research

The pivotal position of 'liaison people': facilitating a research utilisation intervention in policy agencies

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This paper explores the enormous variation in views, championing behaviours and impacts of liaison people: staff nominated to facilitate, tailor and promote SPIRIT (a research utilisation intervention trial in six Australian health policy agencies). Liaison people made cost/benefit analyses: they weighed the value of participation against its risks and demands in the context of organisational goals, knowledge utilisation norms, epistemology and leadership support. There was a degree of self-fulfilment (organisations got what they put in), but SPIRIT could not always be tailored to address local knowledge needs. We present nine propositions for identifying and supporting liaison people in similar interventions.

key words research utilisation • faciliation • championing • process evaluation

Introduction

Externally designed and implemented organisational change interventions are thought to have a greater chance of success when they are supported by one or more internal staff members acting as facilitators (Greenhalgh et al, 2004). Such facilitators often manage the administrative tasks associated with an intervention and may be involved in recruitment, consent processes and/or data collection. More importantly, they are social mediators of the ideas and processes central to the intervention. This may involve formal activities such as presentations at staff meetings, but is likely to include *ad hoc* negotiation and interpretive communication with diverse colleagues and with those implementing the intervention. Thus facilitators are expected to function as persuasive advocates and mediators, using their interpersonal skills and institutional knowledge to deliver and, where necessary, reframe interventions to maximise their success.

In this paper we build on existing knowledge by describing the attributes, perceptions, contexts and associated behaviours of the facilitators – known as liaison people – of a novel complex trial that was designed to increase the use of research in health policy agencies (CIPHER Investigators, 2014). We demonstrate that the liaison people (LPs) functioned as critical mediators with profound impacts on how the intervention was shaped and received in each site. We develop propositions from our analysis that provide guidance about how to identify and support LPs (or related functions) in similar interventions. But first, we present an overview of the key roles and characteristics of intervention facilitators in general, and then describe the intervention trial that our LPs were facilitating.

Characteristics of internal intervention facilitators

Intervention facilitators are conceptualised in many ways, but the literature draws attention to three predominant types: champions, opinion leaders and boundary spanners. The terms are not mutually exclusive and are often used interchangeably and/or ambiguously (Greenhalgh et al, 2004; Williams, 2011), but they denote specific attributes and functions with implications for how change agents are identified, supported and utilised. (Greenhalgh et al, 2004; Thompson et al, 2006)

Champions are internal employees who advocate for organisational change initiatives. Their function is to capture attention and counter indifference by connecting the intervention with organisational goals and values. Champions articulate their vision of the intervention and demonstrate personal commitment to it (Hendy and Barlow, 2012; Howell and Boies, 2004). This involves risk as the characteristics of the intervention, including its failure or success, will be associated with their judgement and prestige (Thompson et al, 2006). The literature describes champions variously as people who emerge spontaneously during a new initiative (Hendy and Barlow, 2012; Howell and Boies, 2004; Markham, 1998), or respond to a 'champion call', or are purposefully recruited (Hammond et al, 2011; Ploeg et al, 2010). Given their need to be genuinely enthusiastic and to be perceived by colleagues as authentic, some argue that champions should not be formally appointed (Howell and Boies, 2004). Championing tactics vary (Greenhalgh et al, 2004) and are powerfully mediated by interpersonal and contextual factors (Locock et al, 2001). This makes it hard to build champions into standardised implementation planning.

Opinion leaders are 'able to influence informally other individuals' attitudes or overt behaviour in a desired way with relative frequency' (Rogers, 2003). Although opinion leaders may mobilise members of an organisation through their expert authority or status (Damschroder et al, 2009), they can also be 'near-peers': competent and knowledgeable colleagues who have influence partly because they are seen to share the same frames of reference (Locock et al, 2001; Rogers, 2003). Opinion leadership is targeted and topic-specific, so different opinion leaders may be required for different types and stages of a change process. Thus someone who is strongly influential in one setting under particular circumstances may find their views dismissed in other settings, or under different conditions (Grimshaw et al, 2006).

Boundary spanners link people, sectors, interests and perceptions (Williams, 2002). Their strong external relationships expose them to ideas in the broader environment so they may be more open than other staff to new ways of doing things (Greenhalgh et al, 2004). They can support interventions by building coalitions and bridging gaps in understanding between the organisation and those implementing the programme (Williams, 2002). Such gaps are often exacerbated by lack of disciplinary or industry knowledge: a common concern in researcher/policymaker relationships (Caplan, 1979). Unlike opinion leaders and champions, the role of the boundary spanner is often formalised.

Effective knowledge brokers (those who facilitate exchange between producers and users of knowledge) (Lomas, 2007) possess attributes of champions, opinion leaders and boundary spanners. Knowledge brokers support research-informed policy and practice through knowledge management, linkage and exchange, and/or capacity development, requiring credibility, influence, and the technical and communicative expertise necessary to advance knowledge initiatives within and across complex organisational systems. (Conklin et al, 2013; Traynor et al, 2014; Ward et al, 2009) Many of these characteristics also resonate with Kingdon's (2003) concept of policy entrepreneurs: well-connected advocates who drive change at a macro level (rather than at the organisational level). They leverage policy opportunities by linking different facets of the political system (aspects of boundary spanning); and combine technical expertise, influential rhetorical skills and political savvy with tenacity and a willingness to devote substantial time and energy to the enterprise (aspects of opinion leadership and championing) (Kingdon, 2003).

Common to all these functions is the centrality of complex social processes (Conklin et al, 2013; Oborn et al, 2011; Thompson et al, 2006). Key individuals can influence organisational change, but ultimately it is negotiated through consultation and comparison with peers (Brown and Duguid, 2001; Weick, 1995). Thus the attributes of successful facilitators can only be understood in relation to their context. Greenhalgh and colleagues found that champions were a key determinant of organisational innovation, but that 'no amount of empirical research will provide a simple recipe for how champions should behave that is independent of the nature of the innovation, the organizational setting, the sociopolitical context, and so on' (2004, 615).

Attempts to establish criteria for opinion leaders are similarly confounded: 'What makes someone a credible and influential authority is derived not just from their own personality and skills and the dynamic of their relationship with other individuals, but also from other context-specific factors' (Locock et al, 2001, 745). Those developing the concept of facilitation concur, arguing that facilitators require a toolkit of skills and attributes that can be wielded for different purposes and contexts, but that

their most critical expertise may be in fully grasping the requirements of specific circumstances and responding flexibly. Thus high quality facilitation is that which is most appropriate to the needs of a particular change situation (Harvey et al, 2002; Wilkinson and Frost, 2015).

The SPIRIT study and the LPs who supported it

As mentioned, this paper focuses on 'liaison people', internal organisational staff who were nominated to assist with the implementation of Supporting Policy In health with Research: an Intervention Trial (SPIRIT). Six health policy agencies in Sydney, Australia participated in SPIRIT over a 30-month duration. Further details are provided elsewhere (CIPHER Investigators, 2014; Haynes et al, 2014; Haynes et al, 2016; Makkar et al, 2016; Redman et al, 2015).

