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Unpacking community resilience through Capacity for Change

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Abstract

Enhancing inclusion and self-reliance at community level is gaining ground in policy terms, due - in part - to the need to increase the efficiency of public spend, associated with the global financial crisis. Within Scotland, this shift is manifested through multiple policy and community interventions seeking to enhance resilience of communities. Measuring community resilience remains challenging as there is a lack of practical tools and assessment methods to capture aspects of “change”. The research presented here is based on the “Capacity for Change” programme which, through community engagement and empowerment, seeks to enhance the capacity of rural places and develop inclusive communities. The paper presents, (i) an evaluation model for measuring community resilience and, (ii) empirical findings that derive from deploying the model in a real-life scenario. Based on 155 face-to-face interviews with inhabitants from rural communities, resilience is revealed as being multi-scalar and interdependent, indicating the importance of “unpacking” resilience by exploring different levels of its social and economic components. The findings indicate the significance of interconnectivity of local and regional, and those less and more resilient areas. In addition, it shows that locations with more diversified services and resources are reported by their residents as being more resilient.
Introduction

Community resilience has become one of the buzzwords discussed amongst social researchers, policy-makers, practitioners and community activists (Skerratt, 2013; Skerratt and Steiner, 2013). Although defining community resilience is complex (Wilson, 2012), across the UK a number of public policies and strategies encourage building the resilience of communities through community engagement, empowerment, asset ownership and capacity-building (Cabinet Office, 2010; 2011; Scottish Government, 2010a; 2012). In Scottish policy, the term resilience was presented for the first time in 2007 in one of the National Outcomes: “We have strong, resilient and supportive communities were people take responsibility for their own action and how they affect others” (Scottish Government, 2007, p.46). The Community Empowerment and Renewal Bill also aims to build resilience and capacity of communities, and to strengthen their role in decision-making and service co-production. The document states that ‘communities are a rich source of talent and creative potential and the process of community empowerment helps to unlock that potential. It stimulates and harnesses the energy of local people to come up with creative and successful solutions to local challenges.’ (Scottish Government, 2012, p.6). Similar language promoting community empowerment, enhanced community capacity and ultimately community resilience is used by the UK government: ‘Our reform agenda will empower communities to come together to address local issues. We will achieve this by giving new powers and rights to neighbourhood groups’ (The Conservative Party, 2010, p.5). Simultaneously, the UK government acknowledges: ‘Government on its own cannot fix every problem...We need to draw on the skills and expertise of people across the country as we respond to the social, political and economic challenges Britain faces’ (Cabinet Office, 2010, p.1). Thus, the policy uncritically assumes that citizens are capable of addressing their local challenges and, through the process of empowering, build stronger and more resilient communities.

Despite a positive policy environment that identifies the need to develop community resilience, the concept itself is still “abstract” for practitioners. It is difficult to verify whether
certain interventions bring anticipated changes and help to develop resilient communities (Halley, 2012). Measuring resilience, as well as social and economic outcomes of community-focused policies and projects, remain challenging. There is a lack of easily adaptable and practical tools that enable assessment of interventions. Hence, it is problematic to capture aspects of “change” and to measure how effective community-focused policies and project investments are. The aim of this paper is to address these challenges by exploring the concept and developing a model of measuring resilience in rural, place-based communities. Using on-the-ground work from the Capacity for Change programme, the paper presents empirical findings that help to understand what resilience is and how it can be measured.

The paper starts with a description of the term “community resilience”. Then, the study context is presented and the underpinnings of the Capacity for Change programme are explained. Methodology of the study provides information on our model for measuring resilience. Based on data from six villages, the paper presents findings critically discussing how to measure community resilience. Finally, the paper highlights issues associated with building resilience and, as such, contributes to and informs current research, policy and practice.

