# CDI Centre for Development Impact
## PRACTICE PAPER

Innovation and learning in impact evaluation

# Multiple Pathways to Policy Impact: Testing an Uptake Theory with QCA

**Abstract** Policy impact is a complex process influenced by multiple factors. An intermediate step in this process is policy uptake, or the adoption of measures by policymakers that reflect research findings and recommendations. The path to policy uptake often involves activism, lobbying and advocacy work by civil society organisations, so an earlier intermediate step could be termed 'advocacy uptake'; which would be the use of research findings and recommendations by Civil Society Organisations (CSOs) in their efforts to influence government policy. This CDI Practice Paper by Barbara Befani proposes a 'broad-brush' theory of policy uptake (more precisely of 'advocacy uptake') and then tests it using two methods: (1) a type of statistical analysis and (2) a variant of Qualitative Comparative Analysis (QCA). The pros and cons of both families of methods are discussed in this paper, which shows that QCA offers the power of generalisation whilst also capturing some of the complexity of middle-range explanation. A limited number of pathways to uptake are identified, which are at the same time moderately sophisticated (considering combinations of causal factors rather than additions) and cover a medium number of cases (40), allowing a moderate degree of generalisation.

## Introduction

The impact of research products on policy has received considerable attention in literature (Court *et al.* 2002, 2003, 2006; Crew *et al.* 2002; European Commission 2008, 2010; Masset *et al.* 2011; Sumner *et al.* 2009, 2011; UNESCO 2011; and World Bank OED 2005 are just a few examples). However, no systematic attention has been given to the 'understanding of what, when, why and how research feeds into development policy' (Court *et al.* 2003). Why are some ideas picked up and acted on, while others are ignored and disappear? If we consider academic research together with evaluation research, the same can be asked of the related issue of 'evaluation use'. Under what circumstances are evaluations used? Some factors are under the control of the research community, like research quality[1]; but many factors that influence uptake are not controllable by researchers. Content, for example, cannot be said to be entirely controllable since it relates to the description or explanation of a reality that the researcher does not normally influence.[2] Other factors are even more strongly contextual, such as the 'novelty value' of the research findings (Ledermann 2012), which relates to the [in]consistency of findings with prevailing narratives and discourse among policymakers; and whether there is resistance or contestation towards the findings due to the sensitivity of the topics addressed. Context is unanimously recognised to be a crucial factor in determining use/uptake of [evaluation] research (Ledermann 2012, Weiss 1998, Weiss *et al.* 1980, 2005). Some of these contextual factors are pressure or demand for change, and the extent of demand for new ideas (by policymakers and society more generally) with which to conceptualise problems and solutions (Sarewitz and Pielke 2006).

### Factors potentially influencing 'advocacy uptake'

In the literature cited above, impact is mainly considered as direct influence on policymakers (uptake); however, policy uptake is itself influenced by the use of research findings by CSOs. A relevant phenomenon worthy of explanation is thus, 'advocacy uptake'. The potential determinants of uptake in these cases (as listed in Table 1) appear largely consistent with those mentioned above; however, some are specific to CSOs' internal dynamics. In this paper we make hypotheses on the factors leading to advocacy uptake and then test these using variants of two families of methods. The initial working theory to be tested assumes that the following factors lead to advocacy uptake.

**Table 1 Causal factors for policy influence and uptake**

| | Description | QCA notation for 'high' | QCA notation for 'low' |
|---|---|---|---|
| **Contexts:** difficult to change for researchers and donors | INTERNAL CONFLICT: different approaches to the same policy problem within the organisation | CONFL | confl |
| | CONTINUITY: recommendations are consistent with measures previously recommended by the organisation | PREV | prev |
| | DIRECT PERSONAL INFLUENCE: the research findings are disseminated within the organisation by a local 'champion' | CHAMP | champ |
| **Mechanisms:** under the control of the donor and research community | ACCESS to research | ACCESS | access |
| | QUALITY of research | QUAL | qual |
| | EXTERNAL PRESSURE to take a position on the issue (from donors and development community) | PRESS | press |
| **Outcome** | Research findings are used in advocacy efforts | UPTAKE | uptake |

- Access to research.

- Quality of research.

- Level of conflict within the organisation (whether there are different, conflicting approaches to the problem addressed by the research inside the organisation).

- Continuity: recommendations are consistent with measures previously advocated by the organisation.

- External pressure to take a position on the issue (by donors or the wider community).

- Direct personal influence: the research findings are disseminated within the organisation by a local 'champion'.

These factors can be categorised into contexts and mechanisms following a realist approach (Pawson and Tilley 1997, Room 2013, Befani *et al.* 2007). Contexts are conceptualised here as enduring conditions that are difficult to change by donors or researchers; while mechanisms as conditions are under the control of the donor and development research community.

