practice

A theory of change for capacity building for the use of research evidence by decision makers in southern Africa

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The effective use of public policy to reduce poverty and inequality in southern Africa requires an increased use of research evidence to inform decision making. There is an absence of clear evidence as to how best to encourage evidence-informed decision making, and how to build capacity among decision makers in the use of research. This paper proposes a demand-focused approach for increasing the use of evidence in policy, presenting strategies supporting 'pull' activities and closer linkages and exchanges between producers and users. The paper shares for discussion a people-focused theory of change for building capacity to use research evidence amongst policy makers in southern Africa.

key words research use • knowledge transition • evidence-informed policy • capacity building

Why is there a need to increase the use of research evidence to enable reductions in poverty and inequality?

The worldwide recession has led to pressure on limited resources and increased demands for ensuring public funding is used more effectively. This has coupled with an increase in demand for public accountability, with citizens demanding greater transparency in government decision-making (DFID, 2011). Under these financial and public pressures government is 'reinventing' itself with a trend towards more cost-efficient government, supported by national performance monitoring and evaluation systems, particularly within newly established middle-income economies (Mayne and Zapico-Goñi, 2007).

Within the southern Africa context there is an additional and overriding need for solutions that address both poverty and inequality (Thorbecke, 2013; UNDP, 2013). In this, one of the poorest regions of the world, governments struggle to deliver even basic services for education, health and housing. The statistics speak for themselves: almost half the population of sub-Saharan Africa lives on less than a dollar a day.

Compounded by the worldwide recession, government funding is extremely limited in southern Africa and reliance on donor aid is high. World Bank statistics show that per capita overseas donor aid is over $50 in Sub-Saharan Africa, relative to $10 per capita in South Asia and a worldwide average of $20 per capita (World Bank, 2013a). Furthermore, in the context of government corruption, ensuring good governance and best use of these funds is of particular importance. Coupled with increasing pressure on donor agencies to provide evidence of their impact to their own citizens, this has led to an increased emphasis on research and aid effectiveness in development (Banerjee and Duflo, 2011; Cohen and Easterly, 2009; Conway et al, 2010).

The imperatives are therefore mounting for public policy decision making that effectively addresses the challenges of poverty and inequality, in accountable and evidenced ways. It is in this context that the appropriate use of 'evidence' by decision makers has the potential to increase the impact of government programmes and avoid wasting limited resources on ineffectual interventions, achieving the best possible value for money, at the same time as improving the accountability of government. While this may seem a lofty ideal, it is increasingly the goal of programmes designed to increase the use of evidence in policy making and implementation (Cherney and Head, 2011; Jones et al, 2013; Lipsey and Noonan, 2009; Newman et al, 2013).

What has been done to encourage evidence-based decision making

With its origins in health care, the concept of evidence-based decision making has been around since the 1980s. Popularised within national policy by the Blair government in the UK (Cabinet Office, 1999), the drive to base decisions on evidence, and to evaluate the effectiveness of those same decisions using evidence is increasingly applied, and debated, in international development (Court and Young, 2003; CGD, 2006; Clemens and Demombynes, 2013; Eyben et al, 2013).

Over the last two decades a number of activities and initiatives to support evidence-informed policy making have been put in place across Southern Africa (Broadbent, 2012; du Toit, 2012). These include initiatives for increasing the policy relevance of research agendas such as the Development Research Uptake in Sub-Saharan Africa (DRUSSA) programme. Funded by the UK's Department for International Development (DFID), DRUSSA provides direct support to universities in sub-Saharan Africa to improve participation in and impact on policy and practice. Along similar lines, the World Bank's Development Impact Evaluation Initiative (DIME) seeks to promote and improve evaluations of development programmes. Other organisations, such as the Campbell, Cochrane and Environmental Evidence collaborations, focus on the production of structured summaries of available evidence to inform decision making (systematic reviews). All three collaborations now include development groups of various forms. In addition there are a number of programmes that aim to get high quality evidence into policy and practice, such as the World Health Organization's Evidence Informed Policy Network (EVIPNet), and the Overseas Development Institute's Research and Policy In Development (RAPID) programme.

