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Evaluating the outcomes of co-production in local government

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ABSTRACT

New Public Governance assumes that co-production leads to beneficial outcomes, such as increased efficiency and better citizen well-being. However, few empirical studies have documented these outcomes, and some have demonstrated that the assumed outcomes do not emerge. This study establishes that co-production is a complex, social phenomenon, which implies that there cannot be a clear cause-effect relationship between co-production activities and their outcomes. To qualify and enable further empirical investigation of the outcomes of co-production, the study proposes that contribution analysis should be applied as an appropriate evaluation paradigm to theoretically reduce complexity and define a generic programme theory for co-production. The study also discusses how the creation and operationalisation of a local co-production programme theory can take place to evaluate the relationship between co-production initiatives and outcomes on a localised level. Finally, directions are provided for how the outcomes of co-production can be co-evaluated with citizens.

KEYWORDS Co-production; co-evaluation; programme theory; effects; outcomes

Introduction

A shift from New Public Management to New Public Governance has emerged in many European countries (Verhoest et al. 2010). In Denmark, this tendency is evident: a recent study showed that local governments' focus on citizen involvement in public service delivery has increased by 64.8% since 2013 (Reiermann 2017). The changing role of citizens from clients or customers to co-producers greatly affects how present and future local governments will be designed, re-designed, and managed (Levy 2010; Nabatchi, Sancino, and Sicilia 2017; Audenaert et al. 2019; Mortensen, Brix, and Krogstrup, forthcoming). In this vein, the view of citizens as resources has made co-production a popular concept in the public sector, with the concept spreading to become a new organisational 'recipe' (Røvik 2010) that in some sense serves as a break in tradition with the New Public Management regime

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and thus as a response to the transformation challenge. The importance of co-production as a recipe for public governance was manifested in 2011 by the OECD report, *Together for better public service – Partnering with citizens and civil society* (OECD 2011). Meanwhile, the arguments that support such a move towards co-production are well known: New Public Management has lowered cost structures, and the proverbial 'low-hanging fruits' of this work have been harvested (Hood and Dixon 2013; Gouillart and Hallett 2015; Brandsen, Verschuere, and Steen 2018). Furthermore, Hood and Dixon (2013) concluded that some NPM tools that have been trusted and implemented did not deliver the expected outcomes. Paradoxically, co-production is currently being implemented in public organisations even though few empirical studies have determined the immediate and long-term outcomes of co-production initiatives (Loeffler 2009; Voorberg, Bekkers, and Tummers 2015; Durose et al. 2015; Kleinhans 2017). The objectives for implementing co-production are often not explicitly formalised (Voorberg, Bekkers, and Tummers 2015), and therefore it is difficult to evaluate whether the anticipated outcomes are met. Hence, the lack of focus on defining clear outcome indicators and evaluating these suggests that co-production is considered to be of implicit value for organisations adopting this new recipe.

This study examines the main challenge pertaining to evaluating the outcomes of co-production. It has been established that co-production is a complex, social phenomenon and that the complexity of co-production initiatives thus has logical implications for how their outcomes can be evaluated (Funnell and Rogers 2011). In this context, this study discusses how a local programme theory for co-production can serve as an informational foundation for how co-production processes contribute to the outcomes of such projects (Patton 2012; King and Stevahn 2013; Durose et al. 2015). The goal of the study is hence to propose a generic programme theory for co-production, based on the extant literature, and to provide recommendations on how this generalised theory can be operationalised in such way that local co-production initiatives are linked with their theoretically anticipated outcomes.

The study proceeds as follows. First, the concept of co-production is discussed to identify the current knowledge concerning its outcomes. Thereafter, criteria are framed for selecting an appropriate evaluation approach to study the outcomes of co-production. Next, the study proposes a generic co-production programme theory that can be operationalised into local co-production practices so that outcomes can be evaluated. Finally, attention is given to how citizens can experience an active role as co-evaluators.