SPIRIT's year-long intervention was designed to increase the use of research by staff in health policy agencies. Its components included locally-tailored educational workshops; structured dialogues with experts in research, policy and knowledge brokering; leadership forums focusing on organisational change; the provision of targeted research products and resources; and access to an online information portal. SPIRIT used a stepped wedge cluster randomised trial design in which the intervention was implemented sequentially, with agencies randomly allocated to the time period in which they received the intervention. Outcomes were measured at baseline (prior to any of the six sites receiving the intervention), then at six-monthly intervals, using structured interviews and a self-reported online survey. An in-depth mixed method process evaluation monitored fidelity and explored the interaction between the intervention, participants and contexts.

The SPIRIT investigators initially considered employing a member of staff within each agency part-time to act as an LP. This would have recompensed the LP for their contribution to the study and potentially increased accountability and effort. However, policy colleagues advised that it would be hard to identify staff who would be suitable for (and willing to take on) this dual role, and that shared management would be problematic. Consequently, a more agency-driven approach was used to maximise local ownership of the intervention: the CEO or equivalent in each agency was asked to appoint a suitable member of staff who would act as the LP. This appointment was a requirement of participation in SPIRIT but, due to the diversity of these agencies, there was no stipulation about what attributes the LP should have other than the ability to assist with a range of administrative, decision-making and promotional activities related to the trial.

LPs were provided with a 'Liaison Person Manual' that detailed their responsibilities and timeframes (see Table 1), and attended a briefing teleconference with the lead investigator prior to the trial. It was hoped that LPs would assist in maximising awareness and enthusiasm about SPIRIT, as well as ensure it ran smoothly.

Table 1: Liaison person tasks and timeframes

Phase of study	Task focus	Details	Timing / frequency
Pre-intervention phase	Liaison person briefing	Attend a teleconference with other LPs in which SPIRIT and the LP role are detailed	A one-off teleconference prior to the intervention for LPs already in place
	SPIRIT introductory session	Attend and participate in the introductory session in which the study (and LP role) is explained to staff	A one-off hour-long session preceding the intervention
Intervention phase (over 12 months starting at 0, 6 or 12 months from the commencement of SPIRIT)	Selection of intervention components	Consult with colleague / leaders as required to identify optimal components for agency needs	On-going: starting after the agency receives its audit feedback and finishing when all components are selected
	Identification of agency interests and priorities	Consult with colleague / leaders as required to identify topics, content and providers that will best address agency needs	On-going: starting after the agency receives its audit feedback and finishing when all options are agreed
	Intervention activities	Schedule and book resources for intervention activities	Periodically as required over the 12-month intervention period
		Attend and participate in as many of the intervention activities as possible	Approximately 10 two-hour sessions over a 12-month period
	Invitations and reminders	Invite colleagues to participate in intervention activities	Periodically as required over the 12-month intervention period
Data collection (over 36 months starting at commencement of SPIRIT)	Identification of documents and participants for outcome measures (measures are collected every 6 months over 30 months)	Develop an initial list of invitees and contact details for the online survey based on eligibility criteria	The list is developed before measurement point 1, then updated before each of measurement points 2-6
		Nominate four 'best practice' documents and provide details of the people who developed them	Every six months for six measurement periods
		Nominate a senior member of staff to be interviewed	Every six months for six measurement periods
	Invitations and reminders	Send emails to all eligible staff inviting them to participate in the online survey, followed by two reminder emails	Every six months for six measurement periods
	Process evaluation interviews	Participate in one interview early in the intervention and one following it	Interviews last up to one hour and take place approximately 11 months apart
Other	Other liaison tasks as required (not specified in manual)	Advocate for SPIRIT, be a resource for colleagues, provide advice to SPIRIT team, act as a communication link between the agency staff and the SPIRIT team	Ongoing over the duration of the study (36 months), but likely to be more intense during the 12-month intervention period

Research questions

While we agree that there is no simple recipe for successfully championing an intervention, we argue that understanding critical aspects of the interplay between personal attributes, views, behaviours, context and the nature of the intervention is possible and can help in the selection and support of effective facilitators in similar interventions. Hence, we attempt to answer four inter-related questions:

1. What were the professional characteristics of the people who acted as SPIRIT's LP and how did these affect engagement with and perceptions of the study (process effects)?
2. How did LPs perceive and promote SPIRIT and with what process effects?
3. To what extent did the LPs operate as champions, opinion leaders and/or boundary spanners?
4. How can we explain the variation in how LPs perceived and promoted SPIRIT? Including (a) What was the role of organisational leaders? and (b) What was the role of organisational context?

Methods

In this paper we report data from the SPIRIT process evaluation (Haynes et al, 2014). Primary data collection methods were: semi-structured interviews with the LPs and purposively sampled staff in each of the six agencies; observations of intervention activities (most of which were attended by LPs); and conversations with study staff who were interacting with LPs during the trial (Table 2). Analytic memos written after each data collection event were an additional data source.

LPs were interviewed twice: early in the intervention and post-intervention. Early interview questions addressed: the LP's work role and tenure, their views about agency research use, how they came to be the LP, initial impressions of SPIRIT, and predictions for how the intervention would be received in their agency. Post-intervention interviews focused on: their experience of acting as the LP, challenges and benefits, how they tackled the LP tasks, factors that affected engagement, any non-SPIRIT activities affecting organisational research use, support internally and by the SPIRIT team, their views of SPIRIT and any feedback about colleagues' views, any impacts, and improvement advice. In the post-intervention interviews other staff were asked:

> The people who took on the role of facilitating SPIRIT in each organisation were quite diverse. In your organisation X acted in that role. How do you think her/his position here or the way she/he approached the tasks involved in facilitating SPIRIT might have affected how people engaged with it?'

Prompts were used to explore participants' views about the attributes, behaviours and impacts of their LP in more depth.

Interview data were managed in NVivo® (QSR International Pty Ltd, 2012) using Framework Analysis (Ritchie and Lewis, 2003). This allowed us to summarise and categorise the critical dimensions of the data while maintaining links to the verbatim transcripts. Categories were derived from (1) a priori considerations such as the role of organisational leadership and LPs' characteristics, and (2) constructs developed

