ACTIVATING COLLECTIVE CO-PRODUCTION MECHANISMS FOR PUBLIC SERVICES:
INFLUENCING CITIZENS TO PARTICIPATE IN COMPLEX GOVERNANCE

PRELIMINARY DRAFT - NOT FOR CITATION

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Abstract

Previous research has suggested that citizens are more likely to engage in co-production of public services with public agencies when the actions involved are relatively easy and can be carried out individually rather than in groups (Loeffler et al, 2008; Bovaird et al, 2012). Since much of the potential pay-off from co-production has been identified as coming from group-based activities, this is a potentially serious barrier. The research in this paper has explored how individuals can be influenced to extend their co-production activities into collective action, participating in more complex governance activities.

The project incorporated experimental methods to explore the intervention strategies (‘nudges’) which can influence citizens and groups towards collective co-production behaviours. The research questions explored were:

1. What are the underlying conditions likely to shape the choice by individuals between individual and community co-production of public services?
2. How can the balance between individual and community co-production of public services be ‘nudged’ towards more community-based activities?

The research methodology consisted of a citizen survey in five case study areas, exploring:

- How the respondent gauges the current state of the issue (e.g. how safe is their area, how good is the local environment as a place to live, how good are local health services?)
- What the respondent has done to help improve things in respect to the issue concerned (including both individual and group actions)
- How satisfied the respondent is with the actions taken by local public sector agencies in tackling the issue and involving the respondent in such actions.
- How much difference the respondent believes can be made to the issue by the actions of ordinary citizens
- How much time (if any) the respondent would be willing to spend (by themselves or with others) in activities to improve the issue
- How important is improvement in each of these issues in the view of the respondent.

This paper reports the results from the study, demonstrating that individual and collective co-production have rather different characteristics and correlates and highlights the importance of distinguishing between them for policy purposes. In particular, it suggests that individual co-production is easier than collective co-production, given that its level is substantially higher than collective co-production. Moreover, it suggests that both individual and collective co-production tend to be higher in relation to any given issue when people are more satisfied with the consultation on that issue and when they have a strong sense that people can make a difference (‘political self-efficacy’). The paper concludes by making some recommendations for future research into the difference between individual and collective co-production.

Key words
Community co-production; individual co-production; co-production correlates; nudge; influence strategies; citizen activation
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Introduction

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**Rationale and Research Context**

User and community co-production of public services first became an important topic in the late 1970s and early 1980s, both in the private sector (Zeleny, 1978; Lovelock and Young, 1979) and the public sector (Whitaker, 1980; Sharp, 1980; Parks *et al.*, 1981; Brudney and England, 1983; Percy, 1984; Whelan and Dupont 1986). This literature identified that user and community co-production had long been widely practised, e.g. in citizen militias, jury systems, workers’ education associations, volunteer fire fighters, etc. It brought wide acceptance for the idea that services generally require inputs from both professionals and service users to be fully effective (Ramirez, 1996).

A second wave of interest in user and community co-production was triggered in recent years by the recognition that the outcomes which public agencies wish to achieve rely on multiple stakeholders for their realisation – and that service users and the communities in which they live are centrally important amongst these stakeholders. Consequently, co-production has come back into vogue both theoretically (Ostrom 1996; Alford 2002, 2009; Bovaird and Loeffler 2012; Pestoff 2012) and in revealing case studies (Ostrom 1996; Alford 1998, 2009; Bovaird 2007; Loeffler et al, 2012). Moreover, extra salience has been given to the potential of co-production in light of the fiscal pressures facing many governments since 2008 (OECD, 2011).

In spite of this growing interest, there has been little quantitative empirical research on citizen co-production behaviours, at either national or local government levels. Two of the authors therefore helped the EU Presidency to co-design a large-sample survey in five countries (the UK, France, Germany, Denmark and the Czech Republic) and have reported from this unique data set on overall co-production behaviours and attitudes (Loeffler et al, 2008) and on how the behaviour and attitudes of citizens towards individual co-production activities correlate with citizen characteristics (Parrado *et al*, 2013).

This study examined in more detail an especially significant aspect which emerged from this research – the phenomenon of collective (as opposed to individual) co-production. Previous research has suggested that citizens are more likely to engage in co-production of public services and social outcomes with public agencies when the actions involved are relatively easy and can be carried out individually rather than in groups (Loeffler *et al*, 2008; Parrado, 2013). However, there are reasons to believe that much of the potential pay-off from co-production, both to the public sector and to citizens, is likely to come from collective activities rather than individual action.
Figure 1 Economic and social value-adding outputs in society
[Source: Bovaird and Loeffler (2013)]

Figure 2 Individual and collective co-production based on citizen and public agency inputs
[Source: Bovaird and Kenny (2012)]
Individual and collective co-production

Based on the seminal work by Ostrom and Ostrom (1977), early definitions of co-production typically referred to the contribution of resources by service users and providers to raising the quantity and/or quality of provision of a good or service, or in some cases their contribution to ensuring that the service was provided at all (Brudney, 1983). For the research in this paper, we have used a more recent variant of this definition by Governance International: co-production is about “professionals and citizens making better use of each other’s assets, resources and contributions to achieve better outcomes or improved efficiency” (www.govint.org, accessed on 6 July 2012).