The previous history of the organisation, its level of internal conflict and the presence of a local 'champion' within it who carries personal responsibility for disseminating and using the research findings can be considered contextual factors, since they are outside the control of the research and donor community. Conversely, the quality of research, access to it and the external pressure to take a position on the issue are categorised as mechanisms because the

degree of control that donors and researchers can exercise here is higher. Table 1 lists the causal factors in the working theory to be tested. The last two columns present the particular notation used in the QCA analysis: capital letters stand for 'presence of' or 'high level' and small letters stand for 'absence of' or 'low level'.

## Assessing the causal contribution of the different factors: correlation vs. combination

Data can be collected on the factors listed above on a number of organisations that are assumed to be potentially interested in a specific piece of research. This paper uses fictitious data on 40 cases[3] (see Annex), amongst which 16 are considered to be successful (research was used), and 24 unsuccessful (research was not used). Success and failure can be defined in several ways: they can be visible or invisible, progressive or regressive, intended or unintended, and immediate or long-term (Sumner *et al.* 2009). In addition, there might be different degrees of success or failure. The simplifications used in this paper are justified because the method illustrated is compatible with *any* definition of success or failure; moreover, even though the version presented here works with dichotomous[4] variables (referred to as 'conditions', – i.e. either success or failure), a variant of the same method can handle fuzzy datasets – i.e. data in the form of degree scales: this would make it possible to take account of degrees of success e.g. fully successful, mostly successful, neither successful nor unsuccessful, largely unsuccessful, etc. (see Ragin 2000; Schneider and Wagemann 2012).

## Table 2 Correlation of causal factors to research uptake

| | Description | Average differences between the successful and the unsuccessful cases | Correlation coefficients |
|---|---|---|---|
| **Contexts:** difficult to change for researchers and donors | INTERNAL CONFLICT (different approaches to the same policy problem within the organisation) | 0.2083 | 0.2041 |
| | CONTINUITY: recommendations are consistent with measures previously recommended by the organisation | -0.0833 | -0.0821 |
| | DIRECT PERSONAL INFLUENCE: the research findings are disseminated within the organisation by a local 'champion' | 0.2917 | 0.2872 |
| **Mechanisms:** under the control of the donor and research community | ACCESS to research | 0.5000 | 0.5345 |
| | QUALITY of research | 0.5833 | 0.5833 |
| | EXTERNAL PRESSURE to take a position on the issue (from donors and development community) | 0.5833 | 0.5833 |
| **Outcome** | Research findings are used in policy and / or advocacy efforts | 1 | 1 |

Before deciding how to analyse the data, it is important to think about how we conceptualise the causal contribution of the influencing factors.

### Independent factors that have an average influence on uptake

One way to think about the causal influence of the above-mentioned factors (internal conflict, continuity, personal influence, access, quality and external pressure) is to take each one separately and measure its correlation with the outcome. Because in this case the outcome is a dichotomous variable (i.e. either success or failure), a way to measure the correlation is to compare the average value of each single factor for the successful cases with the average value of the same factor for the unsuccessful cases. Table 2 lists the average differences between the successful and the unsuccessful cases and the correlation coefficients of the causal factors with uptake.

When taken as a single variable, continuity with previous work of the organisation seems to be irrelevant (correlation coefficient -0.08). Internal conflict and direct personal influence are also weakly correlated (0.20 and 0.29). The information we obtain from this kind of analysis is that the quality of research and the external pressure to take a position on the matter are the most relevant causal factors in policy uptake, with correlation coefficients of 0.58.

### Case studies allow us to see how factors combine to produce uptake

If the above findings were obtained from a real dataset, they would suggest that researchers should focus on research quality and the international community should increase pressure to take a position on the policy issue. We would be advised not to give importance to personal influence and the previous work of the organisation. One of the findings that would be harder to make sense of is the fact that access has a correlation of around 0.5, which means that it is neither strongly nor weakly correlated to uptake. But from basic logic we know that direct uptake is impossible if the stakeholders do not have access to the material; in other words, access is obviously a necessary condition for success[5], although of course it's not sufficient. Statistical methods that calculate averages do not identify necessary conditions.

More in-depth, case-study like investigation on the single cases would reveal that in all successful cases, the stakeholders at least have access to the research products (see Annex). This is because in case studies we see all potential causal factors in action simultaneously; we know what other causal factors they are combined with. See for example Case B in Table 3, if we isolate the row we can see all the values taken by the variables in the different columns. Conversely, in variable-based quantitative studies we isolate the variable columns from the cases and look at averages (see for example Variable 3 in Table 3, where we can see the values taken by the same variable across all cases). Case studies would thus be able to provide information about in what contexts/under what circumstances the different factors are more relevant, rather than returning a simple average.

