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A three-way approach to evaluating partnerships

Partnership survey, integration measure and social network analysis

An increasing number of initiatives are delivered through cross-sectoral or cross-jurisdictional partnerships. Methods to evaluate partnerships have also proliferated, but tend to focus only on particular aspects of partnerships. None alone provide a comprehensive picture of how a partnership is working. Working on commissioned evaluations of partnership initiatives, we have faced the challenge of selecting appropriate methods to gather information on partnership processes—from program or community-level partnerships to partnerships across the highest levels of government. While many partnership evaluations rely on analysis of participants’ views on how effectively the partnership works, more powerful evaluation demands methods to collect systematic quantifiable data on the actual behaviour of the partnership and how it changes over time.

We reviewed a number of quantitative methods for assessing partnership processes and outcomes. As a result, we have been adapting and trialling three data collection tools to assess different aspects of partnerships:

1. A partnership survey (adapted from the Nuffield Partnership Assessment Tool): to collect systematic feedback from participating stakeholders on key partnership dimensions.
2. An integration measure (based on the Human Services Integration Measure developed by Browne and colleagues in Canada): to assess the level of cooperation between participating partners.
3. Social network analysis (employing a sociocentric approach and analysing data using UCINET®): to collect information on interactions between individuals in the partnership.

We have found that the complementarity of these methods provides a robust and more complete picture of the processes and outcomes of partnership initiatives and can be used in combination with qualitative methods to enhance the robustness of partnership assessments.
Introduction

The rhetoric of ‘working in partnership’ has been a dominant discourse in 21st century policy design, health and human service provision in many developed countries around the world. It has been a particularly strong theme in public health and human service provision and international development (Asthana, Richardson & Halliday 2002; Bailey & Koney 2000).

The establishment of partnerships between sectors, services and organisations is a common requirement for many government and non-government initiatives to ensure these initiatives are run as efficiently as possible and benefits are shared widely across organisations. Frequently, supporting the concept of partnerships is the idea of working towards shared goals and achieving more together than can be achieved working separately. In Australia, this way of working was the underlying principle of the National Partnership Agreements that commenced in 2009, where the Commonwealth and state and territory governments agreed to work in partnership through a number of National Partnership Agreements to achieve common outcomes in the areas of homelessness, education, health care, workforce development, and Indigenous disadvantage (Council on Federal Financial Relations 2011).

The development of government-funded interventions with a partnership component brings challenges for evaluation. Requirements to evaluate these initiatives often come with an expectation that the impact of the partnership will be assessed—phrased in tender briefs, for example in terms of ‘impact on the service system’ or ‘the relative strengths and weaknesses of the partnership approach’. These partnership arrangements constitute a new object for evaluation, and pose some methodological challenges (Asthana, Richardson & Halliday 2002; Dowling, Powell & Glendinning 2004). Evaluators are seeking effective and practical methods for collecting data on the processes and outcomes of partnerships (Halliday, Asthana & Richardson 2004; Mandel & Keast 2007). While there are many examples of tools and methods for assessing partnerships, not all meet the needs of evaluators.

The first challenge in evaluating partnerships is agreeing on the terms, many of which have been used interchangeably. Most authors, however, refer to a continuum of partnership working that enables judgements to be made about the extent or degree that participating entities are working in partnership (Frey et al. 2006; Riggs et al. 2014). Terms used include ‘communicating’, ‘cooperating’, ‘networking’ and ‘collaborating’, but these can be positioned differently along the continuum. An agreement on the definition of the terms is needed so that there is a common understanding of the different ways in which partnerships might operate, and what features characterise the different degrees of partnership on the continuum (Dickinson 2006). Communication is frequently represented as the lowest level of partnership working, while collaboration is often the highest (Frey et al. 2006). Most continuums describe degrees or intensiveness of partnership that range from weak to strong, informal to formal, low to high integration, or other graded scales.

A second challenge is to identify at which level the partnership occurs and what are the practical implications. Whether a partnership is between two organisations or many, partnership generally occurs.
between ‘sections’ of each organisation, and the actual interactions occur between particular individuals in each organisation. Thus, interactions between people are an important dimension of how partnerships work (Bailey & Koney 2000; Gajda 2004). Partnerships that involve several layers of management and more than two large organisations are also more complicated to manage and evaluate than those between small numbers of local service organisations.

