

[dstl]

Strategic Success Factors in Counter- Insurgency Campaigns

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Before I Start...

Recycled Presentation!



- This is a *recycled* presentation:
 - It *has been* previously presented at:
 - Cornwallis XII, Nova Scotia, Apr 07 (CP23836)
 - UCSD IGCC CT Conference, San Diego, May 07 (CP24670)
 - It *will be* published as a paper in the Cornwallis XII Proceedings

- My apologies to anyone who has heard this all before...

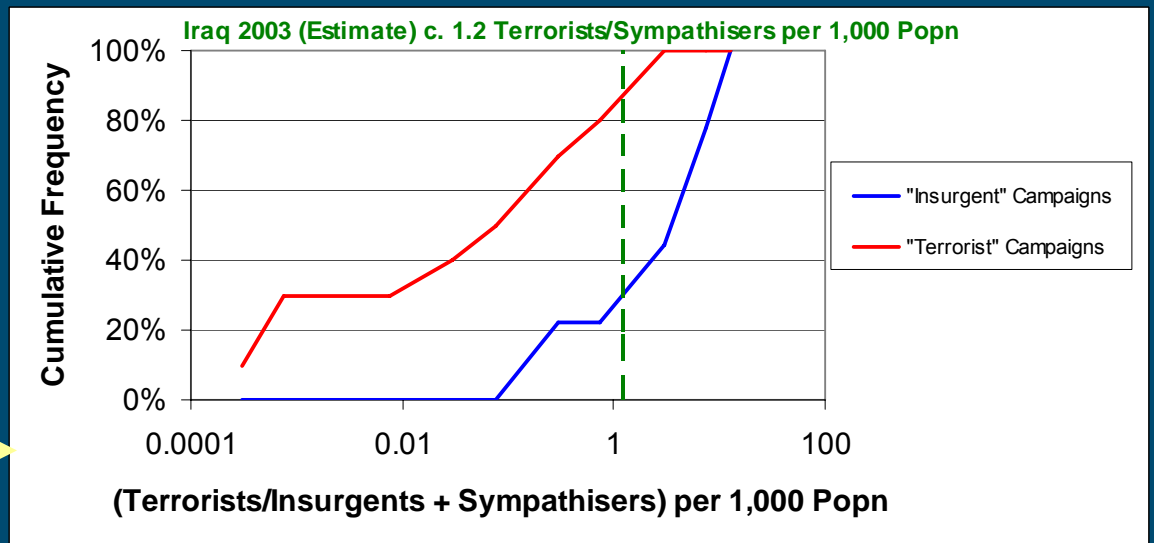
...Please feel free to doze quietly for the next 20 minutes!



Study Scope

- Counter-Terrorism (CT) & Counter-Insurgency (COIN) assumed to represent *adjacent & overlapping* regions of some spectrum of “asymmetric conflict”

- No *a priori* distinction made between **major terrorist & minor insurgent** campaigns



- Boundary Issues:
 - Micro/Urban Terrorist Campaigns excluded (E.g.: November 17)
 - Genuine “Civil Wars” excluded (E.g.: Chinese Communists)

Study Approach

- 3 year “historical analysis” (HA) research programme
- Historical analysis in the UK:
 - Is inspired by Trevor Dupuy’s historical analysis studies, but developed separately out of 1980’s field trials in Germany
 - Is operational analysis of quantified data describing the **actual behaviour of systems** across a wide range of historical cases
 - Is **empirical, statistical and holistic**
 - Involves the testing of **hypotheses** using established statistical techniques
 - Focuses on understanding the **enduring, underlying mechanisms of conflict**

Outline of Analysis Method

- C. 100 possible success factors identified and tested for statistically significant association with campaign outcome:
 - 2005: c. 40 possible Security Forces' (SyF) success factors tested
 - 2006: c. 60 possible Insurgent success factors tested
- Assessment criteria for ordered categories defined for each factor:
 - Category “-1 ”: “Poor, incompetent or no usage/presence”
 - Category “ 0 ”: “Moderate, mixed or occasional usage/presence”
 - Category “+1”: “Good, competent or extensive usage/presence”
- Assessment criteria, categories for outcome measures defined similarly

Coding of Success Factors

- Factors judged on 3 point ordinal scale:

Field Title	Flexibility of Security Forces C2	Degradation of Key State Economic Sectors
Field Type	Security Forces Capability	Insurgent Tactic
Field Value		
-1	The Security Forces were <i>unresponsive</i> , inflexible and <i>incapable</i> of either achieving surprise in planned operations or of exploiting targets of opportunity.	The Insurgents did not <i>significantly</i> seek to destroy or seriously degrade any part of the State's economy
0	The Security Forces had <i>limited</i> responsiveness and flexibility and were <i>sometimes</i> able to act sufficiently rapidly to achieve surprise in planned operations or to exploit targets of opportunity	The Insurgents <i>occasionally</i> or <i>inconsistently</i> sought to destroy or seriously degrade key sectors of the State's economy
1	The Security Forces were <i>responsive</i> , flexible, <i>capable</i> of planning innovatively and of <i>acting rapidly</i> to achieve tactical/operational surprise or to exploit targets of opportunity	The Insurgents <i>constantly</i> and <i>consistently</i> sought to destroy or seriously degrade key sectors of the State's economy

Outcome Measures Used

- Two types of campaign success considered:
 - **Military Success** (judged on achievement of monopoly of violence)
 - **Political Success** (judged on achievement of initial objectives)
- **Military Success assumed zero-sum** a priori:
 - ‘(State) Success’ **State** monopoly of violence at end campaign
 - ‘(State) Partial Success’ **Both State & Insurgents** retain capacity for violence
 - ‘(State) Failure’ **Insurgent** monopoly of violence at end campaign
- **Political Success** coded **independently** for all Actors (Internal State, External State, Insurgents):
 - ‘Success’ **Most** initial objectives achieved at end campaign
 - ‘Partial Success’ **Some** initial objectives achieved at end campaign
 - ‘Failure’ **Few** initial objectives achieved at end campaign

Data Collection & Coding

- Data for 44 COIN campaigns collected & categorised by external researchers
 - 2005: Data on overall campaign, context, Security Forces' factors etc
 - 2006: Data on Insurgent & social factors only
- Case selection was pseudo-random:
 - Stratified sampling across geographic regions
 - Spread over period post World War I
- Each data point currently represents an entire campaign:
 - Static analysis only; takes no account of development of campaign over time

