

Exploring the Situational Determinants of Aerial Hijackings

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Project Scope:

In this project we ask which situational characteristics distinguish terrorist hijackings from other types of aerial hijackings. Studying the situational determinants of aerial hijackings requires us to assume that people choose the situations in which they act and once in these situations, that they adapt their behavior to achieve desired goals. We further assume that certain types of behavior cluster for different types of hijackings because certain types of behavior are more likely to achieve certain ends. In turn, this means that different types of hijackings should be predictable from situational characteristics. The different types of hijackings we study here are those undertaken for the purposes of traveling to a destination determined by the hijacker (transportation), hijackings undertaken to extort money (extortion), and hijackings undertaken to achieve a political or social goal (terrorist). We use a database of 745 world-wide hijackings drawn from the Federal Aviation Administration, the Global Terrorism Database (GTD), the RAND-MIPT data, and the ITERATE data. First, we hypothesize that the situational characteristics that increase the publicity or symbolic impact of a hijacking will differentiate terrorist from non-terrorist hijackings. Compared to transportation and extortion hijackings, terrorist hijackings will depend more on publicity. Second, because compared to other hijackings, terrorist hijackings are more likely to reflect group based decision making, we expect terrorist hijackings to involve a greater degree of planning than other types of hijackings. We therefore hypothesize that those situational characteristics that indicate a greater degree of planning will differentiate between terrorist and non-terrorist aerial hijackings. We performed logistic regression analysis to determine whether it was possible to differentiate the 106 terrorist hijackings from the 639 non-terrorist hijackings, using the characteristics of the situation.

Recent Progress:

Our first hypothesis was partially supported. First, if a flight originated from a country whose annual level of terrorism was in the top twenty-fifth percentile of countries in the world for that year, it was two and half times more likely to be a terrorist hijacking. In addition, if the flight left from a capital city, it was more than two and a half times more likely to be a terrorist hijacking. Finally, if the flight originated in the United States, it was more than 90% less likely to be a terrorist hijacking. Situational characteristics that did not differentiate between hijacking types include whether the flight occurred on a weekend, in a particular season, or if there were passenger or crew casualties in the course of the hijacking. Our second hypothesis was also partially supported. Compared to other hijackings, terrorist hijackings were twice as likely to include a weapon and five and a half times more likely to involve more than one offender. Finally, we found that compared to other hijackings, terrorist hijackings were more than two times more common after 1973, the year in which the United States introduced metal detectors and other important anti-hijacking measures. This last finding may suggest that anti-hijacking measures deterred non-terrorist hijackings more successfully than terrorist hijackings. The only advanced planning variable that did not

differentiate terrorist and non-terrorist hijackings was whether the prior three hijackings had successfully achieved their objective. This finding may suggest that terrorist hijackings involve persons that are more committed to their goals and are influenced less by instrumental factors.

We conclude that terrorist-hijackings are in part predictable from their situational characteristics, particularly the country and city from which they originate and whether weapons or multiple hijackers are employed.

Future Plans:

We plan to fully develop the paper for publication in a peer-reviewed journal. This will be accomplished in the next semester.

Publications:

I have not published on this project yet.