In addition, given that the goal of partnerships is to enhance productivity and outcomes through collaborative efforts, assessment of the extent to which a partnership has produced tangible outcomes—above what could have been achieved through organisations working separately—is also important.

Evaluators need methods to collect meaningful information about the most important aspects of partnership processes and outcomes. In reviewing existing approaches to partnership assessment, we realised that the methods tended to be unidimensional (e.g. either only at the overall partnership level or at the individual level) and relied on a single assessment tool that was not able to capture all the different dimensions of a partnership.

We therefore explored innovative but practical methods to provide more comprehensive and robust data about the processes and outcomes of partnerships. Our objective was to use methods that would capture interactions occurring between organisations and individuals in the partnership. The first step was to develop a conceptual framework representing the different dimensions of the partnerships being evaluated, so we could identify appropriate methods to capture all of these. This article describes our conceptual framework and how we combined three methods of partnership analysis. Our approach ensures sufficient data is available to make evaluative judgements about the success of partnerships.

**Approach and methods**

This section describes the process we undertook to identify an innovative and comprehensive approach to evaluating partnerships using a combination of three different methods.

In recent years, an increasing number of evaluations have been commissioned to evaluate programs involving partnerships—from very high-level intergovernmental partnerships to partnerships between small services. We worked from evaluation questions for such evaluation projects to focus our search for appropriate methods and tools for evaluating partnerships. We identified a need to assess the extent and quality of partnership working at different levels—between organisations, sections and individuals—and both processes and outcomes in order to make comprehensive evaluative judgements. We needed robust and systematic, but also pragmatic and feasible, methods. We reviewed a number of existing assessment tools and decided to combine three separate methods that examined the various aspects of a complicated partnership at all levels (see Figure 1). These include:

- a partnership survey that looks at the characteristics (design, governance, implementation and impact) of the overall partnership between organisations as perceived by organisations’ representatives (the overall shaded area)
- an integration measure that assesses cooperative interactions between sections (departments or programs) within the partner organisations that have some reason for working together (inner circles) (Browne et al. 2004)
- a social network analysis that provides insights into interactions between individuals within all partner organisations (dots).

Figure 1 is a visual representation of the conceptual framework used to identify appropriate methods to assess a partnership across all dimensions. It shows the type of interaction each method focuses on at different levels (identified by different colours), and illustrates the premise that the full picture of a partnership can only be achieved by combining the three methods. Our conceptualisation is consistent with the findings of other researchers, that partnerships between organisations are non-linear and multifaceted (Dickinson 2006; Kelly 2012).

We developed the partnership survey tool based on the Nuffield Partnership Assessment Tool (Hardy, Hudson & Waddington 2003) and the VicHealth (2011) Partnerships Analysis Tool. We modelled the tools used for the integration measure and the social network analysis on those used by other evaluators and researchers, with some adaptation to meet our needs. We collected data for each of the three tools through a common online platform.

Respondents are not necessarily the same across all three tools, as all partnership stakeholders do not have to take part in each of the three tools. While it is expected that the social network analysis will include all members of the partnership, the partnership assessment survey only involves key stakeholders that have a view on the overall partnership. The integration survey is tailored to respondents according to the organisation they are interacting with. These three data collection tools added robust quantitative data to qualitative data obtained from interviews with key partnership stakeholders.

We have used some of the methods separately in previous evaluations, but the complementarity of the methods means that they are very valuable when used together, particularly for complicated partnerships. The partnership survey collects the views of key stakeholders in the partnership to contribute to an overall assessment of how well the partnership is operating. The integration measure collects participants’ ratings on levels of
cooperation occurring between their organisation and each of the other participating organisations. The social network analysis measures and maps the interactions between all individuals in the partnership. A network is a more practical construct for envisaging the relationships between individuals when the overall partnership is between organisations.

As partnerships form and develop over time, multiple points of data collection are necessary to capture partnership processes. This can be built in when an evaluation commences early in the life of a project.