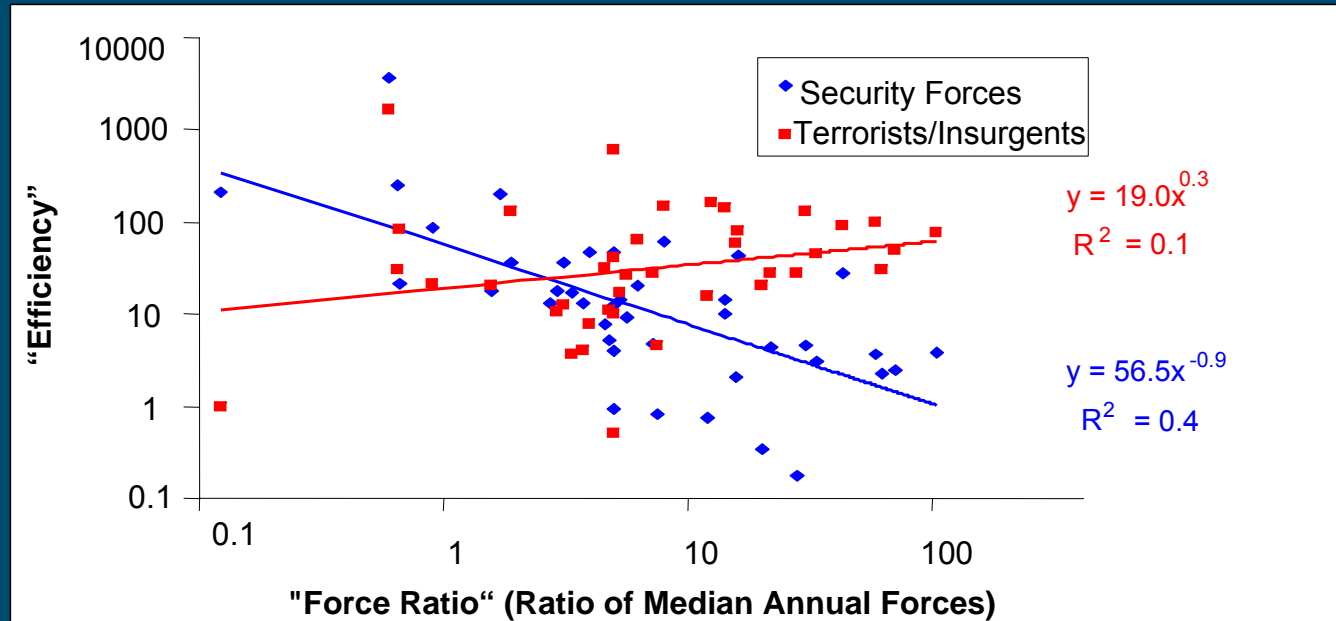
Statistical Analysis

- Candidate success factors tested for association with success using Somers' D statistic at 90% confidence
- Essentially assessing distributions of data in 3 x 3 Contingency Tables:

	Full SyF Military Success	Partial SyF Military Success	SyF Military Failure
Criterion X Well Applied	6	2	0
Criterion X Averagely Applied	1	4	1
Criterion X Badly Applied	1	0	7

“Is there a tendency for better (or worse) values of variable X to be consistently paired with better (or worse) campaign outcomes?”

“Efficiency” of SyF & Insurgents

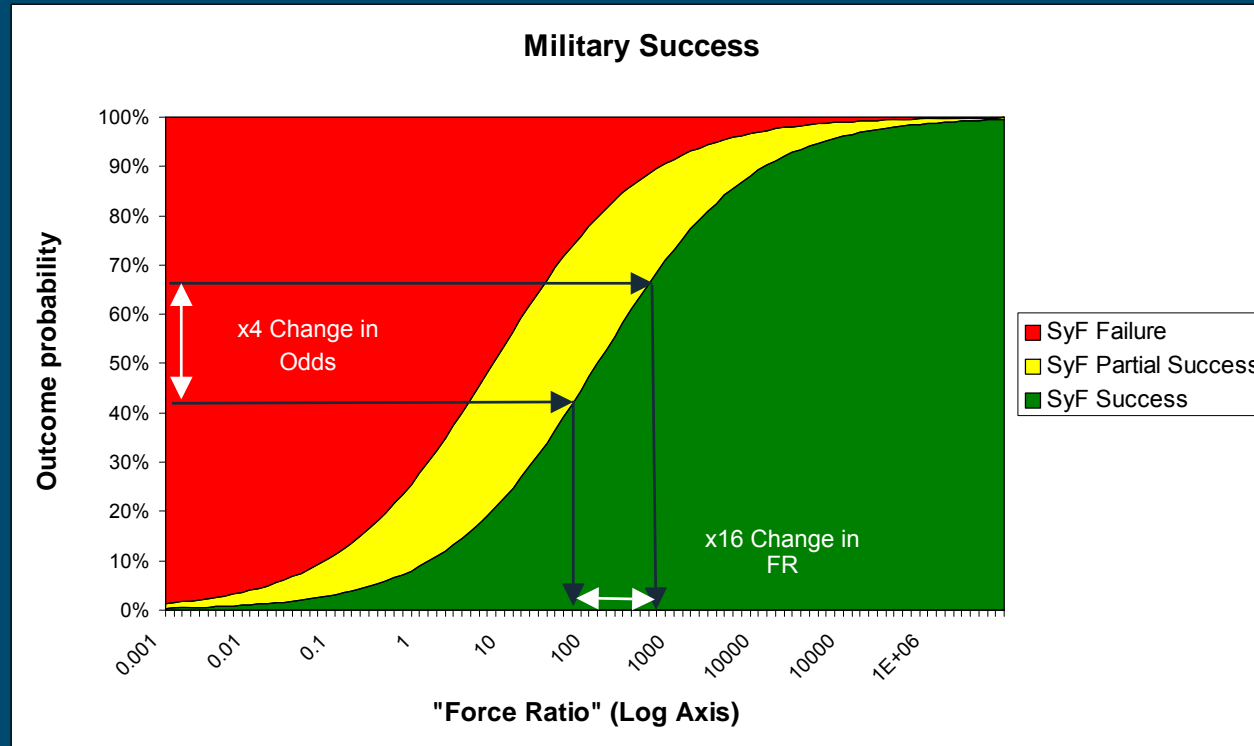


- “Efficiency”: No. opponents killed per 1,000 man-years’ force deployed
 - Security Forces’ efficiency decreases significantly with increasing force ratio
 - No evidence that Insurgent efficiency changes with force ratio (FR)
- Possibly this is because Insurgents are typically too small to experience effects of *diminishing returns on scale*?