The main critique towards case studies is their assumed inability to generalise findings. For example, if we look at each row in our dataset table (see Annex) separately, we

## Table 3 **The difference between case-based and variable-based approaches**

|  | Variable 1 | Variable 2 | Variable 3 | Variable 4 | Combination of all variables in one case |
|---|---|---|---|---|---|
| **Case A** | Variable 1 in case A | Variable 2 in case A | Variable 3 in case A | Variable 4 in case A | **Combination in case A** |
| **Case B** | Variable 1 in case B | Variable 2 in case B | Variable 3 in case B | Variable 4 in case B | **Combination in case B** |
| **Case C** | Variable 1 in case C | Variable 2 in case C | Variable 3 in case C | Variable 4 in case C | **Combination in case C** |
| **Case D** | Variable 1 in case D | Variable 2 in case D | Variable 3 in case D | Variable 4 in case D | **Combination in case D** |
| Average value of one variable in all cases | **Average of Variable 1** | **Average of Variable 2** | **Average of Variable 3** | **Average of Variable 4** |  |

run the risk of collecting 40 different cases that don't tell us much about the general trends.

**QCA: bringing together the best of both worlds**
Qualitative Comparative Analysis (QCA) is a method for systematic cross-case comparison introduced by Charles Ragin in 1987 (main textbooks are Rihoux & Ragin 2009 and Schneider and Wagemann 2012). Like other methods based on case studies, QCA analyses combinations of causal factors. However, unlike most case-based methods, QCA also attempts to generalise these combinations to groups of cases, identifying a limited number of pathways to the same outcome that apply to a small, medium, or large number of cases. By applying QCA to our dataset of 40 cases we discover that the two mechanisms of external pressure and research quality, rather than being 'the most important in general' are relevant or not depending on the context. In other words, QCA does not provide a measure of average causal influence, but tells us under what circumstances (in combination with what contextual factors) the mechanisms trigger the outcome.

The necessity analysis[6] immediately reveals that access is necessary for uptake: in all successful cases, stakeholders had access to the research products.

The sufficiency analysis[7], aimed at synthesising the paths, or the combinations of factors across successful cases, reveals the following (see Table 4a):

■ In the context of continuity with previous advocacy efforts and presence of a local champion, uptake takes place no matter the values taken by other conditions (first row, Table 4a)

■ In the context of continuity with previous advocacy efforts, external pressure to take a position is sufficient to trigger uptake (second row, Table 4a).

■ In the context of having a local champion who supports the measures recommended by the research, but with the research having 'novelty' value with regard to previous advocacy efforts, uptake is observed only if research quality is high (third row, Table 4a).

## Table 4a **Sufficient paths to success: what triggers uptake in which contexts?***

| Synthetic representation | | Description |
|---|---|---|
| PREV*CHAMP | => UPTAKE | In the context of continuity with previous advocacy efforts (PREV), direct personal influence (CHAMP) is sufficient to trigger research uptake |
| PREV*PRESS | => UPTAKE | In the context of continuity with previous advocacy efforts (PREV), external pressure to take a position (PRESS) is sufficient to trigger research uptake (even in the absence of a local champion). |
| prev*CHAMP*QUAL | => UPTAKE | In contexts with no previous history of advocating similar measures (prev), a local champion (CHAMP) and high-quality research (QUAL) are able trigger uptake |

*See Table 1 for an explanation of the QCA notation used in this table.

## Table 4b Sufficient paths to failure: what guarantees lack of uptake in which contexts?*

| Synthetic representation | | Description |
|---|---|---|
| prev*champ | => uptake | The combination of the two contextual factors unfavourable organisational history (prev) and lack of a local champion (champ) guarantee absence of uptake. |
| prev*CONFL*qual | => uptake | Unfavourable history (prev) is also sufficient when combined with low quality of research (qual) and high level of internal conflict (CONFL); having a local champion or not is irrelevant here. |
| PREV*champ*press*qual | => uptake | Where organisational history is favourable (PREV), we need a lethal combination of low pressure to take a position (press), low research quality (qual) and the absence of a local champion (champ) to guarantee absence of uptake. |

*See Table 1 for an explanation of the QCA notation used in this table.

Most of the above findings are reinforced by the sufficiency analysis of the unsuccessful cases (Table 4b), which identifies the following sufficient combinations for lack of uptake:

■ While the combination of two contextual factors (favourable organisational history and presence of a local champion) is sufficient for uptake; the combined absence of these two factors is also sufficient for failure, strengthening the evidence of their relevance (first row, Table 4b).