Table 2: SPIRIT process evaluation data collection details

Data source	Data collection method	Data	Timing	Focus of data collection
Liaison people	Semi-structured interviews	Digital recordings, transcripts and memos	During the early phase of the intervention	How they became the LP? Actions and experience of the role to date. Initial views of SPIRIT and predictions re staff engagement.
			Soon after the intervention ended	Actions and experience of the role. Views about SPIRIT and staff engagement. Advice for improving the intervention and LP support.
	Informal telephone calls and emails	Notes and email data (summarised in memos)	Throughout the trial	Views / concerns / further reflections about SPIRIT or contextual factors.
General participants	Semi-structured interviews (purposively sampled)	Digital recordings, transcripts and memos	During the early phase of the intervention	Organisational culture and context, initial views of SPIRIT, LP role in early implementation.
			Soon after the intervention	Experience of SPIRIT, views about agency engagement, impacts of LP actions and attributes, advice for improvements.
Intervention sessions	Observations and checklist completion	Digital recordings, fieldnotes, checklist codes and memos	Throughout the intervention phase of the trial	Documenting intervention delivery, describing participation and interactions in each agency, including the role of LPs.
SPIRIT staff	Interviews / structured conversations	Fieldnotes and memos	During engagement phase and after mid-intervention feedback	Any information about views and activities of executive staff and LPs that would help to explain interaction with and impacts of SPIRIT.
	SPIRIT staff meetings and ad hoc conversations	Memos	Throughout trial	Any information about views and activities of LPs and other agency staff that would help to explain interaction with and impacts of SPIRIT.
	Collation of emails from LPs copied to SPIRIT staff	Emails (summarised in memos)	Throughout the trial	Verification of LPs' email communications to staff in their agency about different aspects of the trial (this information was not received consistently so it is not strictly comparable)

inductively from the data such as LPs' perceptions of intervention flexibility and how they integrated LP tasks into their daily work. A later round of analysis was guided by further concepts from the literature, coding for instances of LPs acting as champions, opinion leaders and/or boundary spanners. Observational and memo data was synthesised into schematic case studies which were structured to allow cross-organisational comparison of key dimensions. During analysis, the LP-related interview data was reviewed iteratively against the case studies to contextualise perceptions, relationships and experiences. Data collection and analysis was concurrent, founded on the method of constant comparison where data is iteratively sought and scrutinised in order to develop, nuance and counter emerging hypotheses and explanations (Boeije, 2002). Synthesised LP data and emerging interpretations were reviewed by a small team of multidisciplinary investigators who contributed regularly to the process evaluation work. Later analysis was reviewed by members of the SPIRIT implementation team in order to identify any inaccuracies, and so we could consider their views.

Draft findings were sent to the six primary LPs, that is, the people who acted as LP for the majority of the intervention in their agency. They were asked to comment on the reasonableness of the findings and to inform us of any other views they wished us to consider. We explained that their opinions would be considered and included in the resulting paper, but would not necessarily alter our interpretations. Our purpose was to: (a) provide the primary LPs with an opportunity to contribute to the depiction of LPs in their agency; (b) re-examine our interpretations in the light of potentially challenging insider perspectives; and (c) provide additional data with which readers could critically assess our findings (Locke and Ramakrishna Velamuri, 2009). Unlike conventional member checking this was not an attempt to validate our findings – people may have quite different though equally valid views of the same issues (Sandelowski, 1993). All six LPs responded. Their views, including an overview of how their comments changed other aspects of this paper, are presented later. Participants' perspectives on the findings, together with sampling for maximum diversity of stakeholder perspectives, data triangulation and team involvement in analysis, added to the rigour of this work (Mays and Pope, 2000), as did our reflexive stance throughout (Symon and Cassell, 2004). Ethical approval for the SPIRIT trial and process evaluation was granted by the University of Western Sydney Human Research Ethics Committee, approval number H8970.

Results

While it is impossible to fully disentangle their impact from other contextual factors, it is evident that LPs made a profound difference to the way that SPIRIT was communicated, perceived and engaged with in each of the six intervention sites. We present the findings in relation to our research questions:

1. What were the professional characteristics of the LPs?
2. How did LPs perceive and promote SPIRIT?
3. To what extent did LPs operate as champions, opinion leaders and/or boundary spanners?

4. How can we explain the variation in how LPs perceived and promoted SPIRIT? Including (a) What was the role of organisational leaders? and (b) What was the role of organisational context?

Some details about LPs and the organisations in which they work have been altered to preserve anonymity. We have deliberately obfuscated any details that may reveal which LP was based in which organisation and, in the case of multiple LPs in the same agency, their position in the sequence and whether or not they were the primary LP.

What were the professional characteristics of the LPs?

In five agencies, the CEOs nominated the most senior member of staff with a research or evaluation role to act as the SPIRIT LP. In two cases, these staff passed on the function to a more junior member of their team. In the sixth agency, which had no dedicated research or evaluation position, the LP function was held by a senior executive. Consequently, there was substantial variation in the hierarchical position and role of LPs within their organisations.

Seniority

Contrary to our expectations, LPs with greater seniority did not always facilitate higher levels of participation. Reminders sent by the most senior LP often resulted in a spike in online survey completions compared to a nil effect from less senior LPs, but there was no consistent relationship between seniority and survey response across the agencies. Interviewees speculated that simply appointing a senior person to act as the LP "spoke volumes" about the "authenticity" of that agency's commitment to SPIRIT. How this seniority was used, however, was equally important. Leveraging power may have had adverse impacts such as causing resentment from staff who were instructed to attend workshops. Conversely, seniority enabled LPs to make executive decisions, whereas junior LPs needed to elicit responses through bureaucratic chains of command, often negotiating new processes for dealing with the questions SPIRIT posed. This meant they often took longer to complete core tasks, but this did not result in lower participation rates overall.

Organisational role

Interviewees stated that where the LP had a research or evaluation position it bolstered their credibility as an appropriate facilitator for SPIRIT, but in some cases this association constrained how SPIRIT was perceived. For example, in an agency where the LP was an evaluation manager some staff assumed SPIRIT was an evaluation programme:

> who that person is affects what you think the presentation is going to be about [and its] relevance to your team… because she might have clearly explained [the study] but in your head it's evaluation.

These interviewees speculated that their LP's position increased the intervention's credentials as an evaluation resource, but reduced the likelihood that staff who were

not involved in evaluation would participate. In another agency, several participants expressed discomfort about the purpose of the relatively new organisational position that the LP occupied, and indicated that this led to negative connotations for SPIRIT.

LP coverage and workload

There was considerable variation in the turnover and coverage of the LP function during SPIRIT. Two agencies had a single LP for the entire study period, but with lengthy absences in one case. Two had a single LP during the intervention phase, but different LPs during data collection. In the remaining agencies, multiple people acted as the LP across both phases, including periods during the intervention in which there was no LP. This impeded the conduct of the outcome measures and the selection of, and arrangements for, intervention sessions. It also appeared to impact negatively on staff awareness of the intervention, with several interviewees in these agencies stating they did not recall any communication from their various LPs about SPIRIT. In most cases, staff turnover or restructuring caused the LP function to be transferred, but in one agency it occurred because two LPs found the demands too onerous. As one manager explained, "It ended up being a bit more work than we'd anticipated… she literally just couldn't manage it all".

These demands were not fully knowable in advance, partly because this was a novel trial, but also because LPs' workloads differed hugely depending on how they consulted about tailoring the intervention. The SPIRIT team tried to minimise the burden on LPs but found that they had underestimated time requirements in some cases.

How did LPs perceive and promote SPIRIT?