Force Ratio & Campaign Outcome (1)

- There is a **weak relationship** between odds of military campaign success and whole-campaign force ratio:
 - Statistically significant at 93% confidence
 - A **conservative** and reasonable result given expected “noise” in data
 - Military success used because a zero-sum outcome
 - Strictly, tested against the ratio of median annual forces (used as a surrogate approximation to force ratio)
- Can use **ordinal logistic regression** to estimate the *rate of change of odds* with *change in force ratio*

Force Ratio & Campaign Outcome (2)



- Each x2 (x4) change in campaign odds is:
 - *Estimated* to be equivalent to a x4 (x16) change in force ratio
 - *At least* equivalent to a x2⁺ (x4⁺) change in force ratio (90% confidence)

Security Forces' Success Factors (1)

Magnitude of Estimated Equivalent Force Multiplier (FM)	Military Campaign Success for State & Security Forces' (SyF)	Political Campaign Success for State & Security Forces' (SyF)
x50 < FM	- -	Pop Support for Conflict Pop Support for SyF
x20 < FM ≤ x50	SyF Doctrine Pop Support for SyF	- -
x10 < FM ≤ x20	Pop Support for Conflict SyF Training Flexibility of SyF C2	SyF Doctrine - Targeting Insurgent Leadership (-)
x5 < FM ≤ x10	Resource Availability State Legitimacy Counter-Intelligence "Hearts & Minds" SyF Intelligence Strategic Posture Integration of SyF C2	SyF Counter-Intelligence Winning "Hearts & Minds" Flexibility of SyF C2 Overall SyF Intelligence State Legitimacy Integration of SyF C2 Legal Status of Campaign

They only tell us
the *What?* not the
How?
(Context specific?)

Security Forces' Success Factors (2)

- Generically, the factors most important to State military and political success in COIN at the campaign level are those concerned with:
 - Wresting the campaign initiative away from the Insurgents:
 - good Counter-Int; proactive Strategic Posture; Hearts & Minds
 - The directed & precise application of Security Forces' capability:
 - flexible & integrated C2; good Int; good Training and Doctrine
 - Creating/maintaining the necessary political context for success:
 - Popular Support for Security Forces; Hearts & Minds; good Training and Doctrine

Security Forces' Success Factors (3)

- These generic, campaign level success factors include no factors relating to:
 - Security Forces' capability itself:
 - Firepower, mobility, use of 'special forces' etc
 - the *specific* methods by which Security Forces' capability is applied *against* Insurgents
 - Degradation of infrastructure, direct attrition, control of population
- These factors *may* still be significant in specific contexts
- There is *some* requirement for boots-on-the-ground:
 - Force ratio advantage & resource availability
 - *Needed to avoid losing, but not in itself sufficient for winning?*

Insurgent Success Factors (1)

Magnitude of Estimated Equivalent Force Multiplier (FM)	Military Campaign Success for Insurgents	Political Campaign Success for Insurgents
$x50 < FM$		Pop Support for Insurgents
$x20 < FM \leq x50$	<i>(Insurgent Doctrine)</i> Pop Support for Insurgents	- -
$x10 < FM \leq x20$	Destruction of SyF -	<i>(Insurgent Doctrine)</i> Attempted Destruction of State Infrastructure
$x5 < FM \leq x10$	Insurgent Firepower Insurgent Counter-Intelligence Overextension of SyF Overthrow State Leaders Insurgent Training Legitimise Claim to Power	- - - - Insurgent Experience (-) Insurgent Internal Structure (-)
$x1 < FM \leq x5$	Attract External Intervention Insurgent Concealment in Terrain Subversion of Population Overall Insurgent Intelligence	Attempted Destruction of State Institutions (-) - Legitimise Claim to Power Subversion of Population

- **CAVEAT:** The *Insurgent Doctrine* Factor is **unsafe** – use with caution!