Understanding community resilience

Resilience is often defined as both a personal and collective capacity to respond to change. Magis (2010, p.402), for example, discusses how “members of resilient communities intentionally develop personal and collective capacity that they engage to respond to and influence change, to sustain and renew the community and to develop new trajectories for the communities’ future.” Resilience is perceived as the adaptive capacity, and the ability of individuals to deal with change in a constantly evolving socio-economic environment (Hegney et al., 2008). Within this context, it is claimed that social capital is an integrated element helping to build community resilience (Wilding, 2011). Resilient communities are (pro-)active and capable to help themselves, suggesting that they are empowered and able to influence local life (Fournier, 2012). Consequently, resilience presents the ability to absorb disturbance and still
retain a similar function, the ability of self-organisation and, finally, the capacity to learn and adapt. The ability to change rather than the ability to continue doing the same thing could to be a key element defining resilience (Adger, 2000; Zautra et al., 2009). In order thus to survive and thrive, communities need to change and this is because status quo does not exist in their economic and social surroundings.

Various authors argue that community resilience can be conceptualised in terms of how well different types of capitals are developed in a community (Magis, 2010). Communities with diverse capitals are considered to be more stable, productive and less vulnerable to external shocks (Allen et al., 2012). Based on a literature review on community resilience, Wilson (2012) concludes that three types of capitals are considered to be the ‘glue’ that keeps the communities together and are necessary for communities to function well. These include economic, social and environmental capitals – all essential in understanding resilience at the community level (Adger, 2000; Cutter et al., 2008). However, although conceptual models exploring economic, social and environmental capitals and their importance in developing community resilience exist (Wilson, 2012), a need to measure community resilience in a real world application is suggested (Magis, 2010). A model measuring community resilience can help to assess what makes some rural communities stronger than others and harnessing reliable measurement tools in a longitudinal study can help to assess the efficiency of community interventions bringing the enhanced understanding of the concept.

Despite numerous publications in the field, the notion of resilience is perceived as being fuzzy and its application still remains in its infancy (Davidson, 2010; Pendall et al., 2010). It is argued that little work exists on “resilience and slow-onset hazards associated with anthropogenic drivers of change such as, socio-political or economic change” (Wilson 2012, p.2). Communities however face a number of challenging economic and social changes. For instance, many rural communities are confronted with rural depopulation and ageing (Hamilton et al., 2004, Steinerowski and Woolvin, 2012), unemployment (Pelling, 2003), insufficient access and quality of services (Farmer et al., 2012), school closures (Woods, 2006), lack of transport
services and affordable housing, higher costs of living and fuel poverty (Skerratt et al., 2012). When investigating resilience at a rural community level, it is necessary to understand and capture the pressing issues rural communities face. We therefore argue that models for measuring community resilience should take into account local settings and socio-economic characteristics.

**Study context: Capacity for Change initiative**

In order to identify better strategies for sustainable rural development, the *Capacity for Change* -C4C- was developed and led by Dumfries and Galloway's LEADER programme (Scottish Government, 2013). C4C specifically targets small, less-resourced rural communities who have not engaged with LEADER or other major funding streams. Less-resourced communities are defined in this project as communities which have lost some or the majority of local services over recent years. The communities were identified by LEADER project workers. Non-engagement was identified through the analysis of previously-funded LEADER projects which showed that particular communities regularly apply for external grants to run community projects. This leaves other (possibly less capable) communities without the support and opportunities for development. Hence, strong, proactive, and entrepreneurial communities become even stronger and weaker communities less capable of generating community project ideas do not access essential support, potentially becoming weaker. In order to address the challenge of potentially widening disparities, the C4C initiative was introduced. Through community engagement and empowerment, C4C seeks to enhance the capacity, inclusivity and resilience of the selected communities. Moreover, the programme tests whether expectations and responsibilities placed by current policies on communities are realistic.

**Geographic context: Dumfries and Galloway**

This study focuses on rural areas in Dumfries and Galloway which is one of the most rural regions of Scotland (Scottish Government, 2010b). Rural Scotland is important in terms of its
contribution to national development representing a place of production and consumption, and a place in which people chose to live and visit (Steinerowski and Atterton 2012). However, there are also well-recognised challenges of accessibility, service provision, connectivity and shifting demographic structures (Skerratt et al., 2012). Wider research (Steinerowski and Steinerowska, 2012; Munoz and Steinerowski, 2012; Steinerowski et al., 2008) shows that the extent to which rural people respond and adjust to disturbances and disruptions may influence whether and how communities can develop and evolve. The notion of “resilience” would thus seem to be highly relevant to understanding the process and patterns of uneven regional development (Simmie and Martin, 2010).