For ease of reading, we have structured this article around the three methods. The final section discusses overall implications of applying the three methods together. The article does not detail each method, but provides an overview of how each one can be applied to a partnership assessment, within a mixed methods approach alongside qualitative methods. The focus of this article is methodological, so it does not present actual results from applying these methods, but some example results are provided to demonstrate the data that the methods can generate.

**Partnership survey**

**The method and tool**

A review of available survey tools to assess partnerships identified that some are more suited to self-assessment to improve partnerships as they develop than to evaluation of partnership processes and outcomes. One often cited tool is the UK Nuffield Partnership Assessment Tool, which was based on extensive empirical research and has been adapted by other researchers (Halliday, Asthana & Richardson 2004). It was designed by the Nuffield Institute in 2003 to assess partnerships for local governments and has a focus on principles for successful partnerships at management level (Hardy, Hudson & Waddington 2003). In Australia, the Victorian Health Promotion Foundation developed a Partnerships Analysis Tool for partners in health promotion. The tool provides a convenient framework for describing the extent of cooperation between players as well as being a self-assessment tool and has been extensively used by evaluators in the health field (Riggs et al. 2014; VicHealth 2011). Another tool frequently mentioned is the very comprehensive Partnership Self-Assessment Tool developed by Weiss in 2002 for the Centre for the Advancement of Collaborative Strategies in Health and updated in 2010 (CACSH 2010).
Building on these tools, in particular the Nuffield and VicHealth tools, we developed our own partnership survey tool, in a shorter and simplified format to make it more usable in evaluation projects. Our partnership survey instrument covers four areas:

- the need for the partnership
- partnership governance
- the partnership in action: formal structures and informal processes
- the impact of the partnership.

The partnership assessment survey is only administered to key stakeholders who can formulate a view on the overall partnership. Respondents are asked to rate the extent to which they agree with specific statements related to each area. The survey can be paper-based or online (see Figure 2).

While the tool has not undergone reliability and validity testing, we have found it to be robust for assessing different types of partnerships (including cross-jurisdictional and cross-sectoral partnerships and partnerships in various sectors). Findings have been consistent with qualitative findings, such as interviews with the participating partners.

**Example of results**

Data collected from the partnership assessment survey allows evaluators to quantify the views of partners on the design and functioning of the partnership. In Figure 3, example data is used to show responses from a sample of questions from each section of the survey. In this example, it seems that there is room to improve partnership governance, that is, only a few respondents agreed that the scope of the partnership was clearly defined (17 per cent) and a quarter (26 per cent) tended to agree.

Repeated administration of the survey would help to identify any improvement in stakeholders’ views of the overall partnership over time.

**Integration measure**

**The method and tool**

The Human Services Integration Measure developed by Browne and colleagues in Canada provides systematic information about how the partnership works in practice between specific organisations, which is not captured by the partnership survey. The measure has been tested (Browne et al. 2004) and used in a number of studies.

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**FIGURE 2: EXAMPLE OF ARTD PARTNERSHIP SURVEY—GOVERNANCE SECTION OF THE ONLINE QUESTIONNAIRE**

**Partnership governance**

Please state how much you agree or disagree with each of the statements below.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Tend to agree</th>
<th>Tend to disagree</th>
<th>Disagree</th>
<th>Don’t know/ not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 Partners were involved in forming the vision and goals for the partnership</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Partners were involved in developing the working arrangements for the partnership</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 The scope or terms of reference for the partnership are clearly defined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Each partner’s roles and responsibilities are clearly defined</td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>11 The partnership can demonstrate or document the outcomes of its collective work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 The partnership reviews and refines the working arrangements when necessary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments</td>
<td></td>
<td></td>
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</tbody>
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across a range of sectors, such as health and homelessness (Ye et al. 2012). We adapted the definitions used in the scale to assess the level of cooperation between organisations (see Table 1).

The integration measure collects data through two questions using the five-point cooperation scale:

- To what extent is your organisation cooperating with the following organisation?
- To what extent would you like your organisation to cooperate with the following organisation?