Co-production definitions and outcomes

There is an ongoing debate over what should be included under the co-production construct (Voorberg, Bekkers, and Tummers 2015; Vanleene,

Verschuere, and Voets 2015; Brandsen, Verschuere, and Steen 2018), and the elasticity of the term has been described as both its limitation and strength (Durose et al. 2015). The concept of co-production was originally developed by Elinor Ostrom and her research group in the 1970s to describe the empirical phenomena of citizens contributing to the production of public goods and services (Ostrom et al. 1978; Van Eijk, Steen, and Verschuere 2017). Ostrom defines co-production as ' … the potential relationships that could exist between the "regular" producer (street-level police officers, schoolteachers, or health workers) and "clients" who want to be transformed into safer, better educated, educated, or healthier persons' (1996, 1079). Inspired by Ostrom, co-production literature has evolved around the potential relationship between citizens and frontline staff. Parks et al. (1981, x) defined co-production as ' … the mix of activities that both public service agents and citizens contribute to the provision of public services. The former are involved as professionals, or "regular producers", while "citizen production" is based on voluntary efforts by individuals and groups to enhance the quality and/or quantity of the services they use'.

Ostrom et al.'s (1978) and Parks et al.'s (1981) definitions are broad and are built on the premise that most services cannot be delivered without some compliance from their 'receiving' citizens (Durose et al. 2015). Bovaird and Loeffler (2012) criticised the term co-production for being too theoretical to be of use in the practical world of public services, asking, 'Which services are not co-produced?' Different scholars have responded to this criticism by creating typologies and further definitions to set boundaries for co-production. Needham and Carr (2009) and Boyle and Harris (2009) emphasised the importance of power-sharing and suggested that co-production is conditioned by citizens having real decision-making power. Needham and Carr stated that co-production at its most effective ' … requires a relocation of power and control, through the development of new user-led mechanisms of planning, delivery, management and governance' (2009, 6). However, Bovaird and Loeffler argued that citizens' participation in the provision phase is not enough to have a 'fully' co-produced service, and that, for co-production to occur, citizens must also have a high commissioning level (Bovaird and Loeffler 2012). Thus, there are multiple perspectives on what co-production is, and this plurality led Pestoff (2019) to suggest that an all-inclusive definition would not, in fact, make sense. Instead, he proposed an alternative view by framing three 'schools of co-production': the 'Input-output school', the 'Value-chain school', and the 'Public value creation school' (see, e.g., 163–166).

The present study supports Pestoff's argument that a generic definition of co-production is unnecessary, and proposes that, regarding the evaluation of co-production outcomes, the question should be whether the outcomes logically and empirically can be connected to activities that can be defined as co-production (Chen 1990; Pawson and Tilley 1997). In other words, this

study does not consider it essential that co-production does not have a common theoretical definition, but rather proposes that co-production is defined in the local context and will take different forms depending on this context (Loeffler and Bovaird 2018). However, minimum criteria comprising a transparent and explicit account of how and why activities are defined as co-production is provided.

Proposed outcomes of co-production: five rationales

Scant empirical studies have reported on the outcomes of co-production (Voorberg, Bekkers, and Tummers 2015; Loeffler and Bovaird, forthcoming). A review by Voorberg, Bekkers, and Tummers (2015) determined that 80% of the studies labelling themselves as addressing co-production did not focus on the outcomes of co-production. The types of outcomes identified by Voorberg, Bekkers, and Tummers (2015) concerned documenting the changes in effectiveness (Baars 2011) or increases in service quality (Leone et al. 2012). Bovaird and Loeffler (2012) presented seven cases of how co-production, as proxied by co-planning, has led to increased value for citizens as co-producers and how co-design with citizens has resulted in cost savings for public organisations.