■ The combination of a favourable organisational history and a low level of internal conflict is not sufficient to produce research uptake, but their combined absence (unfavourable history and high level of conflict) is sufficient to guarantee absence of uptake when research quality is low (second row, Table 4b).

■ Even where organisational history is favourable, the lethal combination of low pressure to take a position, low research quality and the absence of a local champion guarantees absence of uptake (third row, Table 4b).

## Answering different impact questions: what different methods tell us

Calculating the correlation coefficient for the different factors allowed us to answer the questions: 'how much importance does each factor have, on average?' and 'is the single factor of little or high importance?' However, 'how much' is not the only question we might want to answer. We might also want to know how, why and under what circumstances each factor is important for the outcome. This helps in understanding when and under what circumstances uptake *will* take (Stern *et al* 2012). Knowing how much it happened in a specific time and place does not necessarily help. The statistical analysis showed that by itself, and on average, continuity with previous advocacy efforts does not make any difference (Table 2), but when

we look at what other factors continuity is combined with, its role becomes clearer: we discover that, although it doesn't trigger uptake by itself, it is a very important ground-preparing factor. In a context of continuity with previous advocacy efforts, in fact, two distinct factors (high pressure and a local champion) are indeed able to trigger uptake (Table 4a); while in a context of discontinuity one factor (lack of a local champion) and the combination of two others (internal conflict and low quality) guarantee lack of uptake (Table 4b).

Another mechanism that seems weakly correlated with the outcome, according to the statistical analysis, is the presence of a local champion with personal responsibility for disseminating the research findings (Table 2). By contrast, the QCA analysis shows that the latter factor is indeed a trigger of uptake in two different contexts: when the findings are consistent with previous advocacy efforts and also when they aren't, provided research quality is high (Table 4a). Moreover, the lack of a local champion is sufficient for lack of uptake when combined with unfavourable organisational history (Table 4b). Finally, the statistical analysis tells us that the level of internal organisational conflict is weakly correlated with the outcome (Table 2); but the QCA analysis shows that absence of conflict is an important ground-preparing factor, because when conflict is combined with low research quality and lack of continuity with previous advocacy efforts, it becomes sufficient to guarantee absence of uptake (Table 4b).

### Ground-preparing and triggering factors: discovering the role of contributory causes

Case studies allow us to see several causal factors at work simultaneously (Table 3); we understand that causes do not work in isolation, and each contributes to a causal package that produces the outcome. However, focusing on a single case study doesn't tell us what factors prepare the ground without producing the outcome; what factors

## Figure 1 Multiple Pathways to Research Uptake: the role of external pressure to take a position

Policy recommendations **consistent** with previous advocacy efforts

Policy recommendations **consistent** with previous advocacy efforts

**Presence** of a local champion

Policy recommendations **inconsistent** with previous advocacy efforts

**High** Research Quality

**Presence** of a local champion

⇩ ☺

⇩ 😐

⇩ 😐

Pressure **triggers uptake**

Pressure seemingly **irrelevant** (uptake happens anyway; **but prepares the ground** and matters in case other conditions disappear)

Pressure seemingly **irrelevant** (uptake happens anyway; **but prepares the ground** and matters in case other conditions disappear)

trigger the outcome while drawing on a 'ready ground' prepared by other factors; and what other ways the outcome could be produced (equifinality). In order to answer these questions we need to compare the case to other similar ones. The added value of QCA lies in untangling the similarities and differences between the cases, such as identifying different paths to the outcome (equifinality); and discovering what causal factors trigger the outcome under what conditions; and what conditions are needed for some causal factors to be activated (Befani 2013), applying in practice the theoretical framework of multiple conjunctural/configurational causality (Ragin 1989).

For example, if we look at the role of **external pressure** in contributing to research uptake (Fig 1), we notice that:

■ When external pressure combines with institutional continuity (PREV), it triggers uptake (second row of Table 4a and first part of Figure 1).

■ Although, as a single condition, external pressure is combined with both uptake and lack thereof, and is generally unable to trigger the outcome by itself, its presence is still important because its absence, combined with low research quality and absence of a

local champion, guarantees absence of uptake even in a context of organisational continuity (third row in Table 4b).