These questions are asked for each organisation the respondent is cooperating with as part of the partnership, according to its role in the partnership. The measure creates an integration score by quantifying the gap between the observed and the expected level of integration. This is similar to approaches used in marketing where the gap between the expected performance and the perceived experience is a measure of customer satisfaction. The difference between desired and current levels of cooperation has been used in other

<table>
<thead>
<tr>
<th>Code</th>
<th>Level of cooperation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No awareness</td>
<td>We are <em>not aware</em> of approaches by the equivalent program team in the other organisation</td>
</tr>
<tr>
<td>1</td>
<td>Awareness</td>
<td>We are <em>aware of</em> approaches by the equivalent program team in the other organisation, but organise our activities solely on the basis of our own objectives, materials and resources</td>
</tr>
<tr>
<td>2</td>
<td>Communication</td>
<td>We actively <em>share information</em> (formally or informally) with the equivalent program team in the other organisation</td>
</tr>
<tr>
<td>3</td>
<td>Coordination</td>
<td>We <em>work together</em> by modifying program planning and delivery to take into account methods, materials and timing of the equivalent program team in the other organisation</td>
</tr>
<tr>
<td>4</td>
<td>Collaboration</td>
<td>We <em>jointly</em> plan and deliver key aspects of our program with the other organisation with the aim of an integrated approach</td>
</tr>
</tbody>
</table>

Source: Adapted from the Human Services Integration Measure (Browne et al. 2004).
partnership assessment tools, such as the Strategic Alliance Formative Assessment Rubric (SAFAR) (Gadja 2004).

Our adapted survey instrument also included additional questions to collect systematic data about the type of activities undertaken between organisations. This consisted of a list of predefined activities to tick if undertaken (e.g. sharing background research information, models and/or tools, coordinating timing and/or content of delivery activities) and an open-ended question for respondents to provide examples of cooperation activities (qualitative data).

Example of results
Based on the data collected, an observed and an expected cooperation score for each organisation are calculated according to group ratings (other organisations’ ratings of the cooperation level with this organisation).

An example of results is presented in Figure 4. In this case, the overall perception of the partner organisations (O1 to O10) is that they are working around the level of communication, edging towards coordination. There is a clear gap between expected and observed cooperation for O3, O4 and to a lesser extent O2, as perceived by others, which indicates areas for improvement in future partnership activities. Conversely, stakeholders perceive their level of cooperation with O5 as being at the expected level. Collecting the same data at later time points would help to measure any change in the level of cooperation over time.

Social network analysis
The method and tool
We identified the need for a method to describe the interactions between individuals in a partnership because the other methods provide information at the organisation level but not between individuals. The strength of relationships between individuals is clearly an important component of successful relationships, but so is the role that particular individuals play within a network or partnership. We therefore decided to use social network analysis techniques, a method for collecting and analysing data about the relationships between people, groups, organisations, computers and other connected entities (Hinds & McGrath 2006). The whole set of relationships forms the network and the nodes represent the people or other entities that are connected through ties that show relationships or flows between them. When applied to partnerships and cooperation networks, this method can identify patterns of interaction between stakeholders as well as brokers and information bottlenecks. It also provides an overview of the network as a whole—whether it is centralised or decentralised with various subgroups—and how it evolves over time.

FIGURE 4: EXAMPLE OF OBSERVED AND EXPECTED COOPERATION SCORES BY ORGANISATION (O1 TO O10)
A sociocentric (or whole network) approach appears to be more appropriate to social network analysis for partnership evaluations: it focuses on interactions between individuals from an overall network perspective, in the context of a network that is already defined (Chung, Hossain & Davis 2005). In a sociocentric approach, social network analysis data collection is most commonly organised through a survey addressed to all members of the network. The survey commences by listing the names of stakeholders involved in the network: a name generator with a pre-populated list of names and the opportunity for the respondent to add new names. Respondents then identify who they know and answer questions about their interactions with those network members. Subsequent questions are about the number and types of interactions (e.g. face-to-face, phone, email or other medium) with stakeholders selected in the name generator. Additional questions can include whether the reported level of interaction is considered as typical, how long they have known the individual and how well they know them. These qualifiers can be used as dependent variables in the statistical analysis.

Respondents, as well as stakeholders identified by respondents, constitute the nodes of the network in the analysis. The ties indicate interactions between stakeholders. Because interactions are reported from one stakeholder to another, the data is directional.