According to Vanleene, Verschuere, and Voets (2015), the outcomes of co-production can be divided into different clusters. Building on this idea, the following five rationales are identified by the present study as overall outcomes that represent the logic for adopting co-production as an organisational recipe (Mortensen, forthcoming): 'realisation of innovation potential' (Pestoff and Brandsen 2010; Osborne, McLaughlin, and Chew 2008; Lindsay, Osborne, and Bond 2014; Osborne, Radnor, and Strokosch 2016), 'better individual well-being and citizen empowerment' (Jo and Nabatchi 2018; Needham 2008; Bovaird and Loeffler 2012), 'increased effectiveness and efficiency' (Vanleene, Verschuere, and Voets 2015), 'mobilisation of resources' (Bovaird 2007; Loeffler and Bovaird, forthcoming), and 'increased democracy' (Verschuere et al. 2018; Pestoff 2009; Vanleene, Verschuere, and Voets 2015). These rationales do not represent a comprehensive list but draw on the different theoretical arguments for co-production in the public sector (Pestoff 2019).

One of the challenges of evaluating the outcomes of co-production is its multi-faceted application and different rationales within different disciplines, such as volunteering, health and social work, urban and rural development, and cultural consumption (Voorberg, Bekkers, and Tummers 2015; Brandsen, Verschuere, and Steen 2018). Each discipline shapes and defines the co-production concept and offers different outlines of it (Verschuere et al. 2018), which implies that co-production outcomes will differ from discipline to discipline and from context to context and that comparing the outcomes

of different co-production initiatives will present difficulties (Brandsen and Honingh 2016).

Local contexts as framing conditions for outcome evaluation

Rather than basing evaluation methodologies on the manifold theoretical abstractions of co-production where 'progress has been hampered by conceptual fuzziness and a lack of comparability between existing data' (Brandsen and Honingh 2016, 433), it has been argued that views on co-production evaluation should be inverted and based on the local contexts in which co-production activities occur (Durose et al. 2015; Krogstrup and Mortensen 2017). Currently, co-production is a generally accepted organisational system, but until this system can be translated and adopted in local contexts, co-production will remain more representative of an ideology than a concrete organisational process (Røvik 2010). By referring to these local contexts of co-production, it is possible to define a relevant evaluation methodology that enables the creation of new knowledge concerning the functioning and non-functioning mechanisms that lead to desired outcomes (Chen 1990; Pawson and Tilley 1997; Voorberg, Bekkers, and Tummers 2015; Nabatchi, Sancino, and Sicilia 2017).

In this regard, scholars have conceptualised co-production contexts by dividing the process into researchable typologies by differentiating among the varied types and degrees of interactions between citizens and public service providers (see, e.g., Bovaird and Loeffler 2012; Van Kleef and Van Eijk 2016). Van Kleef and Van Eijk (2016) stressed the importance of the temporal dimension, questioning whether co-production activity is based on long-term relationships or ad hoc activities. Moreover, they focused on the scope of such activity and enquired whether it is a collective (entire community), group, or individual co-production process. Brandsen and Honingh (2016) stressed that citizen involvement in co-production activities can differ not only because of their incentive to participate but also because of the service being co-produced. Hence, the extent of the activities in a co-production process can be determined by several factors, including local rules, organisational culture, and national legislation (Mortensen et al., forthcoming).

Co-production as a complex, social phenomenon

Co-production can be recognised by three characteristics relevant to the formulation of evaluation methodologies. Firstly, many stakeholders are involved in the co-production process (e.g., citizens, municipal employees, NGOs), and this process constantly emerges and changes as interaction occurs between them. Secondly, co-production is not limited to a specific context, but rather the processes can take place as sequences of interactions and/or simultaneous interactions occurring in different contexts, for example, across administrative or organisational boundaries. Consequently, multiple

variables can influence the co-production process, which leads to the third characteristic, that is, the lack of an unambiguous, context-independent causal relationship between co-production interventions and their outcomes (Funnell and Rogers 2011; Patton 2012). Hence, co-production can be framed as a 'complex, social phenomenon' (Funnell and Rogers 2011).