Liaison people across the six agencies had strikingly different conceptualisations of the LP function which, in turn, shaped how they approached the tasks. In one agency, SPIRIT was implemented following a major restructure. The LP speculated that her colleagues would conflate her newly formed team with SPIRIT: "… my feeling is that people will tend to judge [us] by how useful they find SPIRIT, but also, maybe, to judge SPIRIT by whether they are embracing [us] or not". Accepting this blurred line, she focused on adapting the intervention so it could be integrated into the team's planned activities and directly support their professional development goals. The LP in another agency saw the function as an extension of his research governance position, so he used the experience to further develop cross-agency networks, convene research-orientated forums and increase essential skills in "translating and negotiating". A third LP had operational oversight of the organisation and conceived her core task as managing the study's demands: "getting it done efficiently". She used her authority to act as a buffer between the trial and already overburdened staff, and to maximise measurement responses, "if I say 'Do it', people will do it". Another LP was appointed to 'fix' SPIRIT after a previous LP had failed to engage staff. She conceptualised the work as a mobilisation exercise that depended on "getting buy-in", so she prioritised interpersonal persuasion and advocacy. The LP in the fifth agency, who managed a research team, argued that the LP function was primarily administrative and questioned how appropriate it was for someone in his role. He focused on the core deliverables and minimised other tasks, whereas the LP in the sixth agency had an equivalent organisational role but saw the LP function as a "natural fit". She

conceptualised her task as maximising the value of SPIRIT which meant "generating belief" among managers so they would persuade their staff to participate, and devising mechanisms to "embed" the intervention's ideas in organisational practice, "I tried to get something out of each [workshop] that would stay, would hang around for us". Thus, in all cases, it seemed that the LP function and its core tasks were perceived in relation to the organisational position and professional responsibilities of the people who were assigned to act as LPs. As we show later, this was further shaped by the study's perceived alignment with wider organisational goals.

To what extent did the LPs operate as champions, opinion leaders and/or boundary spanners?

Championing SPIRIT

Of the six LPs who were in place for the majority of the intervention phase, four were champions for SPIRIT and two were not. Non-champions did not: communicate a vision of what the intervention could achieve, demonstrate commitment or enthusiasm for it, or attempt to engage others in supporting it (Howell and Boies, 2004). Of the further 13 people who acted as LPs temporarily during the trial, we estimate that four displayed moderate championing, three were clearly not champions, and the other six (some of whom were in position for a matter of weeks) are unknown. We base these assessments on: (a) LPs' statements in interviews and/or informal conversations about the value of SPIRIT and how they approached the tasks; (b) observable differences in LPs' levels of enthusiasm and approach to tasks during intervention activities (for example, how they introduced workshops); (c) LPs' conversations with SPIRIT team members; and (d) interviews with other agency staff. There was close agreement between LPs' self-reported attitudes and behaviours in relation to the intervention and how other agency staff perceived their LP.

Unsurprisingly, LPs' regard for SPIRIT appeared to correlate with their 'championing' and this, in turn, had an impact on how the intervention was structured, promoted, attended and perceived in each agency. In the two agencies where none of the LPs were champions, there was less consultation, the intervention was promoted inconsistently, aspects of the tailoring were less successful, and participants' views of the intervention expressed in interviews and workshop feedback forms were more negative than in the other four agencies.

Relationship quality

Congruent with the literature, which asserts that the quality of relationships between champions and their colleagues is positively associated with influence (Howell and Higgins, 1990), many interviewees reported that positive regard for their LP encouraged their participation, "[she] is such a wonderful person that you kind of want to do it for her". Strategies LPs used to encourage goodwill participation included dropping by colleagues' desks to request they complete a survey, chatting in the kitchen about SPIRIT goals and, in one case, negotiating an explicit quid pro quo. Where interviewees reported instances of participating as a direct result of their LPs' request, it was usually in the context of informal personal interaction (rather than emails or generalised comments in meetings). This suggests that friendly near-peer

LPs may be best positioned to encourage participation (Rogers, 2003). However, as we point out later, leaders also played a vital role in this dynamic.

Selling SPIRIT

One of the most noticeable differences between champion and non-champion LPs was the extent to which they 'marketed' SPIRIT, that is, creatively harnessed organisational information channels and used rhetorical strategies to make the intervention and outcome measures more appealing. One LP did a mini presentation for staff who had missed the introductory session. He admitted to "embellishing the [audit feedback] a little bit" to create buy-in. Another explained, "I can talk it up in a way that sounds like it's not a hassle and it's interesting – and look, it is good stuff we're getting out of this that will help you in your work". This LP sought out and spoke personally to every member of staff nominated for each of the outcome measure points (about 25–30 people on six occasions), and achieved a 100% response rate.

One of the more senior LPs was also keen to increase response rates, so she sent a rare personal memo to staff telling them that, uncharacteristically, she had completed the survey because the organisation needed good data for cross-agency comparison. In interview she explained her strategy: if staff knew she had completed a "bloody survey" they would understand its importance, plus they are highly motivated by competition. This agency's response rate increased significantly and we are not aware of other factors that could explain it. This accords with findings that champions use formal and informal methods of communication to frame interventions strategically in terms of organisational orientations and objectives (Hendy and Barlow, 2012; Howell and Boies, 2004). Conversely, non-champion LPs may have undermined SPIRIT at times by overtly distancing themselves from the study. For example, one LP introduced a workshop saying that he didn't know what it was about, and another forwarded email requests to colleagues about the online survey with the disclaimer, "Don't shoot the messenger!" As we show later, these activities were influenced by LPs' concerns that SPIRIT might damage their professional reputation.

The blurred distinction between persuasion and imposition was noted in every agency. All LPs admitted to "cracking the whip" to some degree, and most reported that staff sometimes felt hassled by multiple requests to participate. Overarchingly this related to "trying to get people involved with something that they don't necessarily see benefits them directly". Some LPs argued that getting colleagues to see these benefits placed too much responsibility on them; they asked, "Whose job is it?". Naturally, LPs who valued SPIRIT were more willing to sell it and to convince colleagues to participate in data collection as part of a trade-off, but they also had more ammunition with which to do so. "Chasing" colleagues required "resilience", but there is little doubt that these persuasive strategies increased participation; as one of the "chased" participants explained, "people find it hard to say no because… [the LP] is very politely persistent in that she'll find you and hassle you until you [say yes]".

These findings highlight the ethical challenges of workplace interventions. As others acknowledge, the line between persuasion and coercion is particularly delicate in organisational research where co-workers have recruitment responsibilities, protocols cannot be easily enforced by the research team, and where staff may regard participation as expected (Aguinis and Henle, 2004). SPIRIT sought to minimise coercion risks by reiterating the voluntary nature of participating and providing opt out opportunities

pre- and post-data collection. Although managers could see who attended sessions they did not know whether their staff participated in data collection. There were no complaints about coercion, and the low survey response rates in most agencies suggest that people did not feel compelled to complete them, but in supporting the study a minority of LPs and managers may have strayed over this line, resulting in some unwilling participants (albeit in a study with negligible risks of harm).

Understanding SPIRIT

Being an LP was a learning curve and many of the longer serving LPs found that they became more adept over the duration of the study. Familiarity with the outcome measures increased the efficiency with which they were administered, just as experience of the workshop consultation and delivery process increased understanding of how components could be adapted, "[Before this] I couldn't envisage what a Research Exchange would look like – what the possibilities were".