Many of these activities for increasing the use of evidence in policy focus on the capacity to conduct and disseminate policy-relevant research rather than on capacity to use evidence, that is, they are 'push' activities (driven from the research community), the limitations of which are well documented (Lavis et al, 2003; Milne et al, 2014; Nutley et al, 2007). There remains a need to support 'pull' activities (those stemming

from potential users of research) (Newman et al, 2012), as well as linkage and exchange activities (interactive activities building relationships between research producers and users) (Murthy et al, 2012).

What do we know about 'what works' in increasing the use of research evidence?

The barriers to increasing the use of research by decision makers are well understood. These have been nicely summarised in a DFID systematic review (Clar et al, 2011) and include:

- Individual-level barriers including lack of experience and capacity for assessing evidence, mutual mistrust, and negative attitudes towards change and research
- Organisational level barriers, such as an unsupportive culture, competing interests, frequent staff turnover, interest group pressure on decision makers, issues of censorship and control, 'anti-intellectualism' in government against use of research, the importance of indigenous knowledge, religion and cultural differences
- Relationship and communication barriers, including poor choices of messenger, information overload, the use of traditional, academic language, the lack of actionable messages
- Timing issues, such as the differences in decision makers' and researchers' time frames and the lack of time to make decisions

However, how to overcome these barriers is not well established and we do not know what works. Even in health care evidence for how best to build capacity is limited. The systematic reviews that have addressed these questions consistently show that we have no good evidence for the effectiveness of any of these approaches (Clar et al, 2011; Murthy et al, 2012; Flodgren et al, 2012; Horsley et al, 2011; Hemsley-Brown and Sharp, 2003; Stewart and Oliver, 2006). The best quality evidence comes from a Cochrane systematic review (Horsley et al, 2011), which suggests training in how to critique research (known as 'critical appraisal skills') leads to modest gains in practitioner knowledge and behaviour. However, closer examination of these training initiatives suggests they are of limited relevance, focusing on medical professionals and employing neither problem-based nor participatory approaches (Stewart and Oliver, 2006).

We know that capacity building needs to be problem-based, participatory, prolonged and supportive, including more than just training. Evidence from systematic reviews support the use of both participatory and problem-based learning. They suggest that capacity building within the workplace (most commonly known as 'continuing professional development' or CPD) which is collaborative (at least two professionals working together) and sustained (over a minimum of 12 weeks) enhances motivation and confidence of participants, compared to studies of individually-oriented sustained CPD which show modest impacts (Cordingley et al, 2003; 2005a; 2005b, 2007). Positive impacts of collaborative sustained CPD were associated with: the use of external specialists; feedback to participants by facilitators and encouragement to develop peer-support systems; being based in the place of work; scope for teacher participants to identify their own CPD focus, starting points and pace; inclusion of practitioners in applying and refining the new knowledge and skills they gain, and

experimenting with ways of integrating them into their own practice; an emphasis on peer support; and the provision of ongoing specialist support included modelling, mentoring, workshops, observation and feedback, coaching, and planned and informal meetings for discussion. It is also relevant that current drives to train health care professionals for evidence-based practice in the 21st century focus on transformative learning, delivered via consortiums of experts, drawing on global resources adapted to local contexts (Frenk et al, 2010).

Capacity building in evidence use is essentially seeking to change the behaviour of decision makers, and we do know that facilitating behaviour change requires multiple approaches, strong networks linking organisations, and actual joint working across these consortiums. Supporting behaviour change requires complex systems and multiple processes of change that together contribute to new embedded ways of working (Greenhalgh et al, 2004). It must include more than purely training, incorporating a range of approaches (NICE, 2007).