**Methodology**

Measuring resilience is problematic and there is no universally agreed measurement tool. In order to empirically measure resilience and capacity for change, below we elaborate our C4C mixed-methods analytical framework which is comprised of three stages.

*Three stages to develop C4C mixed-methods analytical framework measuring rural community resilience*

**Stage 1.** The aim of this stage was to “unpack” the concept of resilience. This was done through a desk-based study and a review of academic papers, community toolkits and policy documents. Our analysis recognised the multidimensional nature of the term and differentiated between individual and community levels of resilience in two main domains: economic and social. Figure 1 depicts proposed components constituting community resilience.
In order to verify how social and economic resilience at both individual and community levels are described, defined and measured, our study incorporated the analysis of the strengths and shortcomings of key models measuring/describing resilience (see Table 2). The process required rigorous review of existing international evidence and enabled recognition of themes and elements in each of the four resiliency categories.

**Stage 2.** In this stage we conducted a scoping study in rural villages in Dumfries and Galloway aiming to validate findings from Stage 1. As social, economic, geographical, political and historical contexts in (international) literature differ from the context of our study, it was crucial to gather information on what community resilience represents to local communities. In addition, a number of focus group discussions were organised with members of local community councils. In order to get a better understanding of what does and does not constitute resilient communities, we visited communities that could be perceived as "successful" with active citizens and other "less successful" communities in which a number of services have been withdrawn over the recent years and where local people have not engaged in community development projects. Both stages of the study created a "hybrid evaluation model" (High and Nemes, 2007) and lead to the development of Stage 3.

**Stage 3.** Based on the literature review (Stage 1) and the on-the-ground information (Stage 2), this stage aimed to identify the most appropriate themes for capturing social and economic as well as individual and community resilience were identified. Overlapping themes were used to develop research questions that enabled exploration of social and economic resilience at

![Figure 1. Components of resilience in communities](image-url)
individual and community levels. The questions were constructed to measure resilience in qualitative and quantitative ways. Twenty questions were constructed in way that enabled respondents to give answers using a scale from zero (very negative) to ten (very positive). In addition, to better understand responses, twelve qualitative exploratory questions were included. Examples of resilience questions are presented in Table 1.

Table 1. Examples of resilience questions in different dimensions of the C4C model.

<table>
<thead>
<tr>
<th>SOCIAL INDIVIDUAL RESILIENCE</th>
<th>0</th>
<th>1</th>
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<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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<tbody>
<tr>
<td>To what extent are you happy with your life in this community?</td>
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<td>What makes you feel that?</td>
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</table>

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<th>ECONOMIC INDIVIDUAL RESILIENCE</th>
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<th>7</th>
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<th>9</th>
<th>10</th>
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<tr>
<td>How would you rate your personal financial stability/security?</td>
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<thead>
<tr>
<th>SOCIAL COMMUNITY RESILIENCE</th>
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<th>5</th>
<th>6</th>
<th>7</th>
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<th>10</th>
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<tbody>
<tr>
<td>How strong is the sense of community determination to act together in the village?</td>
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<td>10</td>
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</table>

<table>
<thead>
<tr>
<th>ECONOMIC COMMUNITY RESILIENCE</th>
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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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</thead>
<tbody>
<tr>
<td>To what extent does your community use village based goods and services?</td>
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<td></td>
<td></td>
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<td></td>
<td>10</td>
</tr>
</tbody>
</table>
# Table 2. Selected resilience models, their strengths and shortcomings