Example of results
Social network analysis provides quantitative data and a visual representation of how individuals within the partnership are working together. We use the software UCINET to conduct our analyses and NetDraw to represent the network visually. These tools have been developed specifically for the purpose of conducting social network analysis. Figure 5 is a sociogram produced from NetDraw that provides an example of a visual representation of a network based on social network analysis data.

This example provides some interesting preliminary insights. The overall network has higher density interactions at the centre. A few stakeholders are playing a broker role allowing the network to reach out to stakeholders located at the periphery of the network, but this can also increase the risk of bottlenecks developing.

Social network analysis also provides other tools to better understand the structural patterns of the network and the roles played by individuals, in the form of key metrics, in particular:
- network measures: density that explains the general level of interconnectedness, and centralisation that

FIGURE 5: EXAMPLE OF A SOCIOGRAM CREATED FROM INDIVIDUAL INTERACTION DATA
and behaviours (Kelly 2012).

These provide a way to test hypotheses in the form of correlations with qualifier variables, such as stakeholders in their role for a longer time are more likely to play a central role in the network (a high level of centrality).

Discussion and conclusions

Our experience with applying these three methods in combination is that it substantially enhances the methodological robustness of partnership evaluations. We selected the three methods—partnership survey, integration measure and social network analysis—to reflect three dimensions of the partnership: overall partnership arrangements, cooperation between organisations, and interactions between individuals. Some partnership assessment tools include interactions between organisations and between individuals as if they were the same thing, which can lead to rather complicated ‘pictures’ and difficulty interpreting the level of collaboration (Frey et al. 2006). Our approach considers these dimensions through separate methods, thereby addressing the multifaceted and complex nature of relationships between organisations, and reducing the risk of confusion between perceptions and behaviours (Kelly 2012).

By including data about what is actually shared between organisations and the behaviour of individuals, it ‘objectivises’ what could be an otherwise abstract and subjective assessment.

This approach sits within the tradition of mixed methods research, being primarily quantitative with qualitative data as supplementary (Patton 2008). Various metaphors are used in the literature to describe the benefits of integrated analysis in mixed methods research (Bazeley 2010). Some of them are particularly appropriate in this context. First, the three methods are combined ‘for completion’, with each method providing data at a different level (overall partnership, organisation and individual) to complete an image. Second, the three proposed methods are combined ‘for enhancement’. One method can identify something that could be explored through other method(s) to reach a better understanding. For example, in cases where the integration measure shows lower than expected levels of cooperation, the social network analysis can provide supporting evidence that some important players are peripheral in the network and need to be more engaged. Finally, the various methods are combined as ‘pointers to a more significant whole’.

The most commonly used mixed method metaphor in this regard is triangulation, where at least two types and three sources of information are required. These requirements are met in our three-way approach, which should lead to more accurate and credible partnership assessments.

Decisions about using the three-way approach to assess a partnership should consider: the stage or maturity of the partnership; who contributes to the assessment; whether the assessment is designed to measure the process of partnership working or the outcomes; and who will use the results and how they will be used. Other practical factors such as the scale of the partnership, the evaluation budget and scope will also influence the choice of methods.

While combining these three quantitative methods clearly has the potential to enhance the assessment of a partnership, we believe they should be complemented by qualitative methods that allow more in-depth exploration of findings. This is consistent with the findings of other reviews of partnership evaluation (Halliday, Asthana & Richardson 2004; Riggs et al. 2014). Interviews or focus groups can gather valuable information about underlying mechanisms, perceptions of what works for whom, experiences of difficulties and suggestions for improvement, which can in turn inform further exploration of the quantitative data.

Partnerships will continue to be a focus of many government and non-government programs into the future, so the need to implement comprehensive and defensible data collection methods to evaluate the range of partnership processes and outcomes will become increasingly important. Ultimately, our three-way approach should enhance the ability of evaluators to assess the effectiveness of partnerships, identify key characteristics of successful partnerships, and provide valuable recommendations for how partnerships can be improved.

Note

1 UCINET is a software package developed in 2002 by academics Lin Freeman, Martin Everett and Steve Borgatti for the analysis of social network data (Borgatti, SF Everett, MG & Freeman, LC 2002). It comes with NetDraw, a network visualisation tool.

References