Linking co-production to evaluation research

When evaluating outcomes, a classical dichotomy is often made between 'attribution analysis' and 'contribution analysis'. Attribution analysis assesses to what extent a given intervention can be attributed to the outcome and which variable caused this outcome (in other words, a randomised controlled trial [RCT] perspective) (McDavid, Huse, and Hawthorn 2013). In attribution analysis, problems are treated as simple and technical, and, therefore, attribution analysis is unsuitable for the evaluation of the outcomes of complex programmes such as co-production that consist of multiple interacting variables (Patton 2012; Krogstrup and Brix 2019). Hence, it has been stressed that the attribution analysis paradigm does not efficiently apply to the criteria for evaluating the outcomes of co-production since co-production is a social, complex phenomenon (see, e.g., Durose et al. 2015). Instead, this study suggests that co-production evaluation should be based on contribution analysis, which is an approach that addresses cause-effect questions using theory-based evaluation to infer causation (Chen 1990; Pawson and Tilley 1997; Leeuw 2012). The key questions in contribution evaluations deal with 1) whether the intervention has made any difference for the subject; 2) to what degree the intervention influenced the observed results; and 3) the qualities of the contribution. A contribution analysis produces a 'contribution story' (Funnell and Rogers 2011), a part of which explains the behavioural changes that the intended beneficiaries have made as a result of the intervention (Patton 2012). Notably, a contribution story does not represent the ultimate truth, rather, the results must be regarded as a sufficient conclusion concerning the extent – and the reason(s) why – the co-production intervention has contributed to a given outcome (Chen 1990; Dahler-Larsen 2018). To enable the evaluation of such outcomes, a programme theory can be used (Leeuw 2012).

Discussion

Defining a generic programme theory for co-production

A programme theory is a hypothesis of how interventions can contribute to generate an outcome, not as a universal law but depending on how the context triggers the generative mechanism (Chen 1990). Therefore, the definition of a generic co-production programme theory can enable the

translation from current research to local contexts, with the aim of providing an analytical framework that can be used to define, develop, and evaluate local co-production initiatives (Funnell and Rogers 2011; Rolfe 2016). The generic programme theory developed here is based on the theoretical assumptions related to co-production and, as such, represents a framework of guiding principles for the evaluator responsible for local operationalisation. This generic programme theory is thus context-independent but becomes context-dependent when being operationalised locally. Figure 1 suggests a generic co-production programme theory that can be translated locally to define, organise, and evaluate local co-production initiatives.

The generic programme theory was drawn as a linear model following a programme theory template. According to Patton (2012), such clear, logical thinking is imperative when developing a programme theory to create a comprehensible logic between an intervention strategy and its outcomes. However, co-production represents processes performed by active agents who respond to – and learn from – changes as they emerge (Barnes, Matka, and Sullivan 2003); thus, drawing a co-production process as it emerges in real life in a programme theory would require a complex, interactive model full of iterations and feedback loops.

Operationalising the generic programme theory into local co-production practices

The defining of a local programme theory highlights existing assumptions concerning the link between activities and outcomes, and, more importantly, identifies the changes required to achieve the anticipated outcomes (Chen

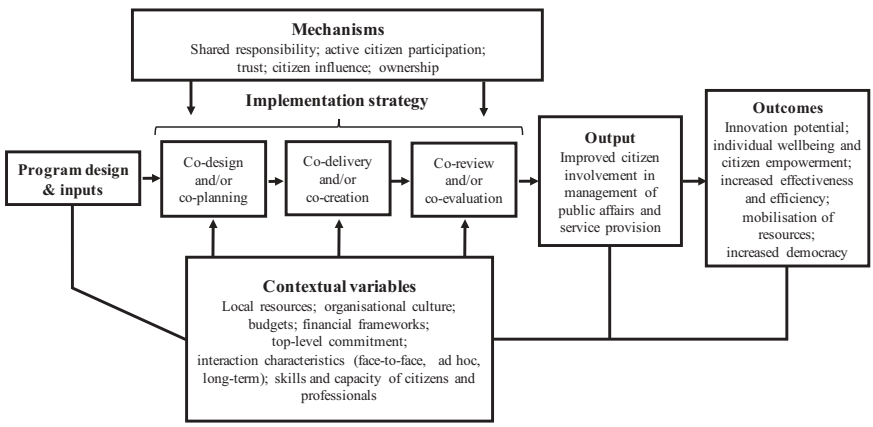

Figure 1. Generic programme theory for co-production.
Source: Authors' own development