A key advantage of this definition is that it allows us to distinguish what is and what is not ‘co-production’. Unless BOTH citizens AND professionals make a significant contribution, we do not consider the activity to be ‘co-produced’. Consequently, purely ‘self-help’ by people who use services and purely ‘self-organising’ by communities do not qualify as co-production under this definition. Moreover, consultation exercises only qualify as ‘co-production’ if the contribution of citizens is significant – as would not be the case, for example, if the consultation was only to pass on information to citizens rather than allowing them to change decisions.

This definition is also valuable in emphasising the interactive nature of co-production – stakeholders making better use of each other’s resources – and thus the potential for collective action in co-production. While for some authors (Ostrom 1996; Ramírez 1999) co-production is seen in terms primarily of individual action, for others (Joshi and Moore, 2004), it implies long-term relationships (institutionalized arrangements) between state agencies and organized groups of citizens. Alford (2002) takes this further, distinguishing between co-production undertaken by users-clients, volunteers, and members of a community. He suggests that ‘users-clients’ receive private value from the service which they co-produce with an agency – here there is no ‘collective value’ from the co-production activity. On the other hand, volunteers and members of the community both jointly produce and jointly ‘consume’ public value. (Of course, service users or clients can sometimes simultaneously play this role, too, when they co-produce a service). Alford sees citizens playing the second role, ‘volunteers’, as actively engaged in the provision of public goods or services which bring value for others, while at the same time they may also benefit themselves. Finally, citizens acting as ‘members of a community’ are generally not actively engaged in the provision of public goods or services for anyone, but are engaging in wider activities (such as influencing policy or holding politicians to account for their decisions and behaviours) which are generally intended to benefit others (often including themselves). In line with our chosen definition from Governance International, these latter two roles of citizens therefore involve collective co-production of outcomes and wellbeing, harnessing the resources of both citizens and the public sector, as opposed to individual co-production.

As examples of how important collective co-production is to the creation of public value, in the UK there are about 350,000 school governors, who not only serve on committees to help run schools but also have a legal liability for the affairs of the school; about 5.6m people help to run sports clubs; 750,000
people volunteer to assist teachers in schools; 170,000 volunteer in the NHS, befriending and counselling patients, driving people to hospital, fund raising, running shops and cafes, etc. In 2008, there were over 109 active time banks across the UK, in which 600,000 hours of time have been mutually exchanged (Ryan-Collins, Stephens and Coote, 2008). However, with the exception of these in-family health and social care activities, and those involved in running sports clubs, the numbers of people involved in these ‘collective’ activities can be seen as rather small, compared to the ‘individual’ co-production efforts of 1.8m regular blood donors or 8m people signed up as organ donors, and 10m people who keep an eye on potential crime and anti-social behaviour within Neighborhood Watch schemes, all of which are more ‘lonely’ activities, but which are also easier to fit into a person’s daily timetable (although, of course, they may also have a ‘group’ dimension, e.g. attendance at occasional Neighborhood Watch meetings in the locality).

Nevertheless, the value of the contribution made by ‘collective’ co-producers cannot be estimated simply by a head count. As Pestoff (2012: 28) argues: “Collective action and, even more, collective interaction have the ability to transform the pursuit of self-interest into something more than the sum of individual self-interest”, particularly promoting “the development of social capital, mutualism and reciprocity” (p. 30). These potential ‘external’ benefits suggest that collective co-production may be sufficiently attractive to make its increase an appropriate target for public intervention, if the costs are kept proportionate.

In this paper, we therefore focus specifically on the relationship between individual and collective co-production: Are some types of citizen more likely to engage in one rather than the other? Are there specific policy initiatives or engagement mechanisms which might encourage citizens to engage more in collective co-production? Are these more likely to work with those citizens who are already co-producing as individuals? How can individuals be influenced to extend their co-production activities into collective contexts?

**Methodology**

The study undertook a citizen survey in a five different types of local authority to elicit responses on citizen’s involvement in co-production of public services, attitudes to doing more co-production and key drivers of co-production behaviour. The core survey questions were common between the five areas but some variation in the questionnaire was agreed with the five authorities to reflect local priorities. As previous research has shown that co-production activity varies widely between service areas and issues, the research focused in-depth on the following themes:

- Local environmental improvement
- Community safety
- Social wellbeing
The key research instrument was a questionnaire to the members of citizen panels in each of the five local authority areas. The choice of themes was made by the local authority, to reflect their current policy priorities. One chose three themes (Wolverhampton MBC), several chose two themes (LB of Barnet, Bristol City Council, Derbyshire Dales District Council) and one chose just one theme (Swansea City Council).