<table>
<thead>
<tr>
<th>Models of evaluating resilience</th>
<th>Strengths</th>
<th>Shortcomings</th>
</tr>
</thead>
</table>
| Building Resilience in Rural Communities – Eleven components of Resilience (Hegney et al., 2008) | - Various elements of community resilience  
- Individual, group and community levels | - No quantification of community resilience  
- Qualitative examples of community resilience not easily compared across communities |
| Measuring and Modelling Community Resilience (Forgette and Boening, 2011) | - Quantitative value of community resilience  
- Measuring ‘change’ over time  
- Compare resilience between different locations | - No clarification how to collect data  
- Resilience questions might be subjective |
| First Impression Community Exchange Programme (Centre for Community Economic Development, 2010) | - ‘External and independent’ assessment of strengths/shortcomings of villages  
- Collaboration between similar communities  
- Engages people who might bring change in their communities  
- Evaluation is not expensive | - First impression (i.e. the core component of the concept) might not be accurate and can give wrong impression  
- Recruitment of ‘first impressioners’ might be challenging  
- Community members hesitant to hear critique  
- Lack of follow up phases |
| Five Ways to Wellbeing (Aked et al., 2010) | - Universal target group  
- Simplicity of the model | - Refers only to an individual level  
- Does not quantify level of resilience  
- Does not state how to collect data |
| Community Resilience Self Assessment (Magis, 2010) | - Quantitative value of community resilience  
- Easy method measuring ‘change’ in communities  
- Enable resilience comparison between communities | - Data collection is based on Key Informants. Response might not be representative  
- Subjectivity of Key Informants might lead to false results |
| Community Capacity Building (Noya and Clarence, 2009) | - Tangible outcomes (e.g. GDP)  
- Measure aspect of change (e.g. unemployment rate) | - Difficult to access data at community level  
- Changes might be observable only in for a long period of time  
- Difficult to prove source of outcomes  
- Investigates largely economic aspects and omits social factors |
Data sources

Data presented in this paper were collected between 2011 and 2012 in six villages in Dumfries and Galloway. C4C focused on small rural communities of up to 500 inhabitants (although precise statistics about the population size are not available at that level, data provided by C4C project workers indicate that the smallest village has 170 inhabitants and the biggest 430). At this stage of the research we do not provide village names due to confidentiality issues. Findings of the study derive from implementing C4C mixed-methods analytical framework for monitoring the C4C programme. In total 155 face-to-face semi-structured interviews were conducted with C4C community members. Interviewees were identified through snowball sampling method and consisted of community members with diversified socio-demographic characteristics. Snowball sampling is useful when the desired population is ambiguous or not easily accessible, and it uses informal social networks to identify respondents who are hard to locate (Bryman and Bell, 2007). Embeddedness in the local settings means that initial respondents can easily identify other interviews from the area. These features were especially useful as the C4C programme deals with communities that usually do not engage in community activities and are hard to reach. Researchers aimed to collect views from 10% of local population (thus in the smallest village the sample size was 17 and in the biggest 43 people). All interviewees were ensured the anonymity in research outputs.

Findings

Findings of the study indicate that social resilience achieved higher scores than economic resilience, and individual resilience was self-assessed at a higher level than community resilience (Figure 2).
Findings presented in Figure 2 are elaborated in Table 3 and then discussed in detail below in the text.

**Table 3. Levels of resilience across six communities (values based on mean)**

<table>
<thead>
<tr>
<th>Village</th>
<th>Individual</th>
<th>Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>6.43</td>
<td>6.41</td>
</tr>
<tr>
<td>2</td>
<td>7.63</td>
<td>6.80</td>
</tr>
<tr>
<td>3</td>
<td>7.37</td>
<td>5.84</td>
</tr>
<tr>
<td>4</td>
<td>7.63</td>
<td>5.01</td>
</tr>
<tr>
<td>5</td>
<td>7.58</td>
<td>6.12</td>
</tr>
<tr>
<td>6</td>
<td>8.15</td>
<td>6.25</td>
</tr>
<tr>
<td>Economic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>3.96</td>
<td>3.67</td>
</tr>
<tr>
<td>2</td>
<td>4.31</td>
<td>3.96</td>
</tr>
<tr>
<td>3</td>
<td>5.00</td>
<td>5.74</td>
</tr>
<tr>
<td>4</td>
<td>5.43</td>
<td>4.23</td>
</tr>
<tr>
<td>5</td>
<td>5.01</td>
<td>4.97</td>
</tr>
<tr>
<td>6</td>
<td>5.74</td>
<td>5.56</td>
</tr>
</tbody>
</table>

