERSITY OF MARYLAND

Reducing the anticipated benefits or likelihood of success of an attack can deter VEOs.

60; 73; 74; 75; 76; 64; 65; 61; 77

## General Description of the Literature:

Many scholars in the policy, political science, and criminology literatures have argued that reducing the anticipated benefits or the likelihood of success of an attack can deter VEOs, including Davis and Jenkins (2002), Knopf (2010), and Kroenig (n.d.). There have been a number of studies using both statistical analysis and case studies on the effects of physical defenses in reducing attacks against those targets. Taken together, studies by Enders and Sandler (1993), Dugan et al (2005), and Lum et al (2006) suggest that some defensive measures reduce terrorism, whereas others merely displace it, or have no effect. There is no empirical research on the deterrent effects of reducing the anticipated benefits of attacks.

## Detailed Analyses

**60:** Reducing the anticipated benefits or likelihood of success of an attack can deter VEOs.

Summary of Relevant Empirical Evidence: Scholars (e.g., Davis and Jenkins 2002) have argued that applying better defensive measures to protect targets can deter terrorism by decreasing the likelihood of mission success. Kroenig (n.d.) provides illustrative evidence for this hypothesis. He points out, for example, that U.S. efforts to defend the U.S. Embassy in Turkey in 2003 deterred an al Qaeda cell from attacking the embassy and convinced them to attack a softer British consulate instead. Performing statistical analysis on data from 1968 to 1988, Enders and Sandler (1993) report that the installation of metal detectors at airports reduced terrorist hijackings, but increased other types of terrorism, including assassinations. They also found that fortifying embassies decreased barricade missions, but increased assassinations. Using data on 1,001 aerial hijackings between 1931 and 2003, Dugan et al (2005) find that installation of metal detectors reduces the incidence of criminal hijackings, but not of terrorist hijackings. In addition, Dugan et al (2005) concluded that hijackings to Cuba decreased following a 1970 Cuban policy that declared hijacking a crime. In a meta-analysis of existing research, Lum et al (2006) find that metal detectors at airports decrease hijackings but there is no support for the idea that fortifying embassies and protecting diplomats deters terrorism.

Empirical Support Score: 2 (for reducing likelihood of success); 0 (for reducing anticipated benefits)

**Applicability to Influencing VEOs:** These studies were performed on VEOs and the findings are, therefore, directly applicable to government efforts to influence VEOs.

**Applicability Score:** Direct: At least some of the empirical results directly concern the context of influencing VEOs

**73:** Applying better defensive measures to targets, even if imperfect, can help deter VEO attacks on those targets by decreasing the likelihood of mission success for risk averse members and group members or by increasing the uncertainty of carrying out a successful attack.

A CENTER OF EXCELLENCE OF THE U.S. DEPARTMENT OF HOMELAND SECURITY BASED AT THE UNIVERSITY OF MARYLAND

Summary of Relevant Empirical Evidence: Scholars (e.g., Davis and Jenkins 2002) have argued that applying better defensive measures to protect targets can deter terrorism by decreasing the likelihood of mission success. Kroenig (n.d.) provides illustrative evidence for this hypothesis. He points out, for example, that U.S. efforts to defend the U.S. Embassy in Turkey in 2003 deterred an al Qaeda cell from attacking the embassy and convinced them to attack a softer British consulate instead. Performing statistical analysis on data from 1968 to 1988, Enders and Sandler (1993) found that fortifying embassies decreased barricade missions, but increased assassinations. In a meta-analysis of existing research, Lum et al (2006) find that there is no support for the idea that fortifying embassies and protecting diplomats deters terrorism.

**Empirical Support Score:** 3

**Applicability to Influencing VEOs:** These studies were performed on VEOs and the findings are, therefore, directly applicable to government efforts to influence VEOs.

**Applicability Score:** Direct: At least some of the empirical results directly concern the context of influencing VEOs

74: Metal detectors and increased law enforcement at airports decreases hijackings.

**Summary of Relevant Empirical Evidence:** Enders and Sandler (1993), performing a statistical analysis on terrorist incidents from 1968 to 1988, find that the installation of metal detectors at airports reduced terrorist hijackings, but increased other types of terrorism including assassinations. Using data on 1,001 aerial hijackings between 1931 and 2003, Dugan et al (2005) find that installation of metal detectors reduces the incidence of criminal hijackings, but not of terrorist hijackings. In addition, Dugan et al (2005) concluded that hijackings to Cuba decreased following a 1970 Cuban policy that declared hijacking a crime. In a meta-analysis of the existing research, Lum et al (2006) find that metal detectors at airports decrease hijackings.

**Empirical Support Score: 9** 

**Applicability to Influencing VEOs:** These studies were performed on VEOs and are, therefore, directly relevant to government efforts to influence VEOs.

**Applicability Score:** Direct: At least some of the empirical results directly concern the context of influencing VEOs

**75:** Visible variability in prevention measures is particularly effective for the effect of applying better defensive measures to targets.

**Summary of Relevant Empirical Evidence:** Some scholars (e.g., Kroenig n.d.) have argued that visible variability in defensive measures can have a deterrent effect by keeping terrorists off balance. If they cannot understand and game security systems, they cannot have confidence that an attack will succeed. Indeed, the ARMOR program at LAX randomizes the deployment of vehicle checkpoints and guard dogs for precisely this reason. While this hypothesis is plausible, there is no empirical support for it.

