ACTION-RESEARCH

The Internal-External Dynamic: Using Research to Inform Government Policy about Poverty in Canada

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Background: The purpose of this study is to describe integrated knowledge translation (iKT) partners' experiences with moving knowledge to action within government. In this study, iKT partners emerged from government, academic, and community settings with a shared interest in making changes to policies, programs, and services that would benefit families in poverty.
Methods: Interview data were generated with 23 iKT partners who worked within or close to municipal and provincial governments. Partners were asked about how to use research findings to draw attention to and make needed changes within government. Qualitative description was used to answer our research question. An iterative and inductive process of coding, categorizing, and theming characterized our analysis.
Results: Partners described how bureaucracy stymied change as well as how bureaucratic barriers could be overcome. In particular, partners described how to create opportunities for research use through an internal-external dynamic/dance, wherein research is strategically poised to address current political priorities. The value-laden nature of poverty also has implications for research use.
Conclusion: An interplay of public engagement and socially accountable partnerships are needed to drive change within government. The broad shift in academia to engage with community and government partners warrants further discussion.

Keywords: Community-Based Participatory Research; Knowledge Translation; Qualitative Research; Policy; Poverty; Social Determinants of Health

This paper documents the insights generated from partners committed to a long-term community-based research project that served low-income families in Edmonton, Alberta, Canada. To understand how partners put their research "to work," we interviewed partners during the latter end of the project, when they were awaiting the results of the primary research question but had an opportunity to "mine" their data and generate timely interim analysis. Partners described an interesting dynamic between work outside (external) and within (internal) the government. This "internal-external" dynamic has practical applications for anyone working in community-university partnerships that often tackle complex health and social issues such as poverty.

Knowledge about Poverty is Strong and Long-Standing

We have long known the causes and consequences of poverty. As early as 360 BC, Plato (2008) described government legislation as a key factor in determining the distribution of wealth. Furthermore, the relationship between poverty and health was identified in the mid-19th century, when scholars not only found an association between living conditions and health, but also identified the political and economic factors that created these disadvantages (Raphael, 2010). Today, our understanding of how poverty impinges on health and well-being has grown into the field of the social determinants of health (World Health Organization, 2014).

However, knowledge alone has been insufficient to provoke needed legislative action in Canada. The Organization for Economic Co-operation and Development (OECD, 2015) found that Canada allocated about four percent less than the OECD average to social supports which would serve to reduce poverty. Wealth disparities have, in fact, reached "unprecedented levels" (OECD, 2015, p. 40), and health consequences

unsurprisingly ensue. For instance, the United Nations Children's Fund (UNICEF, 2013) recently ranked Canada's child well-being as 17th among 29 advanced nations. Clearly, more action is needed to reduce poverty and associated health consequences.

Barriers to Action are Complex

The reasons for the lack of research use and recommended policy action are complex and contextual. Scholars studying policy change have long agreed that research findings compete with other interests, ideologies, and ideas (Clavier & de Leeuw, 2014; Lomas, 2000; Weiss, 1979). In Canada, a known barrier is the provincial and federal governments' division of responsibility for health and social programs (McIntosh, 2004). The bulk of responsibility falls on the provinces, which are increasingly "expected to do more with less" (Lasker, Weiss, & Miller, 2001, p. 180), and with limited cost sharing from the federal government (Raphael, 2010)—a reflection of a broader ideological force.

Canada's history of neoliberalism perpetuates and justifies policy inaction both nationally and globally. Neoliberalism arose in Canada during the 1970s under the misguided notion that economic growth would ensure prosperity and well-being for all Canadian citizens. In actuality, neoliberal policies and politics ensure that privileged individuals have more influence than the poor (Coburn, 2010). Examples in Canada of how such ideology is manifested include changes to the tax structure and inflation/living costs outpacing minimum wages in the 1980s (Raphael, 2010). Such neoliberal economic policies emphasize profit over people, and require both strong regulation of the market and social movements (Sanders, Baum, Benos, & Legge, 2011). Thus, policy action will require far more deep and complex strategies to remediate poverty (Wright, 1994).