■ External pressure is thus an important ground-preparing factor and, when combined with institutional continuity, becomes a trigger for uptake.
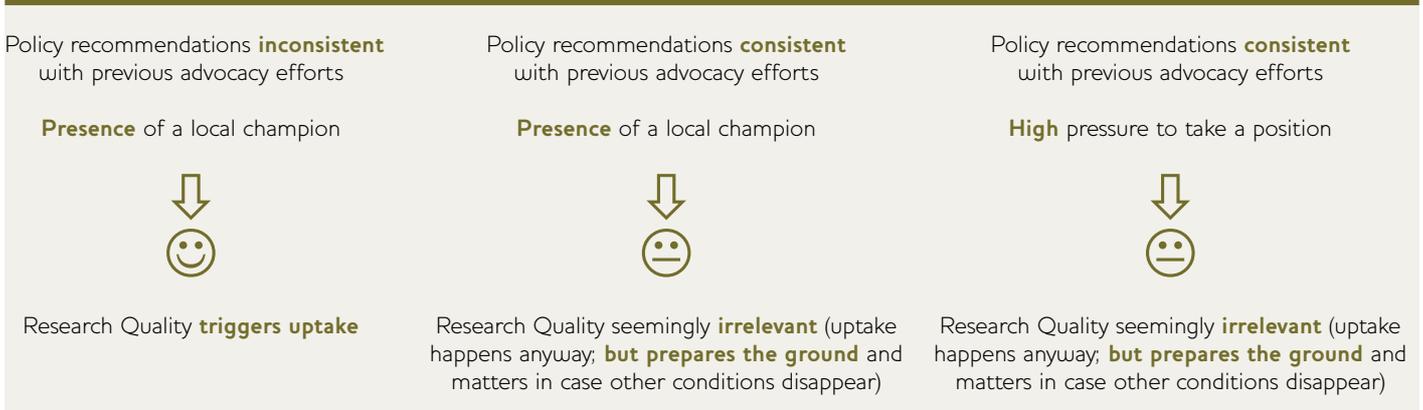
Similarly, if we want to understand the role of the **local champion**, we notice that:

■ Having a local champion triggers uptake when the organisational history is favourable (PREV), no matter the state of the other factors (first row in Table 4a and first figure in Figure 2).

■ Having a local champion also triggers uptake when the organisational history is unfavourable (prev), but only if research quality is high (QUAL) (third row in Table 4a, second figure in Figure 2).

■ In other situations, the local champion does not necessarily make the difference. However, it is still important since not having one guarantees lack of uptake in more than one context (Table 4b).

## Figure 2 Multiple Pathways to Research Uptake: the role of the local champion

Policy recommendations **consistent** with previous advocacy efforts

Policy recommendations **inconsistent** with previous advocacy efforts

**High** research quality

Policy recommendations **consistent** with previous advocacy efforts

**High** pressure to take a position

⇩ ☺

⇩ ☺

⇩ 😐

Local Champion **triggers uptake**

Local Champion **triggers uptake**

Local Champion seemingly **irrelevant** (uptake happens anyway; **but prepares the ground** and matters in case other conditions disappear)

## Figure 3 **Multiple Pathways to Research Uptake: the role of research quality**

| | | |
|---|---|---|
| Policy recommendations **inconsistent** with previous advocacy efforts | Policy recommendations **consistent** with previous advocacy efforts | Policy recommendations **consistent** with previous advocacy efforts |
| **Presence** of a local champion | **Presence** of a local champion | **High** pressure to take a position |
| ⇩ | ⇩ | ⇩ |
| ☺ | 😐 | 😐 |
| Research Quality **triggers uptake** | Research Quality seemingly **irrelevant** (uptake happens anyway; **but prepares the ground** and matters in case other conditions disappear) | Research Quality seemingly **irrelevant** (uptake happens anyway; **but prepares the ground** and matters in case other conditions disappear) |

Finally, if we look at the role of **research quality**:

■ Triggers uptake only when there is a local champion (CHAMP), and the novelty value of the findings is high (prev) (see first figure in Fig 3 and third row in Table 4a).

■ In those cases when institutional continuity (PREV) is combined with a local champion (CHAMP) or with external pressure (PRESS), uptake will happen anyway, no matter if research quality is high or low (see first and second row in Table 4a, and second and third figures in Fig 3).

■ However, even when it doesn't trigger uptake, research quality is still important as a ground-preparing factor, since low research quality can combine with the lack of a local champion (champ) and with low external pressure (press) to guarantee failure, even in the presence of a favourable institutional history (PREV) (row 3 in Table 4b).