**Individual, self-reported social resilience**

The individual social resilience dimension received the highest scores compared to other components of the resilience matrix in all villages. This could mean that individual social resilience strengthens the villages, enhancing the overall resilience. The majority of the respondents stated that they are happy with their life in the villages mainly because of a friendly
and supportive neighbourhood, a good quality of life in a peaceful, quiet and safe area: ‘...I've got everything that I need here. You know, I don't like this kind of city rush’ (Interviewee24). Interviewees believed that there is less crime in their villages than currently in cities. Many respondents appreciated the beautiful natural surroundings and green spaces with landscape being recognised by some as a trade-off against the perceived dis-benefits of living in a rural location. Interestingly, respondents indicated that many people are ready to give up economic advantages offered by urban areas in order to take advantage of life and social aspects offered by rural locations.

Individual self-reported economic resilience

Individual economic resilience it is the second weakest dimension across all resilience dimensions in four of the villages. The low scores in individual economic resilience were given due to limited opportunities to apply villagers’ own knowledge and expertise, and very limited opportunities to develop new skills in their villages. Interviewees referred to limited resources in the villages that could help to improve their personal economic situation and the lack of services that would make their life easier: ‘...there is nothing here these days. We've lost everything that we had in the village – we don't have a pub, we don't have a shop and the church is closed now... it's really bad’ (Interviewee41). Due to limited access to essential services, many inhabitants are exposed to additional expenditure associated with commuting. These, however, vary across villages. As indicated in Table 4, Village 1 has the most limited access to services/resources and Village 6 has the most diversified services/resources amongst all six locations.
<table>
<thead>
<tr>
<th>Location</th>
<th>Overall resilience</th>
<th>Available services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village 1</td>
<td>5.12</td>
<td>B&amp;B, Bothe hub, Bus service, Community hall, Small community greenhouse</td>
</tr>
<tr>
<td>Village 4</td>
<td>5.58</td>
<td>B&amp;Bs (x2), Bus service, Mobile library, Primary school, Village hall</td>
</tr>
<tr>
<td>Village 2</td>
<td>5.67</td>
<td>Bus service, Cafe/bike shop (seasonal), Playground, Primary school, Pub (part-time)</td>
</tr>
<tr>
<td>Village 5</td>
<td>5.92</td>
<td>B&amp;B, Bus service, Community garden, Community hall, Mobile bank service, Mobile library, Museum (seasonal) with tearoom, Part-time GP, Playground, Pub</td>
</tr>
<tr>
<td>Village 3</td>
<td>5.99</td>
<td>B&amp;B, Bus service, Caravan park, Community centre, Community hall, Convenience stores (x2), Hairdresser, Hotels (x2), Medical practice, Museum (seasonal), Playground, Post office (part-time), Primary school, Pub, Small community garden</td>
</tr>
<tr>
<td>Village 6</td>
<td>6.43</td>
<td>B&amp;Bs (x4), Bowling green + club house, Bus service, Caravan park, Church, Church hall, Coffee shop, Community garden, Function room, Hotel, Information centre, Light House exhibition + tearoom, Local clinic with a doctor and pharmacy, Playground, Post Office, Primary school, Pub (x2), Restaurant, Shop, Village hall</td>
</tr>
</tbody>
</table>
Community self-reported social resilience

Community social resilience was found to be stronger than individual and community economic resilience, and weaker than individual social resilience. Across all villages, many respondents claimed that inhabitants have opportunities to engage in community life in a range of community initiatives. However, the major challenge to wider community participation was the lack of time: ‘...these days people are too busy with work, they don't have time for community projects’ (Interviewee3). Also, some respondents indicated that there are limited opportunities for social activities and this may have a negative impact on community cohesion. As noted by many respondents, there are “the usual suspects” or “community leaders” who take decisions on behalf of the communities and actively participate in the village's life. Although this could be perceived as positive, some interviewees felt that new ideas that emerge from those who usually do not engage in community life are not welcomed. These can lead to disagreements amongst community members or lack of democratic community engagement. Despite that, a high community spirit was observed during critical times when community members faced a threat of losing existing services or mobilised an issue of shared concern. Finally, most interviewees stated that community members utilise, maintain and care for existing resources in the villages.