Some non-champion LPs were unable to explain the study to their colleagues. One did not know what was happening in the intervention or measurements. Another seemed unaware that his agency had choices about the intervention content: the selection of which he was meant to be facilitating. Many of the LPs found the study information dense and excessive so concluded that grasping it was not a worthwhile use of their limited time. One of them minimised the need to understand the study by telling her staff if they had any questions they should talk to the SPIRIT team. Another handed over the LP function to a colleague when action was required. This contrasts with one of the champion LPs who so delighted in knowing everything about the study that she playfully asked us to test her on the details.

SPIRIT support for championing

All but one LP described the SPIRIT team as supportive, but several felt the team could have done more to build relationships and anticipate their need for succinct, shareable information. Support was also not always consistent: some LPs who took on the function during the intervention period received less instruction than their predecessors. In one case, the LP felt this impeded her ability to champion SPIRIT:

> You should have really sat me down and said, okay, this is what it's all about… That would have clarified the whole thing to me and I would have been able to say, okay, I can explain it to everybody and promote it, advocate for it, I suppose, which I don't feel I have really been able to do.

LPs made suggestions for improving communications and support, highlighting the need for more on-site visits and face-to-face conversations, particularly in the early stages of the trial.

Opinion leadership

Participant interviewees described the characteristics by which they judged the suitability of their LPs; these spanned championing and opinion leadership and were contingent on two related concepts of legitimacy: credibility and commitment.

Colleagues in one agency argued that it "didn't make sense" for SPIRIT to be promoted by their LP, given her seemingly limited understanding of its aims and her indifferent attitude towards research in general. Conversely, colleagues of another LP commented that she was "ideal" given her "research credibility" both as an academic and an enthusiastic advocate for research-informed policy. The LP in a third agency concurred, explaining the CEO nominated him because he is publicly "committed to evidence" and known to influence colleagues' engagement with research. All but one of the primary LPs thought LPs needed research experience in order to speak authoritatively about SPIRIT, and all regarded knowledge of the organisational culture as critical. There was no indication that LPs either were or were not viewed as opinion leaders in relation to other aspects of organisational business.

Boundary spanning

SPIRIT asked LPs to function as boundary spanners across different parts of their own organisations as well as across the agency–SPIRIT divide, hence LPs who were newly employed members of staff were at a disadvantage: they "couldn't leverage existing relationships" or make informed judgements about which colleagues and what documents were eligible for the outcome measures. Lack of familiarity with workplace culture and communication styles complicated consultations about how best to use SPIRIT but, as LPs' relationships evolved, appeared to have less impact on later phases of the study. For example, a newly employed LP was keenly aware that she lacked essential workplace knowledge; yet, by the time of the post–intervention interviews, she was seen by colleagues as a highly effective networker and "ambassador" for SPIRIT. This LP had used SPIRIT to initiate organisational connections and had formalised boundary spanning by recruiting colleagues across the agency to act as team advocates for SPIRIT.

For an LP to bridge the divide between their organisation and SPIRIT, some "translation" was required. Most of the LPs attempted to make the study terminology and underpinning concepts more accessible, for example, they interjected during workshops to explain terms and provide illustrative examples. They also provided reassurance such as when, in the more clinically-orientated agencies, LPs used a drug trial analogy to illustrate that an intervention was being tested, not the participants.

Mediation

Although the SPIRIT team had mechanisms for communicating *to* agencies, they were dependent on LPs for conveying communication *from* agency staff. Consequently, lack of boundary spanning by LPs in some sites meant the SPIRIT team had no access to participants' views and concerns (the process evaluation did not provide this feedback until after the intervention). Conversely, the more enthusiastic LPs acted as mediators, which increased the extent to which concerns were aired, addressed and fed back. For example, when the online survey was shortened one LP framed it as the researchers' response to criticisms raised by agency staff. She informed her colleagues: "See, if you do have any questions or comments at any time about SPIRIT then you can tell me about them because they are listened to, and this is evidence of that". It seems likely that these staff would have perceived such feedback as a validation of their participation. Staff in organisations with less communicative LPs

might have welcomed the shorter survey but would have had less sense of agency in bringing it about.

Brokerage and advice

Variations in boundary spanning resulted in very different levels of advice from the LPs, and this impacted the SPIRIT team's sensitivity to each organisation's culture. Participants in one agency criticised SPIRIT for not using professional learning techniques that were their standard practice (they wanted direction via "pre-readings… so we can come into the room with our heads in the correct space"). These could have been incorporated if we had known. A forthcoming LP might have informed us about these norms unbidden, but we missed an opportunity to learn from the agency prior to the intervention about how to optimise activities in their setting. So while the trial benefited from boundary spanning LPs who proffered advice and creative suggestions, if we had acted as better boundary spanners ourselves we may have been able to tap into valuable insider knowledge more effectively across all the agencies.

SPIRIT team responsivity

Effective boundary spanning was a two-way street requiring mutual responsiveness and conciliation. LPs identified four behaviours from the SPIRIT team that they found particularly encouraging: 1) SPIRIT staff sending positive reinforcing feedback about the LPs' hard work and positive impacts to their manager/CEO; 2) small appreciative gestures from the implementation team such as 'thank you' emails, verbal acknowledgements during workshops, and gifts of chocolates at Christmas; 3) changing aspects of the trial in response to agency feedback (for example, shortening the online survey); and 4) Supporting LPs to use their expertise to adapt information materials and participation strategies, "the good thing was that [the SPIRIT team] always acted on what I suggested… [they] realised that I know the organisation better than they would and what works here". Thus the positive interactions between LPs and the SPIRIT team were co-adaptive. Where LPs' suggestions were not acted on (usually due to infeasibility or adherence to the study protocol) this caused frustration. Clearer communication about why those decisions were made might have lessened this irritation and provided the LPs with a rationale they could share with colleagues.

How can we explain the variation in how LPs perceived and promoted SPIRIT?

Cost/benefit judgements

LPs made informal cost/benefit analyses about the potential value of the SPIRIT intervention for their organisation in relation to its demands. This determined their levels of enthusiasm for the intervention, how they perceived the LP function and how they approached its tasks. For example, one of the champion LPs was explaining her hope that SPIRIT would "pay off": "… it's certainly helped the general direction that we want to travel in terms of the role of research. So in that sense, yes. It's been fairly time-consuming for me personally, but probably worth it for the organisation". Perceived costs and benefits were influenced by management attitudes and behaviours, and by other organisational factors as described below, but were also entwined with

an assessment of the potential professional benefits and risks in being associated with SPIRIT: those who expressed most enthusiasm about organisational benefits also identified value for themselves in being the LP. This assessment was particularly evident in two agencies in which the LPs were new employees. The one with a positive view of SPIRIT embraced the LP role, anticipating that it would help her develop internal connections and stakeholder relationships that were critical for her day-to-day work. After the intervention she reported that it had done just that. Whereas the other LP tried to minimise the risk that SPIRIT would be perceived as his project: "I didn't want that connection". As a new employee with no established organisational reputation it was uncomfortable to be associated with activities that he regarded as demanding with dubious merits. In three agencies LPs saw SPIRIT as a resource that bolstered their extant work in developing organisational research or evaluation capacity and, post intervention, they identified positive impacts in relation to their work. The least enthusiastic LPs did not identify positive impacts for their agencies or themselves. The 'risk minimising' LP described above said that the role had "helped expose me and connect me with people", but not in the manner he would have chosen.