Evaluations of programmes implemented in southern Africa also highlight the importance of good facilitation, trusting relationships, clarity of purpose and a problem-based approach. As early as 2001, a team from the University of Johannesburg, along with the Institute of Education's EPPI-Centre (London), delivered a series of workshops funded by DFID in evidence-informed decision making for HIV prevention, for policy makers and practitioners across the Southern African Development Community (SADC) region (Ellison et al, 2001; Stewart, 2001). Our evaluation of these workshops highlighted the need to recognise that the evidence-based approach, with its emphasis on research, may appear foreign, challenging, and even threatening, to both individuals and their decision-making systems (Stewart et al, 2005; Stewart, 2007). We found that while decision makers need to be able to understand and critique research, expectations that decision makers will conduct research themselves must be avoided. We also found that care needs to be taken in how the approach is presented, that space needs to be provided for discussion and debate of the approach, and that other forms of knowledge need to be recognised and valued. Participants need follow-up support if they are to put learning into practice. Good facilitation, trusting relationships, clarity of purpose, and a problem-based approach were found to be essential foundations for capacity-building activities (Stewart (ed), 2001; Stewart, 2007).

We also know that capacity building must be combined with opportunities and motivations (Michie et al, 2011). Facilitating such opportunities is a particular challenge as even individual incentives require a level of institutional buy-in, and changes in practice require what Greenhalgh and colleagues describe as 'systems readiness for change' (2004). The policy-making process is shaped by a large number of factors (Nutley et al, 2007), not least being both personal and party politics, and individual and institutional belief systems (Newman et al, 2012). The complex processes governing policy making, including both formal and informal systems, vary according to cultural, economic and political norms – the political economy. While it is not always possible to influence these systems, those wishing to increase the use of evidence do need to understand the specific contexts in which decision makers operate if capacity building is to lead to change in practice.

There is a body of research that critiques the assumptions behind evidence-informed decision making, highlighting the potential for politicisation of research generation and research use. While we cannot do justice to these critiques here, it is important

to acknowledge that relevant research is not always available or accessible, and that a lot of research is subjective, and of poor quality. Whilst capacity building in critical appraisal goes some way to address this issue by enabling decision makers to identify biases within any given piece of research, the potential for decision makers themselves to use research to support their own political needs is much harder to address (Jones et al, 2013). Even where good quality research does exist and is used by decision makers, historical, political, economic and social complexity means that more effective policies are not necessarily put in place, nor implemented (Newman et al, 2012).

Last but not least, even where increased use of research evidence in decision making is enabled, this does not necessarily lead to the desired goals of either greater accountability and transparency, or of poverty reduction (Jones et al, 2013). The use of research can facilitate greater transparency, but must be accompanied by other initiatives such as an increased drive for public scrutiny, and the introduction of the necessary procedures to enable this improved public access to both the processes and the products of policy making.

Having explored briefly the drivers and constraints for increased use of research in southern Africa, the barriers to research uptake, and the evidence on how to facilitate greater use of research evidence, the question arises of which approach, or combination of approaches, are worth testing out.

People-centred approaches for facilitating change

One common thread appears to run through the available evidence discussed above on how best to build capacity amongst decision makers in the use of research, namely person-centred approaches. This paper therefore proposes a people-focused theory of change for building capacity to use research evidence among policy makers, with five key elements:

1: Building sustainable relationships

We propose that capacity-building activities should be delivered through a consortium of partners, drawing on and strengthening existing networks. As well as involving local experts with experience of using research evidence activities, the available community of practice can be expanded through opportunities for apprenticeships and shadowing which build up experience. By working through existing networks, including policy makers, research producers and research-use facilitators, capacity building should be sustainable.

2: Building relationships specifically with national governments

National governments, and in particular those government agencies which cut across ministries with cross-government remits for activities such as monitoring and evaluation, have considerable influence. For example, in South Africa, the Evaluation and Research Unit within the Department for Planning, Monitoring and Evaluation is leading the way in increasing the commissioning and use of evaluations across government. By working through internal agencies such as these there is considerable potential for influence.