Community self-reported economic resilience

Community economic resilience received the lowest scores across all resilience dimensions. The majority of respondents observed that current services do not meet existing and future business needs and it is difficult to develop new businesses. The findings revealed that potential business opportunities exist in tourism, renewable energy projects, green-space and agriculture. Some also claimed that a local pub, a cafe, a shop or a local community hub could create some jobs for local people. However, limited demand for services was identified as a major challenge and there was a belief that these ventures would not be economically viable: ‘...there's not enough people here to sustain any business, the population is too small’ (Interviewee63). Despite the
indicated business ideas, the majority of respondents did not see significant opportunities for
development of new jobs in their villages. Some respondents, however, referred to self-
employment and providing services to the wider area outside the village or working remotely
using online digital technologies. New job opportunities would be beneficial as currently limited
job opportunities often force people to find employment outside the villages.

In general, respondents did not have high expectations relating to the economic
performance of the villages. According to some interviewees, new business ventures could
change the dynamics within villages, bringing undesirable changes. This group of people
appreciated peace and safety in their village as a residential rather business area. On the other
hand, some interviewees stressed that community members should support new ideas and
encourage new business creation claiming that new businesses are essential in building the
healthy and sustainable structure of their village.

Overall resilience

Overall resilience is the combination of all dimensions and levels of resilience. Table 3 shows
that despite relatively high level of overall resilience, a community might face specific
challenges related to social or economic dimensions and to individual or community levels. For
example, although the overall resilience in Village 3 is one of the highest, its community social
resilience dimension received one of the lowest scores amongst all villages. The findings show
the importance of “unpacking” the concept of resilience and exploring its components. It is
important to identify strengths of each community and the potential challenges it faces.
Strengths offer opportunities which could be fully utilised and further developed, whilst
remaining sensitive to local cultures of participation and capacities for additional involvement.
Lower scores, on the other hand, should be closely analysed in order to identify and develop
appropriate solutions to existing challenges.

Economic and social aspects of individual resilience received higher scores than community
resilience. This implies that individuals evaluate their personal circumstances better than those
that exist at a community level (possibly this resonates with the individualising logics of our times). Low community scores could also suggest low levels of social capital, weak links between community groups or lack of social cohesion. Furthermore, low scores of economic resilience across all villages could be explained by the characteristics of villages selected for the research and their limited access to services and resources.

Across all resilience dimensions, economic community resilience received the lowest scores compared with higher scores of economic individual resilience. This may suggest that despite the limited local economic resources, local inhabitants draw on available external resources (e.g. job opportunities, services and products) in order to increase their personal economic resilience. This is an important finding which could indicate that, when exploring resilience, it is essential to look at accessibility to and inter-linkages between researched communities and their neighbourhood locations. Possibly, an ability to access a “more resilient” neighbourhood location can help to enhance individual resilience of those from “less resilient” locations. Hence, being located closely to a stronger and resilient place could have a positive impact on other, less resourceful, communities. It is important, therefore, to look at more complex picture of resilience and its local and regional interconnections.

Finally, we would argue that places with more diversified access to services and community resources are more resilient. For instance, Village 6 with the highest number of available services/community resources is the strongest in its overall resilience score.