Integrated Knowledge Translation (iKT) Partnerships Promote Change

In addition to ideological barriers, there is a limited understanding and application of skills, tools, and approaches likely to promote research use in government. Research about the social determinants of health has been primarily disseminated didactically and passively (e.g. academic journals, online publications) which is unlikely to instigate change on an individual or organizational level (Wensing, Bosch, & Grol, 2013) and may not be relevant to decision makers. Rather, a more interactive approach is needed to operationalize 'upstream' investments in the social determinants of health (National Collaborating Centre for Determinants of Health, 2014). Integrated knowledge translation (iKT) offers the potential to more productively move research into action. In iKT, researchers demarcate a commitment to engage with "knowledge users" at the outset of any research endeavor, to ensure that the research products are relevant for the contexts in which change is warranted (Canadian Institutes of Health Research, 2016). Thus, the central aim of iKT is research use (Denis & Lomas, 2003).

The iKT Partnership Under Study

Our iKT partnership—Families First Edmonton (FFE)—was initiated in the early 2000s. FFE was, in part, provoked by the re-election of a provincial right leaning party in 2001, which implemented unprecedented austerity measures across the health and social service sectors (Quality of Life Commission, 1996). Many individuals across the province who were involved in serving low-income families had a shared concern about the long-term implications of these measures. The partnership was specifically initiated by individuals involved in the Quality of Life Commission (2000)—a local advocacy group in the capital city—who leveraged their networks of individuals working in community, government, and academic settings to garner interest and support the partnership.

Partners involved in FFE were diverse and included funders, knowledge users, and researchers that criss-crossed different sectors (i.e. community, government, academia), levels of governments (e.g. regional, municipal, provincial), and jurisdictions (e.g. recreation, transportation, income support, housing). The founding partners represented 10 organizations, including: (1) Alberta Health Services (formerly, Capital Health); (2) Alberta Ministry of Health (formerly, Alberta Health and Wellness); (3) Alberta Human Services (formerly, Alberta Human Resources and Employment and Alberta Employment and Immigration); (4) Alberta Mental Health Board; (5) City of Edmonton Community Services; (6) Edmonton Aboriginal Urban Affairs Committee; (7) Edmonton and Area Child and Family Services Authority – Region 6; (8) Edmonton Community Foundation; (9) Quality of Life Commission; and (10) Community University Partnership for the Study of Children, Youth, and Families. The United Way of the Alberta Capital Region later joined and supported the strategic direction and funding of FFE. At an early stage, FFE lost involvement from Child Services (a provincial government ministry) following a personal conflict, but later gained input from this group following the re-organization of provincial government departments and election of a new leader.

In 2005, the partnership secured funding from the Canadian Institutes of Health Research and the Alberta Heritage Foundation for Medical Research to develop a community-based research study. The partnership proposed to conduct a randomized control trial that evaluated the impact of different forms of service delivery to low-income families (Drummond et al., 2016). As the partnership gained momentum, a governance structure was implemented to guide decision-making and other local organizations joined and participated in the design and implementation of the research project, including Bent Arrow Traditional Healing Society, Kara Family Resource Centre, the Multicultural Health Brokers Co-Op, and YMCA of Edmonton. The primary investigator of FFE, JD (co-author) led ongoing meetings to develop recruitment strategies and monitor intervention fidelity. The project charter (Families First Edmonton, 2003) provides further detail about their vision and several guiding principles (such as mutual respect, practicality, and accountability) that guided the partnership and the research.

After the randomized control trial interventions concluded and data collection was still ongoing, partners knew they would have to wait for the final research results. During this time, partners made a decision to continue to work together and generate interim data analyses that would be relevant for use within their organizations; they renamed their efforts "Putting the Research to Work" (PRW) in 2010–2012, which is the specific phase of the partnership under study in this paper. The FFE research database, available to PRW partners, included an abundance of information of over 1100 children living in low-income households across over 1400 variables. Examples of potential interim data analyses included demographic profiles of vulnerable low-income cohorts (e.g. single parent, first nations, immigrant), health and mental health outcomes overtime, indicators about quality of life and school achievement, and the number of visits to health and social services. Furthermore, caseworkers who worked directly with participant families had recorded systematic barriers to accessing services and family decision-making processes.