### How did QCA do it and where is the counterfactual?

When assessing causal links between factors and an outcome, the traditional approach is to look for a counterfactual. QCA is indeed compatible with counterfactual analysis, but at the same time goes beyond it. The counterfactual logic is based on Mill's Method of Difference, where two almost identical cases that only differ in the outcome and in one cause are compared: if such cases can be found, then the one differing cause must explain the difference in the outcome, as all other causes are the same in the two cases (Befani 2012). In the dataset used for this paper (see Annex), such pairs of cases can be found and compared. However, while QCA is compatible with both Mill's Methods of Difference and Agreement[8] the type of causality QCA is based on, called 'multiple-conjunctural' or 'configurational' causality, is an extension of Mill's methods. 'Multiple' stands for equifinality, or the ability of different causes/pathways to produce the same effect; while 'conjunctural' refers to the ability to handle combinations and to have causal powers triggered or

inhibited by the context. None of Mill's Methods have these properties, and they also lack the ability to handle causal asymmetry[9] which QCA has (Befani 2013).

Figure 4 is a graphic representation of how QCA operationalises cases and conditions (De Meur and Rihoux 2002) obtained with the software *Tosmana*. Each bordered area represents a combination of conditions. The small rectangles with 0s and 1s in each area indicate which configuration the area represents (for example, '0,0,1,1,0' or '1,0,0,1,1'). The letters are the case identifiers: we have 40 cases, identified with the letter A to NN (see Annex), and each letter indicates which case is covered by which area (for example, the area '0,0,0,0,0' in the top left covers cases X and JJ).

The whole area is divided into smaller sub-areas. Each condition is assigned a macro-area: the right side (the area to the right of the central vertical axis) hosts the 'PREV' cases, or cases with a favourable institutional history, while the left side (the area to the left of the central vertical axis) hosts the cases with unfavourable history (prev). The lower side (at the bottom of the horizontal central axis) hosts the cases with a local champion (CHAMP), while the upper side, over the central horizontal axis, those that lack it (champ). The wide and short rectangle in the middle contains the cases with high external pressure (PRESS), while whatever is outside that rectangle has low external pressure (press). The tall and thin rectangle in the middle contains the cases with high internal conflict (CONFL) while all the cases outside that rectangle present low internal conflict (confl). Finally the cases inside either of the two other fat and short rectangles present high quality of research (QUAL), while all cases outside of those rectangles have low research quality (qual).

Each case takes a specific value on each of the five conditions, and so belongs to several macroareas at the same time: for example, case 'L', denoted with '1,0,1,0,0', is simultaneously: at the right of the vertical central axis (PREV), at the top of the central horizontal axis (champ), inside the PRESS rectangle, outside the CONFL rectangle, and outside the QUAL macro-area.