**Discussion and conclusions**

Through the development of a model for measuring resilience in communities, this paper contributes to the debates on community resilience. The key advantage of the model is that it brings together a number of already-tested frameworks, and by addressing their shortcomings and adapting them to local circumstances, it take into account local circumstances. It also bridges evidence from international research and new empirical data from Scotland. In reviewing academic, policy and practice literature, it identifies economic and social elements of
resilience and highlights multiple scales of resilience at individual and community levels. The model has the potential to show whether and how, influenced by constantly changing social and economic circumstances, different dimensions of resilience change over time. In the C4C study, in order to measure this change, a longitudinal approach will be taken (i.e. using the same research approach, the same group of people will be interviewed when the project is completed). This will enable to develop our understanding about people’s ability and willingness to change while exploring different components of resilience. Importantly, although presented as separate, all components overlap, interact, and are essential in enhancing resilience in communities. This means that community interventions are unlikely to influence only one element of community resilience, but have significant spill-over effects. Thus, the model recognises the complexity of the concept and highlights that resilience does not have status quo.

A significant contribution of this study to the current knowledge is presented by the proposed model which enables the measurement of resilience in qualitative and quantitative ways and, if applied in a longitudinal study, can compare different dimensions of resilience between communities over time. These characteristics are currently sought amongst policymakers (who want to build stronger and more resilient communities and need to assess their policies), funders (who want to find out how efficient their spending and value for money are) and practitioners (who want to positively influence life of communities). For example, in the C4C study, the model is used to evaluate outcomes associated with targeted project investments and to compare resilience and identify aspects of "change" and adaptive capacity of communities. As such, our evaluation of C4C will provide useful data for the development of Dumfries and Galloway LEADER’s post-2013 strategy (Halley, 2012).

Through deploying and testing the model in a real-life scenario, findings show resilience as multi-scalar, multi-sectoral, and interdependent. The findings indicate the importance of “unpacking” the concept of resilience and exploring its various components. As shown, some communities are particularly vulnerable or particularly strong in different dimensions of
resilience. The overall score of resilience, therefore, might not be sufficient to efficiently address local challenges or, alternatively, build on existing strengths. Thus, identifying and exploring different resilience components might help to design local community interventions that address particular challenges within communities, at the economic or social and/or at the individual or community levels. This, further, may present a method in which investments in communities can be made in a more effective way.

The findings indicate the significance of inter-connectivity of local and regional, and those less and more resilient areas. Possibly, being situated near to a more resourceful place can positively influence those who live in the surroundings. Finally, the findings reveal relations between a number of available services/community resources and a level of self-assessed resilience. This study shows that locations with more diversified services and resources are reported by their residents as being more resilient. The causality of this relationship, however, is not known and should be explored in future studies. It could be that because a community is resilient, it is capable of securing sustainability of local resources. The alternative explanation is that because of available resources, a local community could be more resilient.

The study also raises the question of how far it is effective to target communities which generally do not engage with rural development funding of their own volition, or whether it is more appropriate to target resources on those communities already functioning in a socially and economically resilient way. Possibly, by offering external support to “weaker” communities, a “dependency culture” may be promoted. On the other hand, resilience does not necessary happen automatically. It depends on a number of factors some of which individuals and communities can influence and others that remain out of their control. Another question that emerges is whether there is a particular level of external facilitation that helps to build the capacity of a community and another level of “over-support” that can weaken a community by disempowering its local members who remain passive in a moment of crisis or change. It is important, therefore, to consider and identify a balance between the role of a worker/project
manager supporting community initiatives and the wider aspects of community participation and self-determination.

C4C tests assumptions presented in policy documents which indicate that communities want and know how to be empowered. It could be argued that at a time of withdrawal of services and wider supports (which possibly lead to the destruction of community resilience) communities are asked ‘to do more for themselves’. If this is the case, community resilience becomes a tool of transferring responsibilities from the state to wider society. As such, policymakers suggest that all communities are capable of solving local challenges leaving the same less capable communities without essential support. Readiness of communities may vary across different locations. Consequently, the question that appears is whether community capacity can be built through external interventions. As the data collection for the C4C project continues, these are questions which we hope to be able to address in the following years.

In summary, a number of implications for academia, policy and practice stem from our study. For researchers, the paper contributes to the contemporary debate about definition, measurement and development of community resilience. For practitioners, the study makes a substantial contribution as it allows for the identification of the impact that an intervention seeking to enhance resilience may have on the communities within which they are deployed. For policymakers, the paper shows the importance of interlinked social and economic policies, and it presents the importance of understanding the complexity of community resilience.

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