The FFE work informs two phenomena. First, because the FFE study grew out of a desire to improve service delivery to low-income families, the FFE database is rich with information about families living in poverty, including changes in social, health, and economic outcomes over time. The second phenomenon—and the focus of this study—is the iKT partnership and its efforts to translate research about poverty into government. The specific objectives of partnership understudy were to (a) create and implement a plan to assist partner organizations in using research knowledge generated from the FFE study and (b) develop a knowledge translation model that could be used to guide other partnerships. Accordingly, the purpose of this study is to describe the factors that iKT partners identify as important for using research findings within and across municipal and provincial governments. Our research question was: What are partners' experiences with moving knowledge-to-action within and across municipal and provincial governments?

Methods

Qualitative description (Sandelowski, 2000) was used to answer our research question. This methodological approach was used to transform the "everyday language" (Sandelowski, 2000) and learning of the iKT partners into a succinct description of the phenomena under study. Ethical approval was obtained from the research ethics board at the University of Alberta.

Sample and Saturation

We used a purposeful sampling approach and conducted interviews with partners who were knowledgeable about and deeply involved within the PRW partnership. Interviews spanned from 2010 until 2012 and included 23 partners, which is a comparable sample size to similar qualitative description studies and in studies using qualitative content analysis (Mason, 2010). We assessed the richness of our data in light of this comparison, which gave us confidence that data saturation had been achieved.

We further considered six other factors affecting saturation, which Morse (2000) outlined as "the quality of data, the scope of the study, the nature of the topic, the amount of useful information obtained from each participant, the number of interviews per participant, [and] the use of shadowed data" (p. 3). In our study, partners were eager to delve into the topic and disclose details of their experiences with applying research knowledge in government: the quality of the data was excellent, the nature of the topic was easy for participants to describe, and all participants provided useful information. Four of our participants were interviewed twice (once in 2010 and once in 2012). Furthermore, several partners facilitated saturation by sharing what Morse (2001) called "shadowed data" (p. 291), which refers to describing the actions, opinions, and behaviors of others. Specifically, partners divulged the perspective and responses of leaders within their departments. Partners who participated in our study represented different organizations and departments, but all had a shared interest in promoting research use to improve the lives of low-income families. This commonality among partners facilitated saturation.

Data Generation

Interviews were audio recorded and lasted anywhere from 30 to 60 minutes in length. Topic areas for interview questions were generated with core iKT partners and refined by MM (primary investigator) and SL (research coordinator) who both conducted the interviews. Generally, an interview began with questions that obtained information about the partner's prior history with the partnership (e.g. Can you describe your involvement with the PRW project thus far?) to inquiring about present interest (e.g. What are the current priorities in your organization or system?) as well as future priorities (e.g. Who do we need buy-in from and how do we get it?). The interviewer used prompts to clarify and obtain more information (e.g. Given the current priorities you have spoken to, what should we be doing now to ensure research will be used?).

Analysis

Our qualitative content analysis unfolded as an inductive, iterative, and abductive process. We used a "conventional approach" (Hsieh & Shannon, 2005), meaning that the primary author LH began by reading the entire set of transcripts repeatedly. After understanding the data holistically, LH began to code and highlight sections of text that captured patterns and persistent concepts about barriers, facilitators, or strategies related to iKT. Labels for codes were derived directly from the words of partners. In consultation with coauthors (MM and SL), LH grouped similar codes into categories and wrote a summary of each category, describing its contents and its relationships with other categories.