1990). When operationalising the generic co-production programme theory into a locally focused theory for co-production, the following components should be addressed: 1) Which of the five co-production rationales guide local action (outcomes), and which associated problem is expected to be solved? 2) What is the local co-production intervention strategy and how is it expected to lead to the outcomes? 3) What are the expected influencing contextual variables on the co-production process? And 4) What are the mechanisms that trigger the outcome(s)? These components are addressed in the following sections.

Operationalising outcomes: a generic outcome chain for co-production

Based on the co-production literature reviewed above, Table 1 summarises and expands the assumed outcomes, which are divided into the five aforementioned rationales: a) realisation of innovation potential, b) improvement of individual well-being and empowerment of citizens, c) increase in effectiveness and efficiency, d) mobilisation of resources, and e) increase in democracy. The local outcome chain has to be operationalised when defining the local programme theory, and thus clear evaluation indicators are created based on these five rationales. These indicators provide a basis for determining how well or to what degree the co-production outcomes have been attained: for example, via questions such as 'Which changes should we look after in two months to assess if progress has been made?' and 'Which questions should we ask you in three months to evaluate if the process is working as intended?'.

Table 1 represents the outcome chain of this study's generic co-production programme theory. A local operationalisation of the generic programme theory will need to focus on one or a few of these rationales and also consider whether an intervention builds on multiple, co-existing rationales. For example, a co-production project matching two people with disabilities that are able to help each other and take part in activities of mutual interest (the intervention) could primarily focus on creating outcomes of 'individual well-being' by preventing social isolation (rationale B). In a Danish context, such an intervention could also have an economic outcome by mobilising resources of the people with disabilities to help each other with social activities, for example, accompanying each other to the cinema instead of receiving government help to make the trip (rationale D). This example illustrates that two or more rationales can co-exist in the same co-production initiative (Mortensen, forthcoming). A method of managing this complex task involves breaking down the programme theory into manageable and definable sub-theories on a local level, which can then be pursued as partial pieces of the co-production puzzle (Pawson 2006; Funnell and Rogers 2011). In this regard, it is imperative that outcomes (rationales) be explicitly operationalised into local indicators that can be logically linked to the intervention strategy

Table 1. Co-production outcome chain.

	Main output	Short-term outcomes	Medium-term outcomes	Long-term outcomes	Impact
Innovation potential	Increase collaboration, e.g., interdisciplinary networks, public-private partnerships.	Integration of different perspectives and needs. Enhancing the chances of understanding the complexity of societal problems and identifying sustainable solutions through collaboration.	Implementation of initiatives suitable for dealing with complex, societal problems.	Deployment of new sustainable methods of organising public services. Break down silo thinking.	Increase public innovation.
Individual well-being and citizen empowerment	New roles and interaction. Distribution of responsibilities and power in service provision.	Developing new knowledge and skills (both professionals and citizens). Higher degree of citizen involvement.	Citizens actively participate in service delivery and become co-deciders. Improved utilisation of citizen resources.	Higher citizen independence and self-esteem.	Individual well-being.
Efficiency and effectiveness	Listening to citizens to understand their needs in correlation with public services.	Creating services that match citizens' needs. Reducing service failures and improving the targeting of services.	Improved citizen satisfaction and lower public sector costs.	Deliver improved public service outcomes, possibly with fewer resources. Provision of more accurate services.	Increased value for money. A more efficient and effective public sector.
Mobilisation of resources	Interdisciplinary collaboration.	Citizens and non-profit organisations take on tasks and contribute with resources to enable solutions.	Create new services or retain old services with less or non-government resources.	Reducing costs for the public sector. A response to the fiscal pressures on governments to deliver public services.	Public sector cutback. Maintenance of the current service level despite fiscal pressure.
Democracy	Enable and encourage citizens and other interested subjects to participate in the management of public affairs and influence public policy.	Non-governmental organisations and individual citizens can participate in decision-making and democratic consultation within the scope of public power.	Decentralising power down to the lowest appropriate level, including citizens and a diverse range of civic institutions.	Public transparency. Basis for making more informed decisions. Enhanced local democratic control.	Increase public sector democracy. Break away from the idea of the government as a 'Big State' independently delivering all services.