Being nominated

There was no association between how people came to be the LP and their attitude towards it. The only self-delegated LP was among the least enthusiastic. Conversely, the LP who was 'volunteered' in her absence went on to engage an overtly disengaged organisation and to facilitate one of the highest proportional attendance and survey response rates overall. Her initial view of SPIRIT as a confusing 'research thing' was far from enthusiastic, "[When] I got back from holidays and I was asked to take it over I was, like, 'Oh my God! Why?'" Despite this inauspicious start, she strove to learn about SPIRIT and became convinced that her organisation could benefit. Motivated by this and the challenge of turning around the previous LPs' lack of success, she approached the LP tasks with gusto and was able to incorporate a 'conversion narrative' as part of her rhetoric, "I'd say, 'look I thought the same as you… what a hassle! But… it's actually much easier than you think'". This echoes findings that 'change cynics' who revise their views of an intervention can become highly effective champions (Hammond et al, 2011). It is also another ethical grey area in that several LPs were reluctant participants.

What was the role of organisational leaders?

Permission to push

Although LPs were asked to be the 'face' of SPIRIT in their agency, perceptions of the extent to which they were representing managerial views were key. Three LPs said they felt justified in being assertive about SPIRIT because it was known to be on behalf of the organisation's leaders, "They knew it was something that I was pushing, but not for my own agenda… I was nagging them on behalf of our upper management". In cases where leaders explicitly demonstrated support for the LP's SPIRIT-related activities, they felt this 'imprimatur' was strengthened. Colleagues in these organisations concurred. According to interviewees across all agencies, the

most persuasive incentive for completing the outcome measures was being asked by a well-liked, well-respected colleague who saw the endeavour as worthwhile, backed by evident managerial/CEO support.

In contrast, another LP expressed discomfort about the burden of repeated outcome measures and his need to cajole staff to complete them. Despite strong CEO espousal for SPIRIT, managerial support in general was not as visible or consistent as in some other agencies. For example, the LP's immediate manager expressed scepticism about SPIRIT during workshops, which probably contributed to a less conducive environment for persuading colleagues to participate. As others have found, managerial cynicism can depress staff attitudes to organisational change initiatives (Rubin et al, 2009). Even where LPs perceived managers as committed to SPIRIT, they often struggled to get visible backup: "The main challenge for me, I think, is engaging our leaders enough so that they can convey the message to staff". And in some cases, managers constrained LPs' initiatives, limiting SPIRIT's reach in the process. Examples included refusing an LP's request to introduce a 'SPIRIT slot' at team meetings, and instructing the LP to reduce burden on the agency by limiting the number of staff who were invited to participate.

SPIRIT and work performance

The extent to which SPIRIT was formally recognised as part of the LPs' work varied. In most cases managerial oversight of SPIRIT was added to the LPs' usual reporting lines. In three agencies, LPs and their managers identified ways that SPIRIT could be used as an opportunity for professional development, for example, using LP activities as a vehicle for increasing their status and/or exposure in the organisation, and building SPIRIT deliverables into performance reviews. Such strategies strengthened these LPs' desire to make it work. Where LPs radically shaped SPIRIT to address organisational priorities this was possible only because the LP already had some responsibility for developing such initiatives, and there was managerial support for using SPIRIT this way. Figuring out how to accommodate and use SPIRIT within LPs' work was dependent on managers understanding the scope and responsibilities of the function and how these could be enacted in their organisational context, "It is one thing nominating a liaison person and then another thing to find, oh, does that liaison person have the authority to take decisions on all of these areas or to speak across the organisation? Or is their role more administrative?"

What was the role of organisational context?

Paradigmatic compatibility

Perceptions of SPIRIT's compatibility with the organisation's conceptualisation and use of evidence appeared to be the strongest determinant of why LPs saw greater or lesser value in SPIRIT. When interviewed, two of the most unenthusiastic LPs explained that the intervention made assumptions about how they should be engaging with research that did not align with their practice:

> … people are operating at a different level from what is assumed [by SPIRIT], and have different needs. It's no longer to do with access to research evidence,

it's what do you use and how do you use it to articulate good practice? How do you cut through the politics? How do you get people at the frontline to become aware of what they do and get them to throw back at you what kinds of questions are important, and how can that translate into research and policy? Which are very different kinds of questions from just how do you get more research into policy.

These LPs rejected the implication that their organisation should improve their use of research in the way SPIRIT conceptualised it, and did not believe that an externally designed intervention was an appropriate means of tackling highly situated knowledge-to-practice concerns. Their views were supported by other interviewees in the same agencies, suggesting that they were representative of their dominant workplace cultures. It is possible that, say, practitioners from other jurisdictions sharing real world experiences, or workshops that focused on internally developed research or evaluation, might have been more welcome. But the more disengaged LPs seemed unclear about how much intervention opportunities could be adapted and may not have considered these to be possibilities. In one case, the SPIRIT team pushed for a workshop to be facilitated collaboratively with an expert in that agency. The idea was welcomed in principle, but later dismissed due to work pressures.

The more enthusiastic LPs worked in organisations that saw evidence, or the intervention, in a slightly different manner. Although all agencies had a pluralistic conceptualisation of evidence, an investment in stakeholder engagement, and extensive experience in implementing policies and programmes in messy real-world contexts, their emphases varied in accordance with their remit. Agencies working within specific biomedical fields (two of the intervention sites) seemed more disposed to embrace evidence-informed ideals than those with broad population health or systems reform briefs. This may reflect the extent to which forms of research often considered to be of highest academic quality – such as randomised controlled trials – could be applied instrumentally in their contexts. However, two of the champion LPs were in agencies with far broader remits. The first of these agencies was directly dependent on ministerial approval (and therefore, arguably, most susceptible to overt political pressure), yet their LP embraced SPIRIT. Several factors may have played a role. First, there were positive pre-existing relationships between the intervention designers and staff at different organisational levels who had commissioned some of the components offered by the intervention. Having used (and, to some extent, shaped) the product on offer, staff in this organisation were probably less likely to dismiss SPIRIT as pushing a purist and irrelevant evidence-based agenda. Second, the agency leaders enthusiastically and credibly espoused research utilisation and explicitly supported SPIRIT and the LP as a champion of the intervention. These factors were likely to reassure the LP that SPIRIT was sufficiently compatible with his agency to be worthwhile.

The second agency was embarking on training to strengthen their in-house research and evaluation capacity. The LP stated that their continued participation in the study was contingent on SPIRIT contributing to this pre-existing agenda, and she negotiated assertively to refashion intervention activities accordingly. Paradoxically, lack of established relationships between the SPIRIT team and agency staff may have facilitated this exchange as the agency had little to jeopardise in taking a strong stance.

The commonality in all cases was the need for alignment between SPIRIT and the agency's current engagement with research.