Categories were reworked, and if necessary, relabeled, until both internal homogeneity (ensuring that all of the data within the category fit) and external homogeneity (ensuring that the differences between categories were clear and distinct) was achieved (Mayan, 2009). We used memoing to document how the analysis changed as categories matured (Mayan, 2009). The initial categories were shared with core partners and their feedback was used to modify the analysis until these partners were satisfied with the final categories as presented here. To derive themes, we asked critical questions about how the categories were related. Sensitizing concepts (i.e. the words of partners) were captured and considered in every inductive step of our analysis (van den Hoonaard, 1997).

Rigor

The primary author discussed preliminary findings with two central PRW partners (MM and SL) early and incrementally, ensuring accurate representation. Furthermore, our findings resonated with individuals with previous involvement in the partnership (such as JD and SR), as well as current government partners, who were either involved in PRW or working in partnership with researchers on projects building on PRW. This suggests that the phenomena had been accurately represented and relevant. Other strategies included maintaining an audit trail, using peer review among the research team, and describing and referencing other information about the project so that readers could determine if and how the results may apply to their settings. We also followed three verification strategies: (1) methodological cohesion was maintained by following the principles and strategies of qualitative description; (2) sampling was appropriate and adequate; and (3) researchers practiced reflexivity (Morse, Barrett, Mayan, Olson, & Spiers, 2002).

Findings

Partners

Participants represented diverse professional spheres including researchers in academia (n = 9), mid-level managers and senior public servants in government (n = 8), and executive level leaders within community and funder (n = 6) organizations. The eight partners working in government represented two levels (i.e. municipal or provincial) and oversaw multiple jurisdictions (e.g. housing, transportation, recreation). Overall, 23 partners participated in 25 interviews. The majority of partners interviewed identified as female (n = 19). Personal information about age, ethnicity, and socioeconomic standing were not collected.

Bureaucracy as a Structural Barrier to Research Use

Partners recognized bureaucracy existed foremost in government and acted as a structural barrier to their momentum, autonomy, and productivity. Specifically, government partners identified that their "work within the existing structures" of government was "bound by [their] rules and process," particularly for partners in a position of "low official authority" (e.g. middle managers). According to government partners, bureaucracy made it difficult for issues "to get traction" internally. This difficulty was, in part, created by organizational culture, norms, and structures that rewarded partners for prioritizing an "administrative point of view" and discouraged them from divorcing their "very specific institutional interest." As such, partners discussed the challenges of making change both *across* and *within* organizations.

Bureaucracy impeded research use across organizations

Partners described a tension between their organizational goals and their collective iKT goals. Despite government partners' belief in the value of the project and desire to make changes to support low-income families, their work for the project was done "off the side of their desk" and met with resistance. One example that partners discussed was their attempt to develop a "universal application form." Partners knew that low-income families had to complete a tremendous amount of paperwork to qualify for various programs and services. For instance, separate applications existed to determine eligibility for day care subsidies, income support, and affordable recreation, creating an arduous and time-consuming process for low-income families. Despite numerous discussions, partners working at both provincial and municipal levels expressed frustration about their "individual structure" and conflicting priorities that made compromises across organizations difficult. One longstanding partner recalled thinking, "oh this will be easy," but soon realized that her superiors felt the process would be too resource intensive for an initiative that would "reap … benefits" outside of their organization.

Bureaucracy impeded research use within organizations

In addition to the challenges of making changes across organizations, partners cited "layers" that posed a barrier to instigating change internally. Those in mid-level managerial positions were known to have a "limited scope" and "level of influence was strictly restricted by [their] position within the organization." When asked how to draw attention to issues in their system, partners indicated they needed to go "through the appropriate chain of command." In adhering to these prescribed roles and duties, partners valued relationships, in part, because they served to remove "some of the bureaucracy" and frequently cited "champions" as necessary to maneuver information strategically within their organization:

> Change champions are HUGELY important in the government … You need to have the right person with the right level of influence in the right position at the right time. …so if [Bernice] knew that [her supervisor, Bob] was working on something that was towards goal A, she could then position things so that they aligned with his goals and they could get moved forward … her power came from her direct voice to [Bob], so she knew she could take information from us [and] present it to him in a way that [aligned] with what he wanted to achieve.