Source: Adapted from (Mortensen, forthcoming)

related to the empirical problem that co-production seeks to address (Pawson 2006; Funnell and Rogers 2011).

Defining the intervention strategy

The intervention strategy is a central part of a programme theory and theory-based evaluation (Bamberger, Rugh, and Mabry 2012). A local intervention strategy attempts to answer the question 'What kind of activities are needed to reach the anticipated outcomes?' In practice, local evaluators need to be explicit about why and how they define activities as being co-production. The generic programme theory defined above could act as a solution to enable such a transparent account and represents a clear link to co-production research. In any case, the main purpose of the intervention strategy is to create an adequate and explicit local link between the intervention strategy (the co-production process) and the expected outcome(s)[1]. The purpose of the evaluation is to assess whether the assumption about the link between the intervention strategy and the outcomes holds (Chen 1990). Therefore, the task of operationalising local outcome indicators is important, so that concrete, empirical data can be identified and used to assess whether the strategy's logic requires adjustment. In this regard, the intervention strategy can be qualified and changed as new insights emerge as a part of the evaluation. Since co-production is dependent on individual, spontaneous acts and formally organised and institutionalised activities (Pestoff 2014), the intervention strategy is dependent on contextual elements (Kleinhans 2017).

Defining contextual variables

The contextual variables that influence the co-production process vary depending on the theme that is to be addressed and the co-production's local context (Needham and Mangan 2016), thus the 'opportunity space for co-production' needs to be understood and defined as part of the programme theory (Mortensen et al., forthcoming). The contextual variables are therefore divided below into micro, meso, and macro levels, and examples from the literature are given to illustrate the themes on the different levels. On a micro level, Pestoff (2014) argued that the heterogeneity of a group and face-to-face communication are important variables. Van Eijk, Steen, and Verschuere (2017) stressed that citizen and regular producer skills and capacity to co-produce are important; Fledderus (2015), Aagaard and Davy (2017) and Steen and Tuurnas (2018) emphasised relational capacity and trust as imperative for successful co-production. On a meso level, the nature of the service and organisation of service delivery/creation (Pestoff 2014) are important, while organisational culture, decision-making processes, and local resources (Everingham et al. 2012) also affect the process. Finally, on a macro level, the policy context and legislation requirements can influence the co-production process (Everingham et al. 2012). The variables on the micro and meso level may have an influence

on a local governance level, although the macro-level variables are beyond direct control at the local level.

Defining co-production mechanisms

The role of the co-production mechanisms is to explain the link between the intervention strategy and the outcome; these mechanisms can be understood as a trigger for the change. While the intervention strategy explains *what* is to be done, the mechanism explains *why* the intervention potentially causes the outcome (Chen 1990; Pawson and Tilley 1997). According to Bovaird and Loeffler (2012), citizens are willing to become involved in co-production activities, 'but only if they feel they can play a worthwhile role' (2012, 1136). It has therefore been suggested that mechanisms for co-production could include shared responsibilities between the system and users, citizens' degree of influence on the collaboration, and its ownership (Durose et al. 2013; Krogstrup and Mortensen 2017; Van Eijk, Steen, and Verschuere 2017).

Another important mechanism in co-production is trust (Fledderus 2015), which can be established in different ways in different contexts. In other words, the local context of co-production influences how an intervention strategy related to the creation of trust should be defined since different intervention strategies, in different contexts, aiming at different outcomes can all be triggered by the mechanism of trust. Hence these mechanisms play a central role in the evaluation of a complex, social phenomenon such as co-production by conveying insights into why the intervention strategy generated a specific outcome or not (Chen 1990). The next section suggests relevant evaluation methods that meet the requirements for co-evaluating local programme theory based on the generic co-production template (Figure 1).