Tailoring and alignment

There was a strong sense of each agency being in flux and striving toward particular practice goals. This trajectory appeared to provide the benchmark against which LPs assessed the value of SPIRIT: given our circumstances and strategic goals, is this intervention worthwhile? To what extent does it provide opportunities that support how knowledge is conceptualised and situated within our day-to-day practice? This was echoed by interviewees' predictions about whether they would participate in SPIRIT. To do so they would need to "see value", gain "practical benefits", and know that the intervention had "a direct relationship with the work that I'm doing".

Programme flexibility and responsiveness was a key criterion for this assessment. The least enthusiastic LPs expressed concerns about structural inflexibility: "The tailoring of the programme is not really tailoring. What it is, you're giving us a menu… you told us what you're doing… and all we're doing is ticking the boxes". They saw limited scope for extensive adaptations because they regarded SPIRIT as fundamentally non-consultative, "You're talking to [us] but it's a one way situation". However, where LPs experienced the intervention as genuinely tailorable they maximised its benefits by working with SPIRIT staff to shape the workshops and resources to address organisational priorities. Two LPs integrated intervention components into a wider programme of staff capacity building, selecting topics, content and formats specifically to complement internal initiatives. Timing was also critical. Managers in the organisations in which these two LPs were based wanted the intervention to start at the same point as their internal initiatives, and one insisted on a hiatus while a major restructure was finalised. SPIRIT may have been better integrated by other agencies if organisational leaders could have decided when the intervention commenced.

LPs' view about our findings

All six of the primary LPs who were invited to comment on the manuscript responded. Three gave general neutral or favourable feedback, and three commented more specifically. LPs were asked to alert us to any concerns about their identifiability but none did so (though one was initially concerned that other LPs might be identified). One LP asked for a word to be softened and another questioned an ambiguously phrased description of her agency. We agreed with their feedback and made amendments they were satisfied with. Two LPs developed themes in the manuscript about aspects of the trial that motivated them (belief in the goals of the trial, wanting to work with the trial leaders, leadership support and building LP tasks into their work performance review) and the characteristics required for the LP function (organisational and communicative skills, cross-agency connections and tenacity). This feedback has been included with the findings they relate to. Two felt that, having read what LPs in other agencies were doing, they would have benefited from interacting periodically during the trial to share experiences and discuss strategies: "after reading the manuscript, I really felt the loss of not having an opportunity to interact with other LPs – I think we could have learned a lot from each other!"

Implications

Our findings highlight some of the challenges of implementing complex interventions in real-world settings where the intervention's ideas and activities must be carried by, and work through, existing organisational structures, processes and relationships (Damschroder et al, 2009; Locock et al, 2001). In such interventions change is a series of entangled interactions which are impossible to fully control (Greenhalgh et al, 2004). Nevertheless, it is also apparent that LPs wrestled with practical and, in some cases, conceptual obstacles which, in hindsight, could have been better anticipated by the intervention team. For example, we could not manage the frequency with which the LP function was transferred during the intervention, but we did know that policymakers change jobs rapidly and often act in other roles, so we could have designed a better system for supporting these transitions.

The conceptual obstacles suggest that more fundamental revisions should be considered. This will be addressed in further papers when all of our trial data can be considered. In the meantime, we acknowledge the dilemma that conceptual differences presented for some of the SPIRIT LPs. From one perspective, LPs' views were self-fulfilling: where they judged the intervention to have potential value they invested their efforts thereby adding value and experiencing SPIRIT as worthwhile. Where they judged it to have little value, little was added and little was experienced. But how much value could be added? The non-champion LPs were reflecting wider organisational concerns about the dissonance between an externally developed intervention that appeared to pre-frame the problem it was addressing, and in which experts provided generalisable knowledge when they saw knowledge as constituted through local practice: what Gabbay and le May (2011) call knowledge-in-practice-in-context.

It may be helpful to consider these findings in the light of previous research that shows even where change agents are highly respected opinion leaders their influence is bounded by current organisational norms and expectations (Rogers, 2003). It is far easier to motivate people who are receptive to the ideas presented in an intervention than those who are cynical (Rogers, 2003). Thus LPs may have been able to galvanise people's engagement with SPIRIT positively or negatively but, without modifying the intervention substantially, could not have driven transformative change that countered dominant cultural tendencies, no matter how personally committed they were (Dibella, 2007; Hammond et al, 2011; Locock et al, 2001). The existing culture of research use within a policy organisation is known to affect how research utilisation intervention strategies are received. (Dobbins et al, 2009)

The findings from this study support those observed in other studies in that the delivery of interventions is profoundly affected by those who act in facilitation roles akin to that of our LPs (for example, Harvey et al, 2002; Ipsen et al, 2015; Kitson and Harvey, 2016). Further, that the LPs' ability to function as champions, opinion leaders and boundary spanners, was critical. For example, Dixon-Woods and colleagues found that interventions were most effective when:

> … those locally charged with implementation were sincere in their beliefs about the value of the program, were able to create transdisciplinary alliances, had local credibility among peers, were prepared to tolerate debate but exercise firmness, and used multiple tactics including role modelling,

persuasion, sanctioning, reminders, and constant feedback. (Dixon-Woods et al, 2013)

What this study adds is an analysis of how these issues played out in a research utilisation trial in policy agencies. In particular, our findings suggest that concepts from political science about the contingent nature of evidence in policy (de Leeuw et al, 2014; Liverani et al, 2013; Pawson, 2006; Sanderson, 2009) and how it intersects with policy practices and organisational change (Armstrong et al, 2013; Evans et al, 2013; Hallsworth et al, 2011; Sundell et al, 2013) were central to how the intervention was facilitated. The paradigmatic compatibility of SPIRIT with agencies' current and proposed research use strongly affected each LP's views about the value of SPIRIT and this shaped how they engaged with and facilitated the intervention.

A standardised checklist of LP attributes is not meaningful in isolation, but we believe that some propositions (generalised theoretical statements grounded in the data (Ritchie and Lewis, 2003)) can be drawn from our findings. Given the complexities outlined above these propositions may be somewhat aspirational, but they point us in the right direction for identifying and supporting LPs in interventions similar to SPIRIT and, potentially, for informing a framework for evaluating attributes and conditions. They are clustered in three categories: LP attributes, Managerial support and Intervention team responsibilities.

LP attributes

Proposition 1: The LP must believe that the intervention is worthwhile

At best, they will be genuinely enthusiastic about its merits – a champion. At least, they will judge that the benefits outweigh the demands.

As expected, the ideal internal facilitator for an intervention study such as SPIRIT appears to be a genuine champion (someone who believes in the intervention and will advocate for it energetically), an opinion leader (someone with informal organisational influence), and a boundary spanner (someone well-networked in their workplace who can also communicate effectively across the intervention–organisation divide). However, opinion leaders and/or boundary spanners who hold an indifferent or negative opinion of the intervention may undermine it (intentionally or unintentionally), while an enthusiastic champion is likely to ensure core tasks are delivered and amplify enthusiasm, albeit on a smaller scale than the opinion leader or boundary spanner. Consequently genuine support for the intervention appears to be a more important primary characteristic than influentiality or connections. This is hard to ascertain up front and is dependent on local cost/benefit judgements, but managers are well placed to identify likely candidates and, in combination with intervention staff, encourage increased appreciation of the intervention's potential. Others have reported success in gaining support from people who were initially opposed to an intervention (Hammond et al, 2011). Alternatively, agencies might issue an internal call for LP candidates, assuming that self-nominees are more likely to be committed to the intervention and the work required to facilitate it.