## Figure 4 Graphic representation of the dataset
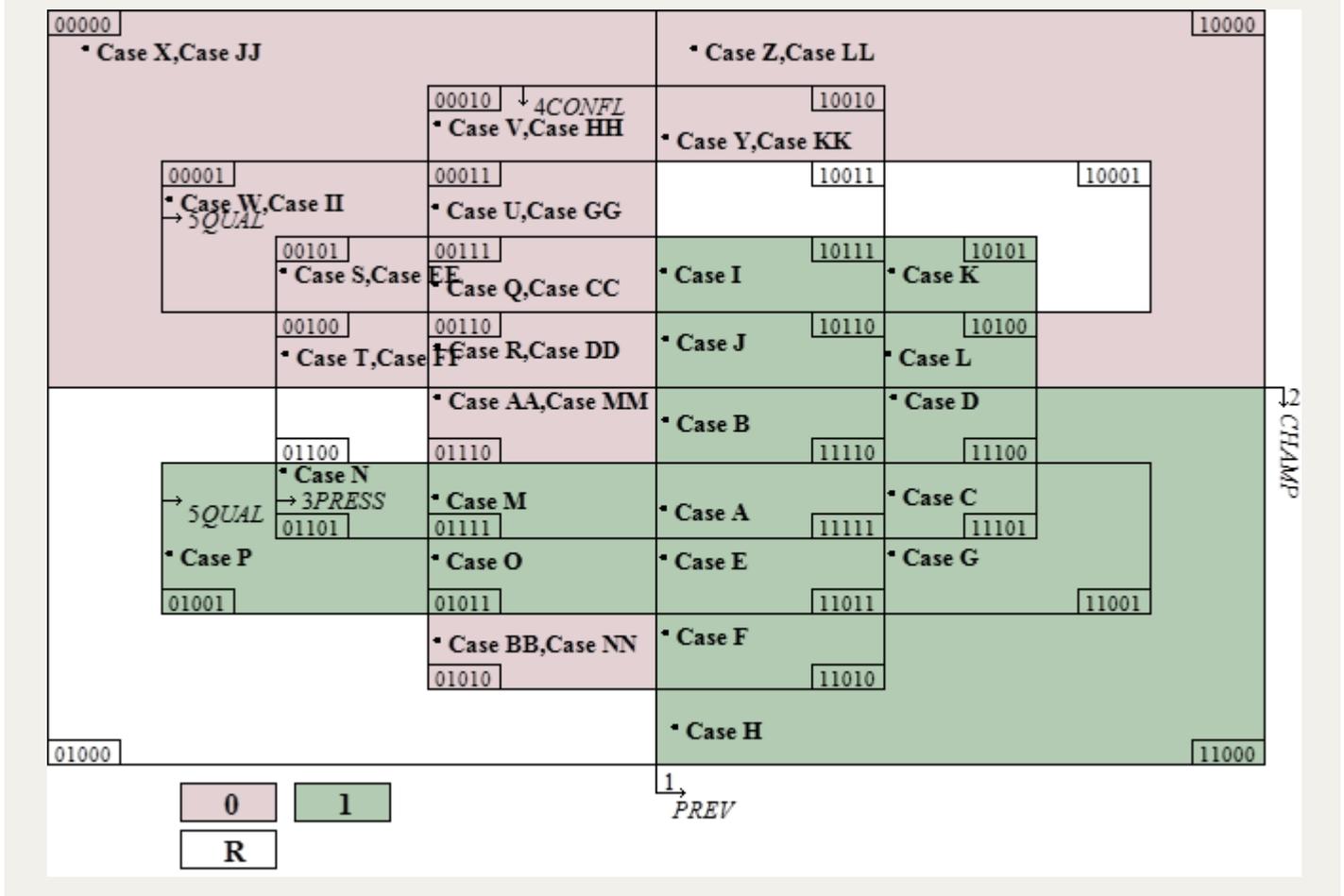


The cases where uptake has been observed are coloured in green, while the cases where uptake has not been observed are coloured in pink. The white areas (denoted as 'R' in the key) represent combinations for which no empirical case is available. Out of 32 possible combinations, or sequences of five zeros or ones, 28 are covered by empirical cases and four aren't. Sixteen combinations are associated with a positive outcome (uptake, the green areas) and 12 combinations are associated with a negative outcome (lack of uptake, the pink areas). No combination is contradictory – that is, associated with both negative and positive outcomes (the 'C' box in the key).

Graphically, QCA produces an overview of the cases. It looks at the 'bigger picture' from afar and notices whether the areas with the same colour (same outcome) form a macro area, or any intersection of a small number of macro areas, possibly two or three. For example:

■ The bottom-right area, corresponding to the sufficient combination PREV*CHAMP is completely green, which means that it is completely covered by successful cases. The bigger rectangle PREV*CHAMP is therefore a simpler, more parsimonious way to describe that group

of successful cases, because every case belonging to that area is successful. Instead of using the single cases, i.e. the small rectangles, we use the bigger area (the simpler configuration common to all the cases). The same can be said of prev*champ, or the top-left area, for lack of success (all cases are pink).

■ All cases on the right side of the PRESS large and short rectangle are successful, which means that PRESS*PREV is sufficient for success (as we had seen in the sections above).

■ Without a local champion (or, in the upper side of the area above the horizontal axis) uptake is quite rare as most of the area is coloured pink. It only takes place inside the PRESS rectangle and in addition on the right side of the area (PREV). Indeed, success without a local champion is only observed in PRESS*PREV contexts, when a favourable institutional history is combined with external pressure.

■ Finally, high quality is sufficient provided there is a local champion because, of the two high quality rectangles, only the one below, in the 'CHAMP' side, is fully covered by successful cases.

## Conclusions

Policy uptake takes place in a complex environment where different causal factors combine to facilitate or inhibit the use of research findings by policymakers and advocacy organisations. Measuring the average effect of these factors can return useful information; however in order to understand the mechanisms that trigger uptake and the circumstances under which they thrive, a more fine-grained approach is required. Case studies allow the untangling of complex causal relationships but – considered separately – are unsuitable for generalisation. A method like QCA that allows the systematic comparison of case study findings, combining refined explanations with limited generalisation, might be a viable alternative that brings together the best of qualitative and quantitative methods. The explanation would need to be restricted to combinations of conditions and thus might not reach the sophistication levels of explanations obtained through other approaches like process tracing or systems dynamics; and the generalisation might not reach the power of statistical procedures that can handle thousands of cases. However, a middle-range method that combines limited generalisation with moderately sophisticated explanation might still be a practical alternative when the trade-off between the explanation and generalisation has too high a price; that is, when we want to know both if an intervention worked, why it worked and under what circumstances it can be predicted to work best in the future.