Perspective: co-evaluating local programme theories with citizens

Funnell and Rogers (2011) argued that an important step is to consider who should be involved in the evaluation process and what their role should be. If the premise is based on a co-production logic in which citizens are viewed as active participants with important knowledge and resources that should be put to use (Needham and Carr 2009; Bovaird and Loeffler 2012; Needham and Mangan 2016; Brandsen, Verschuere, and Steen 2018), then the evaluation of the local programme theory would logically be based on citizens' active participation. However, co-evaluating with citizens can be a complex process, and issues of power asymmetry between citizens on one side and frontline staff and stakeholders on the other could lead to an evaluation bias (Krogstrup and Brix 2019). To reduce or avoid different forms of bias, such as tokenism and self-serving bias (Hurlbert and Gupta 2015; Fledderus 2015), local governments need to ensure that citizens are motivated to participate in the

evaluation of co-production and that they are involved in (the different stages of) this evaluation (Patton 2012; Hurlbert and Gupta 2015). Involving citizens as co-evaluators is valuable as it can lead to empowerment, increased democracy, ownership, and citizen motivation to co-produce (Brandsen, Verschuere, and Steen 2018; Krogstrup and Brix 2019). Therefore, it is important to consider the dilemmas related to involving citizens in this process: for example, whether citizens have the capacity to take part in such a process (Fledderus 2015).

There are several different approaches to collaborative evaluation that can inspire the involvement of citizens as co-evaluators to define and/or assess local programme theories (Rodrigues 2012; Patton 2012; King and Stevahn 2013; Shulha et al. 2016). The models related to the stream of collaborative evaluation research include 'empowerment evaluation' (Fettermann, Kaftarian, and Wandersman 2015), 'utilization-focused evaluation' (Patton 2012), 'dialogue evaluation' (Vedung 2010), 'collaborative evaluation' (King and Stevahn 2013; Shulha et al. 2016), 'user participation in quality assessments' (Krogstrup 1997), 'democratic deliberative evaluation' (House and Howe 2003), and 'fourth-generation evaluation models' (Guba and Lincoln 1989). Some of these models are recognised as having an extensive pre-evaluation focus in which assessment questions are negotiated among the evaluation stakeholders (e.g., Guba and Lincoln 1989). The degree of citizen capacity and resources to participate in the co-production process will vary from person to person. Additionally, it might be useful to include relatives or next of kin to support citizens if they do not have the capacity to actively take part themselves. Hence, the selection of an appropriate co-evaluation model will be a pre-scientific decision dependent on the purpose of the evaluation and the evaluation questions.

Conclusion

To enable the discovery of more empirical evidence concerning the outcomes of co-production in local governments (Loeffler 2009; OECD 2011; Voorberg, Bekkers, and Tummers 2015; Durose et al. 2015), this study made the following contributions. First, it argued that co-production is a complex, social phenomenon, which implies that there are no unambiguous, logical, cause-effect relations between co-production initiatives and their outcomes. This has implications for how the connection between an intervention (co-production) and its outcomes can be evaluated (Chen 1990; Durose et al. 2015; Pawson and Tilley 1997). Based on this premise, this study also argued that contribution analysis, represented by local programme theories, is an appropriate method to evaluate the outcomes of co-production (Chen 1990; Funnell and Rogers 2011). Second, a generic programme theory for co-production was developed based on a literature review in which five outcome rationales were identified, which can be used to operationalise and qualify the

local programme theory. It is, in other words, a way to connect co-production research and practice. Finally, directions were provided to allow citizens to be involved as co-evaluators of co-production activities in local governments.

Note

1. The explicitness of activities and links between activities in co-production processes is increasingly becoming an important theme in co-production studies. Therefore, data from the intervention strategy can enable scholars to report more nuanced and detailed accounts of the 'what' and 'how' of co-production processes (Van Kleef and Van Eijk 2016).

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Disclosure statement

No potential conflict of interest was reported by the authors.

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