3: Using relationships to build organisational and systems change, as well as individual capacity

Research use relies on organisations and systems as well as individuals. This includes the need to understand the political economy in which decision makers are operating and, as much as is feasible, to address barriers and offer incentives for change. While it is often simpler to target individuals with capacity-building activities such as training, there is also a need to support end-beneficiary organisations in improving systems to enable research use. This could be achieved through problem-based training, mentoring and secondments, working with participants to help overcome barriers, whether at individual, organisational or systems levels. These may include issues of access to research, the absence or limited quality of information services, systems for data and knowledge management, incentives for encouraging research use, the recognition of related professional competencies, and the profile of researchers in government. While some institutional factors can be addressed, others will remain outside the scope of any change management programme, and such constraints should be noted.

4: Ensuring the right people and agencies are targeted

By working with partners within governments, and taking time and effort to engage with their priorities, it should be possible to ensure that capacity-building activities are targeted at individuals and teams most likely to: a) have the opportunity to increase their use of research evidence; b) have the baseline skills, for example in monitoring and evaluation; and c) have the motivation to alter their working practices to take into account research evidence (Michie et al, 2011).

5: Ensuring partner commitment and post-programme sustainability

Sustainability is perhaps one of the greatest challenges when trying to increase the use of research evidence, and requires considerable investment in relationship building. It requires commitment to building sustainable capacity in research use. Different approaches to ensuring such commitment might include asking end-beneficiaries to invest in the programme in some, or all, of the following ways: helping to identify and prioritise specific target groups for capacity-building initiatives; releasing staff for training and other capacity-building initiatives, where possible in teams to increase the likelihood of application; identifying staff who are more experienced in research use who might be contracted to act as mentors or host secondments for other policy partners; supporting terms of reference for mentoring, including ensuring those receiving mentoring have an allocated time each week for this, and have specific research-use projects which can be facilitated through the mentoring relationship; and providing rooms for training activities. In addition, all capacity-building activities should be embedded within existing professional development and human resources systems when possible. By working with existing networks and in-country organisations in the delivery of the programme, we hypothesise that it is possible to build up a community of practice with partnerships that continue after the lifetime of a project.

A theory of change incorporating these five person-centred approaches

As outlined previously, the challenges of poverty and inequality are manifested so acutely in southern Africa (see the 'Problem' as illustrated in Figure 1). We are proposing a theory of change in order to enhance capacity among civil servants in accessing, appraising and using available research evidence in making social and economic policy decisions, so as to increase the use of research evidence in decision making: our ultimate goal being to contribute to reductions in poverty and inequality (see 'Desired outcome and impact' in Figure 1). The following 'Current needs' have thus far been identified: namely that most research-use initiatives have been largely 'supply-side' and most have been restricted to the health sector; that capacity-building activities exist, but remain limited in scope with little focus on application of skills; and that most activities have been limited to capacity in monitoring activities and the use of generated data in policy and planning.

We propose a programme of work to build capacity among civil servants that incorporates these five person-centred approaches into a mentoring-based model (see our 'Strategy' in Figure 1).

1. Context-specific work plans will be informed by detailed situational and landscape assessments
2. Training workshops and seminars will raise awareness and enhance capacity
3. An integrated mentorship programme will enhance application of learning
4. Work placements will enable experiential learning and build relationships
5. In addition, all activities will be embedded within the Africa Evidence Network (see Box 1)

These proposals will be further strengthened by five key factors, which reinforce the foundation for this person-focused approach (described as 'Influential factors' in Figure 1):

*   The programme of work will be implemented by a southern-led consortium with extensive experience across Africa
*   We have the support of high-level champions within governments and within our consortium
*   We are working with departments and ministries with overarching responsibility for monitoring, evaluation, research and planning across government sectors
*   There is a drive from donors and increasingly within governments for greater use of evidence to demonstrate 'development effectiveness'
*   We have strong collaborative partnerships within our consortium, and via a wider a regional community of practice: the Africa Evidence Network.