## Table 5 Fictitious dataset used in the illustration

| Case ID | ACCESS | PREV | CHAMP | PRES | CONF | QUAL | UPTAKE |
|---------|--------|------|-------|------|------|------|--------|
| A | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| B | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| C | 1 | 1 | 1 | 1 | 0 | 1 | 1 |
| D | 1 | 1 | 1 | 1 | 0 | 0 | 1 |
| E | 1 | 1 | 1 | 0 | 1 | 1 | 1 |
| F | 1 | 1 | 1 | 0 | 1 | 0 | 1 |
| G | 1 | 1 | 1 | 0 | 0 | 1 | 1 |
| H | 1 | 1 | 1 | 0 | 0 | 0 | 1 |
| I | 1 | 1 | 0 | 1 | 1 | 1 | 1 |
| J | 1 | 1 | 0 | 1 | 1 | 0 | 1 |
| K | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| L | 1 | 1 | 0 | 1 | 0 | 0 | 1 |
| M | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| N | 1 | 0 | 1 | 1 | 0 | 1 | 1 |
| O | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| P | 1 | 0 | 1 | 0 | 0 | 1 | 1 |
| Q | 1 | 0 | 0 | 1 | 1 | 1 | 0 |
| R | 1 | 0 | 0 | 1 | 1 | 0 | 0 |
| S | 1 | 0 | 0 | 1 | 0 | 1 | 0 |
| T | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| U | 1 | 0 | 0 | 0 | 1 | 1 | 0 |
| V | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| W | 1 | 0 | 0 | 0 | 0 | 1 | 0 |
| X | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y | 1 | 1 | 0 | 0 | 1 | 0 | 0 |
| Z | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| AA | 1 | 0 | 1 | 1 | 1 | 0 | 0 |
| BB | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| CC | 0 | 0 | 0 | 1 | 1 | 1 | 0 |
| DD | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| EE | 0 | 0 | 0 | 1 | 0 | 1 | 0 |
| FF | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| GG | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| HH | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| II | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| JJ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| KK | 0 | 1 | 0 | 0 | 1 | 0 | 0 |
| LL | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| MM | 0 | 0 | 1 | 1 | 1 | 0 | 0 |
| NN | 0 | 0 | 1 | 0 | 1 | 0 | 0 |

## Notes

1  Research quality does not refer exclusively to academic quality, but also to relevance, credibility and communication; and whether research provided a solution to a problem. The 2003 ODI study highlighted the impact of participatory approaches, the value of pilot schemes that clearly demonstrate the importance of new policy options, the fact of having a clear communications and influencing strategy from the start, and of packaging the results in familiar concepts. It noted that, 'strenuous advocacy efforts were often required to convince policy-makers of the value of more theoretical research'.

2  except to some extent in some forms of action research.

3  The fictitious data were generated in a partially random process, with a few adjustments operated to simplify the illustration of findings.

4  A dichotomous variable is a variable that can only take 0 or 1 values; it signifies presence or absence of a condition.

5  We cannot claim that an actor has been directly influenced by a product if the actor did not have access to the product! Access is a pre-condition for direct influence, although of course it is not sufficient: the actor could be exposed to the product, perhaps get to know it well and still not use it or embrace its

recommendations. Statistical methods that calculate averages do not identify necessary conditions.

6  The necessity analysis is one of the procedures available in QCA and is aimed at understanding the necessary conditions for an outcome to occur. Broadly, this means that in the cases analysed, the outcome never occurs in the absence of those conditions.

7  The sufficiency analysis is one of the procedures available in QCA and is aimed at understanding what combinations of conditions are sufficient to produce an outcome. Broadly, this means that whenever the conditions are jointly observed, the outcome is also observed.

8  In Mill's Method of Agreement, cases presenting the same effect and the same cause while differing in all other possible causes are compared. If such cases exist, the one common cause must explain the common effect because all other causes differ among the cases (Befani 2012).

9  Causal asymmetry refers to the distinction between causal necessity and causal sufficiency: causes are not always necessary and sufficient for an effect; most of the times they are sufficient but not necessary, or necessary but not sufficient, or neither necessary nor sufficient (but still contribute to the effect).

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> " 'How much' is not the only question we might want to answer. We might also want to know how, why and under what circumstances each factor is important for the outcome. This helps in understanding when and under what circumstances uptake *will* take place in the future "

### Centre for Development Impact (CDI)

The Centre is a collaboration between IDS (www.ids.ac.uk) and ITAD (www.itad.com).

The Centre aims to contribute to innovation and excellence in the areas of impact assessment, evaluation and learning in development. The Centre's work is presently focused on:

(1) Exploring a broader range of evaluation designs and methods, and approaches to causal inference.
(2) Designing appropriate ways to assess the impact of complex interventions in challenging contexts.
(3) Better understanding the political dynamics and other factors in the evaluation process, including the use of evaluation evidence.