In four of the five sites, the research tested out the extent to which ‘nudges’ given to the respondents affected their responses on collective co-production. The two key nudges were:

a) Nudge A: making respondents aware of successful co-production activities in theme concerned (community safety, local environmental improvement, social wellbeing) by individuals or groups in their neighbourhood.

b) Nudge B: making respondents aware of how much time on average individuals (acting alone or in groups) typically devote to co-production activities in respect of the theme concerned.

This means that there were four groups of respondents, namely those who received Nudges A and B; Nudge A only; Nudge B only; or no nudge. Respondents were randomly assigned to these focus groups. This approach was designed to allow researchers to identify which types of influence strategy are most likely to be cost-effective in achieving behaviour change towards collective co-production (John, Smith and Stoker, 2009; Stoker and Moseley, 2010).

Response levels naturally varied with the size of the citizen panels. In addition, some councils were more successful than others in achieving good response rates. The final numbers achieved were: Barnet - 430; Bristol City Council - 953; Derbyshire Dales - 496; Swansea - 706; Wolverhampton – 547.

Findings

Here we report the preliminary findings from the analysis of the surveys, focusing only on statistically significant findings, unless otherwise stated. As can be seen in Table 1, between our five authorities and three potential themes, we have ten potential sets of relationships between co-production and other variables. We analyse each of these ten separately between individual and collective co-production.

Levels of individual co-production: We calculated an index of individual co-production, based on the proportion of questions about co-production activity to which respondents gave a positive answer. The value of this index varied widely, from as low as 20% (community safety in Bristol) to 68% (environment in Swansea). Where pair-wise comparisons could be made, individual co-production was substantially higher in environment than in community safety. Responses in health and wellbeing tended to be at the lower end of the scale, even below community safety.

Correlates of individual co-production: the most frequently significant variables associated with the index of individual co-production were -
o attitude to ‘self-efficacy’ (can people make a difference in tackling the problems) – strong positive association in four out of 10 cases (but also negative in 3 cases out of 10)
o attitude to government interaction – strong positive association in relation to ‘satisfaction with consultation on the issue’ in five out of 10 cases (but also negative in two cases in Wolverhampton); strong positive association in relation to ‘satisfaction with government information on the issue’ in three out of 10 cases (but also negative in two cases in Wolverhampton)

- attitude to performance of government - strong positive association in relation to ‘satisfaction with government response to issue’ in 2 areas out of 10, also strong negative association in 1 area out of 10
- attitude to level of problems (safety, environment, health, wellbeing) – only two significant associations (positive – higher problems mean higher co-production)
o socio-demographic variables – strong negative association between individual co-production and age in four out of 10 cases, only two significant associations with gender (one positive for males, one negative), no significant association in the 4 cases where we can test for ethnic background.

**Levels of collective co-production**: We calculated an index of collective co-production, based on the proportion of questions about co-production activity in groups to which respondents gave a positive response. Again, the value of this index varied widely, from as low as 14% (wellbeing in Barnet) to 43% (environment in Bristol).

**Correlates of collective co-production**: the most frequently significant variables associated with collective co-production were -

- attitude to government interaction – strong positive association in relation to ‘satisfaction with consultation on the issue’ in four out of 10 cases (but also negative in two cases in Wolverhampton); strong positive association in relation to ‘satisfaction with government information on the issue’ in three out of 10 cases (but also negative in one case in Wolverhampton)
- attitude to ‘self-efficacy’ (can people make a difference in tackling the problems) – strong positive association in five out of 10 cases (but also negative in 1 case out of 10)
- attitude to performance of government - strong positive association in relation to ‘satisfaction with government response to issue’ in 2 areas out of 10, also strong negative association in 1 area out of 10
- attitude to level of problems (safety, environment, health, wellbeing) – significant negative association with perceived level of wellbeing in relation to the variable in 2 cases out of 10
- socio-demographic variables – one positive and one negative association between individual co-production and age out of 10 cases, only one significant association with
gender (positive for males), only one significant association in the 4 cases where we can test for ethnic background (negative for white British).

**Willingness to spend time in collective co-production:** We asked how much time respondents were prepared to devote to working with others in various co-production activities. The proportion of respondents prepared to spend at least a few hours a month varied widely, from as low as 23% (Derbyshire Dales, health) to 44% (Bristol, environment).

**Nudges:** We have not yet finished our analysis of the nudges but it is clear that they rarely come up as significant, even for specific dependent variables, such as age, gender, attitude to level of problems, attitude to government interaction, attitude to performance of government, attitude to ‘self-efficacy’.