Last but not least, a number of assumptions underlie this theory of change and need to be considered in implementing our change strategy. They will also be assessed as part of the wider programme evaluation. Summarised in Figure 1 under 'Assumptions', these are the assumptions that:

Figure 1: Theory of change
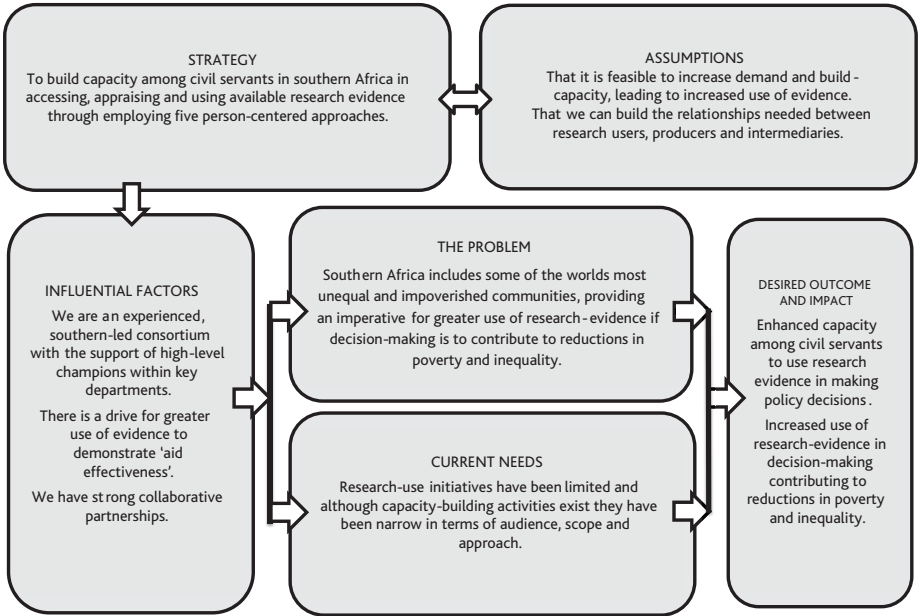
- It is feasible to build capacity in research use among decision makers, generating demand for research evidence ('pull') which is currently, at best, latent demand
- Capacity-building does lead to increased use of research evidence beyond the activities of the programme
- Our strategies will enable sustainable capacity building if delivered in partnership with local networks and embedded within the Africa Evidence Network
- Relationships built through the programme will be meaningful, productive and sustainable.

Box 1: The Africa Evidence Network (www.africaevidencenetwork.org)

The Africa Evidence Network is a community of people who work in Africa and have an interest in evidence, its production (in particular but not exclusively through systematic reviews) and use in decision making. The Network includes researchers, practitioners and policy makers from universities, NGOs and governments.

The Network came into being following the International Initiative for Impact and Evaluation and the Campbell Collaboration's mini-colloquium in Dhaka Bangladesh in December 2012. There were a number of delegates from Africa attending from a range of backgrounds with varying links to different systematic review and evidence-based decision-making organisations. Following a meeting of all of the African delegates it was decided it would be helpful to have a network to share information, experiences and ideas in the belief that in working together the Network can help to make evidence-informed policy and practice a reality across the region.

Conclusion

In the absence of clear evidence as to how best to build capacity to use evidence in decision making, we have proposed a person–centred approach. This will be delivered as part of a programme of work led by the University of Johannesburg and funded by the UK's DFID under their Building Capacity to Use Research Evidence (BCURE) Programme. The proposed theory of change will be translated into a detailed implementation plan and realised in one of the poorest countries in the world, Malawi, and one of the most unequal, South Africa. This work will be supported by an internal monitoring programme and an externally commissioned evaluation. We hope to report on progress over the coming years.

We invite others to reflect on our proposed theory, feed in their reflections and experiences, and join the Africa Evidence Network (www.africaevidencenetwork. org). Furthermore others are welcome to build on and adapt our theory of change for their own contexts and environments. We believe that the approach outlined in this paper has the potential to deliver real and sustainable increases in the use of research evidence in decision making through its emphasis on relationships and networks.

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