While partners valued their relationships, they simultaneously recognized the impermanence of these connections due to individual or organizational changes (e.g. restructuring, cabinet shuffle, retirement). As such, many partners felt that the potential for making change was "too dependent on the people," as partners "won't be here forever." Rather than solely rely on relationships, partners speculated that "chang[ing] the process of how you implement a policy" would have a "greater impact" than policy change alone.

External Pressure as "Politically Potent" for Research Use

In contrast to the difficulty that bureaucracy created for generating momentum internally, partners explained how advocating for "change from the outside" of government can drive changes more efficiently. "External pressure," as partners called it, is "politically potent" and dictates the "broader priorities" of government leaders because it is democratically, what their "constituents are asking for." Civil servants identified that, since accountability is one of government's "public service values," "formal leaders" must respond in some way to external pressure. One partner provided multiple examples of external pressure, including "media coverage" events with the potential for media coverage, negative occurrences (e.g. "high homicide numbers"), external meetings, protests (e.g. "against the cuts in education"), and community groups (e.g. Public Interest Alberta).

Government response to external pressure

Partners explained how external pressure can "grab the attention" of decision-makers in government when citizens demonstrated solidarity, commitment, persistence, and tenacity over a shared concern. One partner recalled:

> There have been groups in Alberta that have been very persistent in terms of trying to keep poverty on the [government] agenda … for example, Public Interest Alberta… they've done a pretty good job of pushing … Then this group from Calgary that is developing their own poverty reduction plan. Those are initiatives that aren't coming down from government. They are more from the community.

Partners recognized that external pressures shaped the priorities of their elected leaders, which filtered into senior level priorities and gave civil servants "permission to engage" in projects that aligned with "what's happening politically" and "justify, at the end of the day" why resources were allocated a certain way. As one government partner put it, "MY boss needs to be involved … if it's HIS plan it's OUR plan." By contrast, partners in community demonstrated more "autonomous decision-making" to make change "happen faster." One partner explained that community non-profit agencies are often funded to "perform [their] mission, not necessarily to run this particular program in this particular way," which "frees agencies up" and permits them to "back off and say a year later —'oh it didn't work let's try something else.'" This autonomy, in part, explains why partners described non-profits as "change leaders."

Government response to poverty

Partners attributed the limited external pressure on poverty to the public misconceptions and a "culture of independence." One partner explained, "we live in a province where we blame those who are low income and we say, 'it's your fault … you are not working hard enough.'" However, "windows of opportunity" do open. Following a change of premier in Alberta, one community partner stated:

> We were a little concerned about even bringing up poverty. However, given the regime change that happened, all of a sudden this is no longer a four-letter word. The Province is actually open to having a conversation about poverty and using that language, 'yes we have a poverty problem,' which is refreshing.

Partners universally agreed that the change in language represented shifting values. Concurrently, there was a growing interest in "mining the data" from the FFE research project, which gave partners an opportunity to work strategically together to see how they could put the data "to work" while waiting for the final research question to be answered.

Internal Insight as Key to Informing External Pressure

While partners recognized that external pressure could be a powerful change agent, it was most productive when paired with what partners called "internal insight." Partners described "internal insight" as government partners' knowledge of when and how to best maneuver and poise ideas and information within government. Researchers obtained valuable internal insight by drawing on and seeking advice from "allies" (current or previous project partners) situated in community and government, who could "easily see … what the sector needs," identify what is "going on in the environment," and advise how and when to proceed with change efforts. For example, internal insight was garnered by a researcher following a meeting she had with government partners:

> so apparently with the new administration, the new Premier sent out some sort of internal document [that encouraged people to] work together and share data. [We] asked [our partners] if [they] had noticed a change at all in terms of people being willing to share information and [they] said, 'yes, absolutely and things are moving' … in a way that they've never seen before, ever … I'm just going to say it right now, [our research colleague] is going to have to be extremely timely with his analysis if he wants to at all maximize any of the work [he has] put into this project … the government could come to us [anytime] and say, "what services [did] families access … over the course of the study?