**Conclusions and recommendations**

This study has demonstrated that individual and collective co-production have rather different characteristics and correlates. This reinforces the findings of our previous international study (Loeffler et al, 2008; Parrado et al, 2013; Bovaird et al, 2012) and highlights the importance of distinguishing between them for policy purposes.

Individual co-production is easier than collective co-production, as it does not rely on group activities or on the reaction of other people to one’s activities. It is therefore not surprising that its level is substantially higher than collective co-production (from the pairwise comparisons available in Table 1).

Both individual and collective co-production tend to be higher in relation to any given issue when respondents have a strong sense that people can make a difference (‘political self-efficacy’). This is also the strongest result which we obtained in our international survey of co-production (Parrado, 2013). Future work will probe more deeply into the elements of ‘self-efficacy’, particularly through distinguishing the concepts of ‘I believe I can make a difference’ and ‘I believe people can make a difference’.

Respondents are also more likely to report high levels of individual and collective co-production when they are relatively satisfied with the public sector’s consultation on that issue. There is a less frequent association between higher co-production and satisfaction with information provided – this is more evident in relation to collective than individual co-production.

It is particularly interesting that there are few patterns of association between individual co-production and the perceptions that people have of the state of the outcome concerned (environment, safety, etc.) or their satisfaction with government response to those outcomes. While the international survey suggested that co-production was more likely where people felt their conditions to be poor and government response to be unsatisfactory (Parrado et al, 2013), there is a less clear-cut pattern from
these UK results, although such a pattern is weakly evident in the case of poor conditions and collective co-production.

It is also interesting that the levels of individual and collective co-production did not vary much with the socio-economic variables of gender and ethnic background. The exception was in relation to age, which tended to be negatively associated with individual co-production but positively with collective co-production (in five out of seven cases, though only one of these was statistically significant).

While the correlates identified above are simply associated statistically with co-production, and cannot be said without further research to be ‘drivers’, it is valuable for policy to recognise that they are likely to occur together. This means that policy should manage them as a ‘package’ rather than as entirely separate variables. In particular, this suggests that a successful co-production strategy with users and communities will require public service organisations to ensure their information and consultation strategies are viewed positively and to strive for high levels of belief amongst users and communities that people can make a difference.

Recommendations for future research

On the basis of these results, we suggest that there is likely to be value in exploring in more detail the ‘cause-and-effect’ relationships between co-production and its correlates. While many of the statistically significant relationships found in this study have conformed to the hypotheses from the literature, this has by no means been so in all cases. More qualitative survey work is likely to be needed to demonstrate the direction of the underlying cause-and-effect relationships.

Moreover, it is in the nature of the statistical analysis in this paper that it has not exposed ‘thresholds’ in relation to key variables – e.g. conditions, government performance, government consultation or information provision. Such thresholds are likely to be important and these will be explored in further statistical work.

Finally, the fact that the ‘nudges’ were generally not significant may indicate that actually there are very deep-seated drivers of collective co-production, which cannot easily be countered simply by providing ‘positive framing’ for responses. (And, of course, even if the attitudes reported by respondents had been influenced by the nudges, it would have been necessary to follow up to see if this had later had any effect on actual behaviour). On the other hand, it may simply be that the ‘nudges’ were of insufficient strength to have an effect. In future replications of this research, we intend to experiment with a series of ‘nudges’, ranging up to very strong hints about expected responses.

Further research is also planned into the reactions of public service staff, particularly front-line workers and senior managers, on the levels of co-production of which they are aware and on the kinds of barriers which they see to further development of co-production in their service areas and for the service users with whom they are most engaged.
## Findings

### Table 1 Key findings from the surveys

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### Details of Findings

- **Barnet - community safety**: 44%
- **Barnet - wellbeing**: 40%
- **Bristol - environment**: 67%
- **Bristol - community safety**: 20%
- **Derbyshire Dales - environment**: 55%
- **Derbyshire Dales - community safety**: 49%
- **Derbyshire Dales - health**: 46%
- **Swansea - environment**: 68%
- **Wolv’ton - environment**: 52%
- **Wolv’ton - community safety**: 44%

### Conditions

- **Crime**: 0.025
- **ASB**: -0.048

### Satisfaction with public service response

- **Crime**: 0.032
- **ASB**: 0.061

### Satisfaction with information

- **Crime**: 0.009
- **ASB**: 0.014

### Citizens make a difference?

- **Ordinary citizens**: 0.044
- **Ordinary people**: 0.065

The table includes various indices and findings related to community safety, wellbeing, and other aspects, with specific values and comparisons across different locations.
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Note: ** statistically significant at 1% level  
* statistically significant at 5% level

Note: In this table, the statistical correlations have been calculated ignoring those who answered ‘Don’t Know’ to the questions.
Acknowledgements

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