Insurgent Success Factors (2)

- Proportionately fewer factors are identified associated with success for Insurgents compared to Security Forces':
 - Is Insurgent success more context-specific than for Security Forces' with fewer generic *"rules of thumb"* for guidance?
 - Suggests need for Security Forces' Int to *"get inside Insurgents' heads"*?
- 3 themes discernible among Insurgent success factors:
 - Possession of favourable political context for success:
 - Popular support, legitimacy of cause, subversion of population
 - Possession of 'kinetic' military strength:
 - Firepower, training, (*relevant doctrine?*)
 - Maintaining an Intelligence Superiority over Security Forces

Insurgent Success Factors (3)

- **Firepower / kinetic military strength** may be more important to Insurgents than to Security Forces:
 - Possession of heavy weapons firepower is a military success factor for Insurgents but not for Security Forces!
 - Insurgents do not suffer diminishing returns on increasing forces
- Presumably Insurgents are much smaller than Security Forces so gain greater benefit from improvement in military capability
- **As much a hypothesis as an inference!**
- Suggests the necessity of modelling **both** the military **as well as** the political component of CT/COIN!

Insurgent Success Factors (4)

- Importance of military capability may explain some of the less immediately understandable Insurgent success factors:
 - Insurgent Internal Structures (with hierarchical better than cellular)
 - Destruction of Security Forces
 - Overextension of Security Forces
 - Overthrow of State Leadership
 - Concealment within **terrain** (but *not* within *populations*)
- These all require (relatively) large Insurgency size to be worth pursuing
- Or, they may be spurious results (“**False Positives**”)

Caveats on these Results

- **Static, whole-campaign analysis:**
 - Effectively considers the **average** state of factors across geography and time
- **Robustness of Insurgent factor design:**
 - Wide range of possible Insurgent strategies for different contexts / campaigns
 - Hard to write generic definitions that cover 44 campaigns over 85 years!
 - Problem of intent vs action (*Threatening* vs *Actual* Destruction etc...)
- **Spurious or “False Positive” Results:**
 - An inherent limitation of inferential statistics!
 - At 90% confidence, it is statistically likely that **up to:**
 - 4 of the Security Forces’ ‘success factors’ found for each outcome type
 - 6 of the Insurgent ‘success factors’ found for each outcome typeare false

Conclusions on Success Factors

- **The Political Component of CT/COIN:** Popular support factors for Insurgents and Security Forces' potentially offer some of the largest modifiers to campaign odds of success:
 - Affecting both military and political campaign outcomes
 - *Up to twice as important to political as to military success*
- **The Military Component of CT/COIN:** Although force ratio has a weaker effect upon campaign outcome than key Security forces' and Insurgent Success Factors:
 - There is still *some* requirement for *boots-on-the-ground*
 - Security Forces suffer diminishing returns on manpower at typical force ratios
 - Insurgents gain at least some benefit from numbers, training, firepower

Any Questions?

The Author would like to acknowledge his gratitude to Dr G Rose ADOA(P+P) DG(S&A) UK MOD for the latter's generous sponsorship of the Author's freebie trip to California for this workshop ☺ – even if it is during winter!

Published Research

- A HOSSACK. *Historical Analysis of Terrorist Campaigns, with observations on Current Operations in Iraq* (Dstl/CP10135). Published In: A WOODCOCK, G ROSE, eds., *The Cornwallis Group IX: Analysis for Stabilization and Counter-Terrorist Operations (2005)* pp 393 – 417.
- A HOSSACK, K SIVASANKARAN. *Success Factors in CT/COIN Campaigns: Preliminary Results arising from Current Research* (Dstl/CP14230). Published In: A WOODCOCK and G ROSE, eds., *The Cornwallis Group X: Analysis for New and Emerging Societal Conflicts (2006)* pp 469 - 491.
- A HOSSACK. *Security Force & Insurgent Success Factors in Counter-Insurgency Campaigns* (Dstl/CP23836). To Be Published In: A WOODCOCK and G ROSE, eds., *The Cornwallis Group XII: Analysis for Multi-Agency Support (2008)*.

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