Informing "external pressure" with this "internal insight," according to partners, was often necessary to draw attention to issues in a productive manner. Partners provided examples that explained why and how external pressure without internal insight could be counterproductive: (a) the media can draw attention to issues by generating a "perceived crisis" and controversy, which could slow progress; (b) the leader of a community group could be perceived as difficult to work with, which prevents collaboration and problem-solving; and (c) protests can generate controversy and lack the specificity needed for progress to occur. Once a calculated response to external pressure was achieved, partners emphasized that research use was promising when "aligned with a set of [issues and] values at a political level." As one government partner suggested, "it is easier to hook your evidence to something that has momentum, rather than trying to use your evidence to create momentum." Partners further delineated that internal insight provided vital information about (1) context and (2) diplomacy.

Internal insight about context

Ongoing conversations and meetings—which provided researchers with precious knowledge of government context (e.g. timing, leverage points)—were critical to identifying opportunities for research use. Research partners were eager for insight ("an inkling") into the "hottest question[s]" in government to "be able to start working on something" and "advance a little bit faster," rather than "sitting here" and "trying to figure out what [government partners] want." Such insight allowed researchers to capitalize on "narrow windows of opportunity," while being sensitive to timing (e.g. election cycles). One researcher commented about a meeting she had with senior government managers and directors, in which she discussed the potential of the FFE data set:

> I said, 'if you want to know about child mental health and what happened after we put in various … service interventions, we have it. If you want to know what it means to have somebody … helping you navigate the health system … we will [know that].' After the meeting, [they] basically ran across the floor to me and asked me for my card. They are ecstatic about the potential to move forward.

Conversely, the absence of internal insight stalled partnership productivity and momentum. For example, one researcher expressed concern when a community partner cancelled a meeting that the researchers needed "desperately" in order "to get going" with their analysis.

Internal insight about diplomacy

Partners noted that "diplomacy" within their system was important to "maneuver information … within the existing structures." Government partners emphasized the importance of "a communications person" or someone to brief higher level authorities with the language that might "perk their ears" and simultaneously not "offend anybody." This sensitivity to communication was critical to the sustainability of the partnership as the data cleaning and analysis was unfolding. For example, when researchers learned they were facing a "null finding" about the effect of existing community practices, researchers feared their results could be used to "justify cuts," rather than have a nuanced discussion around service delivery. A long-standing research partner with FFE discussed the need for a metered process, in which outcomes were anticipated: "We want to move forward but at the same time, if we do something right now, is it gonna be well received? Is it gonna be appreciated? Will it even do more damage?"

To ensure the appropriate platforms and opportunities for necessary dialogue, partners "working in the field" provided information on opportunities for alignment, instances of potential conflict, and facilitated connections with "the movers and shakers." This approach also ensured the continuation of the partnership, which had been previously under threat. One partner explained the challenges of getting the partnership the "proper attention it needed" following a clash of opinions and the loss of involvement from a "big player" within the provincial government:

> After that, I learned a little bit more about some of the political sensitivities that I wasn't aware of when I first joined … I didn't know there was some resistance within the system. When I found that out, that helped me understand how to leverage it better and communicate about it.

As another partner from government put it, "if you understand the ideology, then you WORK it."

Discussion
Principle Findings
The results from our study provide awareness into making change within government. In short, iKT partners described: (1) The prescribed and limited scope of civil servants created by bureaucracy, which stymied their ability to instigate change within government, and (2) The politically potent combination of external pressure and internal insight, which served to inform all partners of the context and diplomacy necessary to advance the partnerships' priorities and create opportunities for research use within and across government. An illustration of these findings can be seen in **Figure 1**.