Proposition 2: The LP should have credibility in relation to intervention goals

Colleagues judged the suitability and effectiveness of their LP in relation to their credibility as an informed advocate for the intervention. Credible LPs had a professional reputation that aligned with the intervention goals (for example, they modelled and espoused research–informed work practices). This point and the one above accord with the literature which indicates that in order for a colleague's espousal to be meaningful they must be perceived as someone who believes in what they are saying *and* knows what they are talking about (Dearing, 2009; Locock et al, 2001).

Proposition 3: The LP should have sound cross-organisational knowledge and connections

The intervention was more tailored, more creatively integrated, and better attuned to professional development expectations when LPs consulted with colleagues and shared their knowledge about organisational priorities, processes and learning norms with intervention designers. LPs' ability to act as intervention intermediaries in this regard required them to have (or be able to rapidly acquire) a good understanding of their organisation and the people who work in it. This requires breadth: without boundary spanning skills, the efforts of champions may be restricted to highly localised contexts (Hendy and Barlow, 2012). But it also requires depth: an ability to understand diverse perspectives and needs arising from complex contextual interactions, and to respond accordingly (Harvey et al, 2002; Wilkinson and Frost, 2015).

Proposition 4: The LP should have good interpersonal skills

Ideally, they will be friendly, approachable and well-liked. Unsurprisingly, our data support assertions in the literature that people are more inclined to do things for people they like. This reminds us that 'reach' is about more than access. The quality of connections was just as important as the quantity for supporting organisational understanding and engagement, including identifying and resolving concerns during implementation. The need for communication and project management skills is a given.

Managerial support

Proposition 5: Organisational leaders need to visibly back the LP as well as the intervention

Strong, visible support for the intervention from managers was key in assuring LPs that their efforts – even when they verged on 'nagging' – were seen as reasonable and warranted (see also McCormack et al, 2013). Colleagues confirmed that strong support from above increased the LP's authority and demonstrated they were acting on behalf of management. Others note that managerial support should encourage LP's autonomy as overly specifying their approach could stifle enthusiasm and creativity (Markham, 1998).

Proposition 6: If possible, the LP function should be incentivised within the organisation

Enthusiasm for the intervention appeared to be enhanced when mechanisms or opportunities associated with the LP function benefited the LP professionally. This included formal professional development recognition (for example, building the work into performance indicators); increased organisational exposure, status or connections; or furthering the LP's own work. In most cases, this will be effective only if there is some congruence between the intervention goals and the LP's day-to-day work. Protected time for the LP tasks to be conducted during work hours should be agreed (Kirchner et al, 2012). A caveat: incentives should in no way pressure LPs to coerce participation.

Intervention team responsibilities

It is hard to overemphasise the importance of the relationships between the intervention team, the LP and organisational leaders. With the benefit of hindsight, these relationships would have been given a higher priority in our study.

Proposition 7: Intervention staff should provide CEOs, LPs and the LPs' line managers with clear and realistic guidance about the attributes and demands of the LP function

The strikingly different conceptualisations of the LP role indicate that, at a minimum, we must emphasise that LPs are skilled facilitators rather than administrators *per se*. Propositions 1–4 above provide the key messages for this exchange. The intervention team must describe the full scope of responsibilities and err in favour of over-estimating likely time commitments.

Proposition 8: Agencies should be supported to enact the role of LP flexibly where it does not compromise implementation fidelity

Our findings indicate the benefits of a flexible approach in which core objectives and tasks are specified but the strategies for achieving them can be developed locally (Haynes et al, 2016). For example, agencies might prefer to divide the LP function between two members of staff, with one taking responsibility for administrative tasks and another for creative input, persuasive communication, and higher level decisions. This has been effective in other studies, especially when those staff work (and are therefore likely to have influence) at different levels of the organisation (Kirchner et al, 2012).

Proposition 9: Intervention staff should actively engage the LP in planning and problem-solving, treating them as a partner in the intervention rather than a conduit

Where LPs shared detailed insider knowledge, employed creative strategies, and made suggestions for increasing the benefits of SPIRIT in their organisations, intervention activities were assessed by implementation staff and participants as more useful. This indicates that working with LPs as an intervention development partner, rather than as an implementer, would increase our ability to learn about and respond appropriately to local conditions, enhancing the relevance and fit of the intervention's goals and

activities (Howell and Boies, 2004). 'Ownership' approaches have been highly successful in effecting and sustaining change (Lopez-Patton et al, 2015; Zimmerman et al, 2013). They enable interventions to focus less on diffusing knowledge and more on contributing to how it is shaped and applied (Knights and Scarbrough, 2010). LPs who co-owned the intervention would be more likely to understand it fully (genuine dialogue bypasses much of the formal communication that SPIRIT struggled with), believe in its potential benefits and be perceived by colleagues as authentic advocates (Howell and Boies, 2004). However, this would depend on a fundamental philosophical agreement between the LP and the researchers about the goals of the intervention. Such collaboration would also require a significant time commitment.

In a subsequent paper, we plan to examine the concordance between the LP attributes, perceptions and behaviours reported here (findings which are blinded to the quantitative results) and the observed intervention effects. We recognise that many factors will affect how SPIRIT was received, but believe that the propositions outlined above, together with our analysis of the centrality of each organisation's research culture and trajectory of change, will help explain the trial outcomes.

Limitations

A limitation regarding the interviews was our inability to reach everyone who acted as an LP in their agency, and to interview as many senior managers as we would have liked, including the agency CEOs. Hence we may have missed some important perspectives. We were also unable to test our propositions formally. Thus, while they are sound representations of our findings across the six intervention sites, we do not know to what extent they provide useful applied guidance in identifying and working with LPs, nor how applicable they are to different organisational contexts.

Conclusions

This paper shows that the LPs who acted as facilitators of the SPIRIT study had a profound impact on how the intervention was implemented. LPs made informal cost/benefit analyses in which they weighed the value of participation against its demands and potential risks. Their different conclusions – influenced by their organisation's mission, research utilisation norms, epistemological stance and leadership support – led to substantial variation in how they facilitated, promoted and tailored the intervention. This impacted on participation and engagement with the study across their respective organisations. LPs' judgements about SPIRIT may have had a degree of self-fulfilment (they got what they put in), however, in some cases the intervention's form and content may have been unsuitable for adaptations that could best address the organisations' most pressing knowledge-to-practice needs. This indicates that the design of research utilisation interventions in policy agencies should incorporate potential participants' views about the role of evidence in policymaking and how local practices can be best supported. Nine propositions were developed from the data that may assist in identifying and supporting facilitator roles in interventions similar to SPIRIT and, potentially, inform a framework for evaluating attributes and conditions.

Acknowledgements

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