

Chapter Title: APPENDIX B Details of Qualitative Comparative Analysis

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Details of Qualitative Comparative Analysis

The QCA approach we employed is designed to reduce patterns of observed factors to the minimum set sufficient to explain the outcomes (that is what prime implicants *are*). In the *Victory Has a Thousand Fathers* 30-case data set, we (and QCA) were unable to make any discrimination between more than a dozen equally plausible sets of prime implicants because of the co-occurrence of so many positive factors in the eight COIN wins and their rarity in COIN losses. To give a simple example: If *A* and *B* both occur in every win and never in a loss, which is more important, *A* or *B*? Discrimination was impossible. Among the 59 core cases in these data, however, there are more marginal cases on both sides; that is, there are COIN wins with fewer positive practices and COIN losses that involved more (but clearly not enough) positives. A COIN force that won while engaging in a smaller number of positive practices helps isolate which practices are critical; similarly, a COIN force that lost while doing some of the things that we have identified as positive practices helps identify which concepts are, by themselves, insufficient. Overall, this allowed us to identify a smaller number of prime implicants (presented in Chapter Five) and make claims about the relative importance, strength, or value of the different concepts.

In our QCA, we entered the factor stacks for the 18 COIN concepts for which we found strong support at the bivariate level into fsQCA:¹

¹ The bivariate analysis found strong support for 18 concepts (actually, 17, but legitimacy was divided into “government legitimacy” and “legitimacy of the use of force” when tested, and both components received support). As indicated in Appendix A, fsQCA would resolve

1. at least two of four development factors
2. at least two of six pacification factors
3. at least one of two government legitimacy factors
4. at least four of six legitimate use of force factors
5. at least four of five reform factors
6. the single unity of effort factor
7. at least two of six cost-benefit factors
8. the single border control factor
9. the single initiative factor
10. at least three of five strategic communication factors
11. at least four of nine FM 3-24 factors
12. at least two of clear, hold, and build
13. at least four of nine “beat-cop” factors
14. at least three of six “boots on the ground” factors
15. at least four of eight commitment and motivation factors
16. at least three of ten tangible support factors reduced
17. at least one of two intelligence factors
18. the single flexibility and adaptability factor.

Iterative QCA found a variety of prime implicants of varying complexity and revealed two useful sets of information: first, a single, simple two-factor prime implicant and, second, nine concepts that consistently contributed to relatively simple prime implicants.

In all iterations of QCA, we identified only one prime implicant that required only two factors to perfectly discriminate the 59 core cases into wins and losses: tangible support reduction and commitment and motivation. These two factors are both present in all COIN win cases, and at least one of them is absent in all losses. No other set of prime implicants is as simple, with all others requiring more implicants or more concepts as part of those implicants to discriminate among the cases.

truth tables based on only 11 factors at a time. Since we could not test all 18 concepts at once, we rotated the factor stacks in and out of the analysis, finally removing a factor once it had had a chance to join a set of prime implicants with all of the factors being tested.

Repeated iterations of QCA also revealed that nine of the 18 factor stacks consistently contributed to prime implicants. These nine factor stacks fit into one of two categories: those that were present in every winning case (suggesting in the logic of causation that they might be *necessary*) and those that appeared only in winning cases (suggesting in the logic of causation that they might be *sufficient*).² In the 59 core cases, every winning COIN force implemented these four concepts, and no losing COIN force had all four of them:

- commitment and motivation
- tangible support reduction
- flexibility and adaptability
- at least two of the following: unity of effort, initiative, or intelligence.

No losing case included any of these three concepts:

- pacification
- FM 3-24
- strategic communication.

Table B.1 presents the truth table for these nine factor stacks and whether the case was a COIN win, making it easy to see the concepts that are always present in wins and those that are only present in wins. Remember, as in all our data, 1 corresponds to the presence of a factor, 0 its absence. Each row in Table B.1 represents a pattern of factor presence and absence that appears in the observed data. Remember that all possible patterns of nine binary independent variables plus the outcome would be 2^9 rows; patterns that did not occur in the data were omitted. Patterns that occurred repeatedly are indicated in the column “Number of Cases.” So, for example, the very first row of data in the

² Of course, it is impossible to make any conclusive causal argument based only on correlative data, and we do not make a formal causal argument. Further, the factors that appear only in COIN wins cannot be established as sufficient in isolation, as each case that includes one or more of those factors also includes all of the factors that appear in every COIN win. From a correlational perspective, however, these are strong and compelling levels of association.

Table B.1
Truth Table for Nine Concepts That Could Contribute Prime Implicants and Case Outcome for the 59 Core Cases

| Pacification | COIN FM | Strategic Communication | Flexibility and Adaptability | Commit. and Motivation | Tangible Support Reduction | Unity of Command | Initiative | Intelligence | COIN Win | No. of Cases | Sum of Approaches |
|--------------|---------|-------------------------|------------------------------|------------------------|----------------------------|------------------|------------|--------------|--|--------------|-------------------|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 9 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 3 | 8 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 2 | 8 |
| 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 8 |
| 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 8 |
| 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 8 |
| 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 2 | 7 |
| 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 7 |
| 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 7 |
| 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 |
| 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 |
| 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 6 |
| 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 6 |
| 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 3 | 5 |
| 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 2 | 5 |
| 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 4 |
| 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 3 |
| 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 2 | 3 |
| 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 3 |
| 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 5 | 2 |
| 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 2 |
| 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 2 |
| 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 1 |
| 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 |
| 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 |
| 18 | 19 | 12 | 28 | 28 | 28 | 24 | 22 | 22 | = number of times present in a COIN win | | |
| 0 | 0 | 0 | 11 | 14 | 2 | 5 | 10 | 1 | = number of times present in a COIN loss | | |

table describes the pattern of factors present in four of the 59 core cases, and the last row of data in the table describes ten cases. Twenty-eight (the number of rows in Table B.1) distinct patterns of these nine factors, plus the outcome, occur in the 59 cases.

Table B.1 includes several pieces of summary information. The right margin shows the sum of COIN concept factor stacks present for that row. For example, the first row of data (which we have already established as representing four cases) includes all nine of the consistently prime implicant, strongly supported concepts' factor stacks. The lower margin includes two summary numbers, the number of times each factor stack appears in a winning case and the number of times each factor stack appears in a losing case. So, for example, looking at the bottom margin for the first column, we see that the pacification factor stack was present in 18 winning cases and no losing cases. These numbers take into account the fact that some rows in the table represent multiple cases. The summaries in the bottom margins simply repeat what was already presented in the bivariate analysis of each concept.

A close examination of Table B.1 reveals many things. The first 16 rows of the table cover all 28 COIN-winning cases, and all the lower rows are case losses. Looking at the right margin, we see that four cases realized all nine of the consistent prime implicant factor stacks (Peru, Senegal, Sierra Leone, and the Philippines [Huk Rebellion]) and that all winning cases realized at least five of the nine. This corresponds to the core finding of the original *Victory Has a Thousand Fathers* analysis: Good COIN practices run in packs. However, this analysis reveals that the "core" of the pack is relatively small and includes only six critical factors, three of which are always present and three more of which at least two are always present.