Limitations of Integrated Knowledge Translation (iKT)
iKT principles have many shortcomings for targeting policy action. In Canada, funders expect applicants to subscribe to the principles of iKT, yet they have been criticized for being technocratic (Greenhalgh & Wieringa, 2011) and subject to power and controversy (de Leeuw, 2016). Furthermore, our findings suggest that the *Diffusion of Innovations* (Rogers, 2003)—a theory dominating the entire knowledge utilization
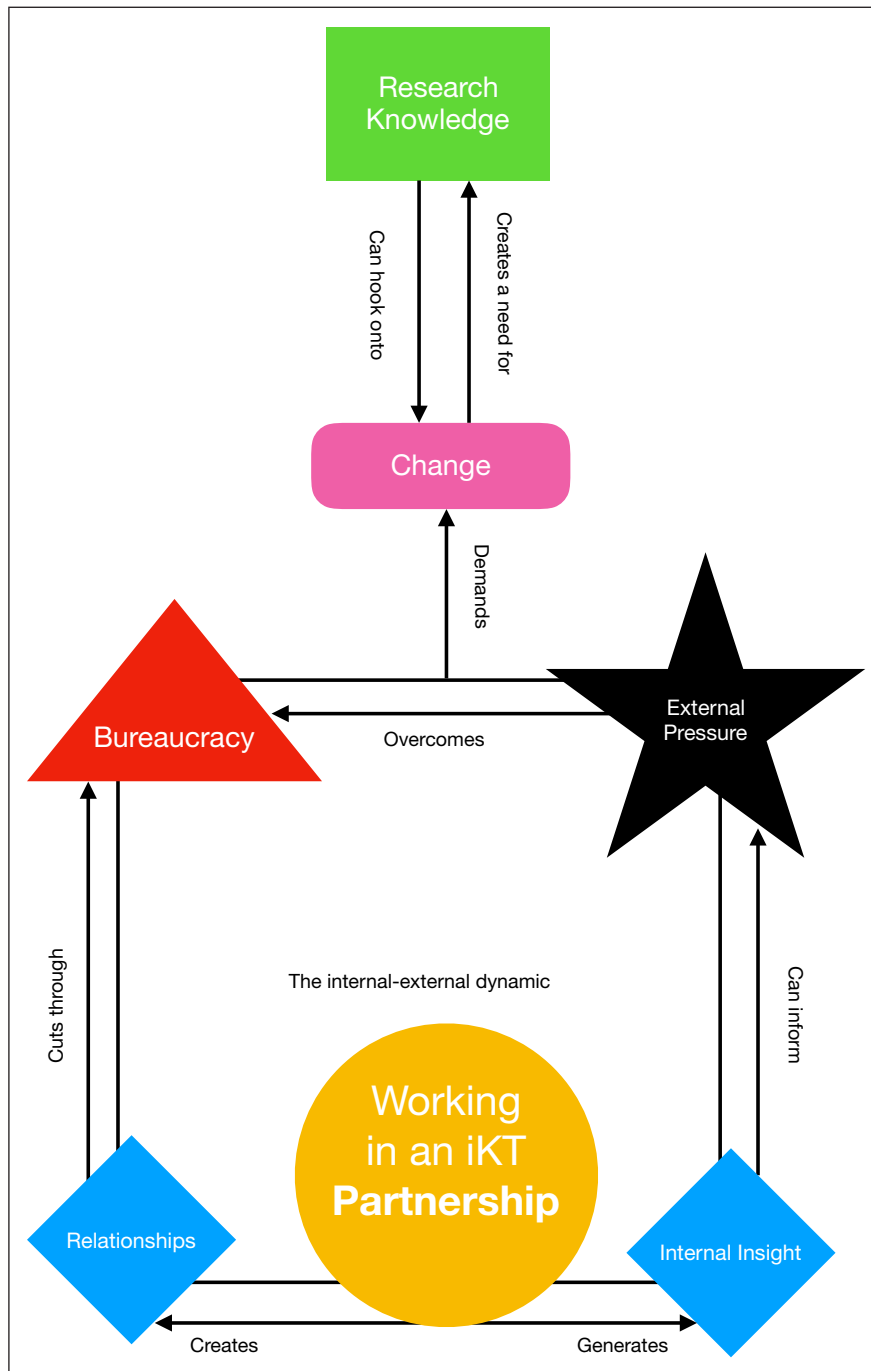
Figure 1: The External-Internal Dynamic. This figure illustrates the thematic patterns arising from the data when asking, "What are partners' experiences with moving knowledge-to-action within and across municipal and provincial governments?"