**Empirical Support Score:** 0

Applicability to Influencing VEOs: N/A

A CENTER OF EXCELLENCE OF THE U.S. DEPARTMENT OF HOMELAND SECURITY BASED AT THE UNIVERSITY OF MARYLAND Applicability Score: Not Applicable – There is no empirical support in any context.

**76:** Reducing the anticipated physical damage (direct and indirect) of an attack can help deter VEOs from carrying out that attack.

**Summary of Relevant Empirical Evidence:** Political scientists (e.g., Davis and Jenkins 2002, Knopf 2010, Kroenig n.d.) have argued that reducing the anticipated physical damage of an attack can deter VEOs from carrying out that attack. There is, however, no existing empirical evidence to support this hypothesis.

**Empirical Support Score:** 0

Applicability to Influencing VEOs: N/A

Applicability Score: Not Applicable - There is no empirical support in any context.

**64:** Reducing the anticipated level of publicity of an attack can help deter VEOs from carrying out that attack

**Summary of Relevant Empirical Evidence:** Scholars (e.g, Kroenig n.d.) have argued that, because terrorists are motivated in part to bring attention to their cause, government efforts to reduce the anticipated level of publicity from an attack can deter VEOs. Bridgette Nacos (2002) has demonstrated that media coverage of terrorist attacks has played into terrorists' hands in case after case. Israel, Egypt, and other governments have policies in place to limit the level of publicity VEOs garner from their attacks. There is not, however, any empirical support for the idea that denying publicity can deter VEO attacks.

**Empirical Support Score:** 0

Applicability to Influencing VEOs: N/A

**Applicability Score:** Not Applicable – There is no empirical support in any context.

**65:** Reducing the anticipated reputational benefits of an attack can help deter VEOs from carrying out that attack.

**Summary of Relevant Empirical Evidence:** Scholars (e.g, Davis and Jenkins 2002) have argued that reducing the anticipated reputation benefits of an attack can help deter VEOs. There is not, however, any empirical support for this hypothesis.

**Empirical Support Score**: 0

Applicability to Influencing VEOs: N/A

**Applicability Score:** Not Applicable – There is no empirical support in any context.

## A CENTER OF EXCELLENCE OF THE U.S. DEPARTMENT OF HOMELAND SECURITY BASED AT THE UNIVERSITY OF MARYLAND

**61:** Using measures to manage and mitigate the consequences of an attack and to speed recovery afterward can deter terrorists by showing that even successful terrorist attacks will not produce large-scale effects.

**Summary of Relevant Empirical Evidence:** Political scientists (e.g., Davis and Jenkins 2002, Knopf 2010, Kroenig n.d.) have argued that efforts to manage and mitigate the consequences of a terrorist attack can have a deterrent effect by demonstrating that even successful attacks will not produce intended damage. Indeed, some states, including Israel, have policies to demonstrate society's resiliency in the aftermath of attacks. There is, however, no existing empirical evidence to support this hypothesis.

**Empirical Support Score**: 0

Applicability to Influencing VEOs: N/A

**Applicability Score:** Not Applicable – There is no empirical support in any context.

**77:** Targeting family members by suppressing financial compensation from suicide terror missions may deter individuals in a VEO from conceptualizing a positive risk-benefit ratio.

**Summary of Relevant Empirical Evidence:** A number of political scientists (e.g., Knopf 2010, Davis and Jenkins 2002, Kroenig (n.d.) have suggested that efforts to reduce the benefits of a terrorist attack for the family or community of a terrorist might deter terrorism. This dynamic has not been investigated empirically.

**Empirical Support Score**: 0

Applicability to Influencing VEOs: N/A

Applicability Score: Not Applicable – There is no empirical support in any context.

## Bibliography:

- Davis, Paul, and Brian Jenkins. 2002. Deterrence & Influence in Counterterrorism: A Component in the War on al Qaeda. Santa Monica, CA: RAND.
- Dugan, Laura, Gary LaFree, and Alex R. Piquero. 2005. "Testing a Rational Choice Model of Airline Hijackings." *Criminology* 34: 1031-1066.
- Enders, Walter, and Todd Sandler. 1993. "The Effectiveness of Antiterrorism Policies: A Vector-Autoregression-Intervention Analysis." *American Political Science Review* 87(4): 829-844.
- Enders, Walter, Todd Sandler, and Jon Cauley. 1990. "UN Conventions, Technology and Retaliation in the Fight against Terrorism: An Econometric Evaluation." *Terrorism and Political Violence* 2(1): 83-105.
- Knopf, Jeffrey. 2010. "The Fourth Wave in Deterrence Research." *Contemporary Security Policy* 31(1): 1-33.

A CENTER OF EXCELLENCE OF THE U.S. DEPARTMENT OF HOMELAND SECURITY BASED AT THE UNIVERSITY OF MARYLAND Kroenig, Matthew. "How to Deter Terrorism." http://www.matthewkroenig.com/Kroenig\_How%20to%20Deter%20Terrorism.pdf.

- Lum, Cynthia, Leslie Kennedy, and Alison Sherley. 2006. "Are Counter-Terrorism Strategies Effective? The Results of the Campbell Systematic Review on Counter-Terrorism Evaluation Research." *Journal of Experimental Criminology* 2: 489-516.
- Nacos, Bridgette. 2002. Mass Mediated Terrorism: The Central Role of the Media in Terrorism and Counterterrorism. London: Rowman & Littlefield.
- Sandler, T., J.T. Tschirhart, and J. Cauley. 1983. "A Theoretical Analysis of Transnational Terrorism." The American Political Science Review 77: 36-77.