field (Estabrooks et al., 2008)—bears little relevance to research uptake *within* bureaucratic organizations such as government, where structural factors, rather than the characteristics of innovations, dictate the absorption of knowledge.

Our findings revealed how iKT partnerships can generate contextual and diplomatic insight, which can be used to improve research use. While our findings confirm those of Redden (2014), who found that the media is likely to generate a response from government, our findings add that the media may generate what partners in this study called a "perceived crisis" and provoke "defensive behavior" or an unwanted response (action or inaction) from government. Thus, we suggest that an *anticipated response* should be pursued, and that external pressure should be applied diplomatically and in light of political context. These insights contribute to Smith, Bambra, and Hill's (2016) call for engaging the general public to action.

A growing number of democratization processes provide hope for engaging the public. Social media, while under fair scrutiny for generating conflict and spreading misinformation (Vaidhyanathan, 2018), can be a powerful tool for generating interest in and desired momentum on social issues: Platforms such as Facebook or Twitter are accessible and ubiquitous; content can be shared widely at unprecedented speed; and little effort is often required on behalf of the user to demonstrate solidarity (e.g. sharing information, liking comments). While we agree social media is a tool that must be used with caution (Loader & Mercea, 2012), we argue that the utility of such platforms should not be dismissed. We suspect that sharing individual narratives, captioned photos, and lay summaries of academic research or critical press may be powerful mechanisms to promote public interest surrounding poverty reduction.

Engaging with Government without being Co-Opted

In light of our findings, we caution the use of research to support current and prospective government initiatives. According to Nowotny and colleagues (2008), a broader paradigm shift in academia entitled "mode 2" knowledge production (para. 2) suggests that research processes are being transformed from being driven by scientists and their host institutions (mode 1) to responding to issues identified by and affecting society at large (mode 2). As such, researchers are (and will continue to be) expected to provide "grist for the mill." This analogy was used by Weiss (1979) and, similarly, by one of our partners to describe situations wherein research findings serve as "political ammunition" that align with entrenched interests or ideologies (p. 429). While our findings support Weiss's claim that "piggybacking" onto government initiatives can be strategic and practical, we argue that researchers must challenge the status quo when needed and capitalize on opportunities to apply external pressure to government.

Researchers are in a unique position to challenge government policy. Unlike partners in community organizations, which are often heavily funded by government, researchers do not have the same fiscal incentive to be cautious in applying external pressure. Furthermore, our findings about internal insight contribute to unpacking what Scriven (1999) termed a "black box" of research use in government settings. In particular, the essential context and diplomacy that partners in this study described may explain, in part, why direct interactions (interpersonal contact) between policy makers and researchers have consistently shown to increase research use (Innvær, Vist, Trommald, & Oxman, 2002; Lavis, Oxman, Denis, Golden-Biddle, & Ferlie, 2005).

External Leverage to Overcome the Inertia of Bureaucracy

Since bureaucracy is likely to characterize government for years to come, it is important to learn how to use strategic leverage points to overcome it. iKT draws on community-based research principles (Cargo & Mercer, 2008), which involves reversing traditional power structures (Wallerstein, 2006) and bringing issues identified by those who want change (e.g. constituents, service providers, middle managers) to those with a more dominant voice (e.g. elected officials, chiefs of staff). However, we found that this "bottom up" (Panda, 2007) approach can be a fruitless and frustrating endeavor within government. As our partners explained, civil servants in middle managerial positions hold little change-producing power. Thus, researchers attempting to influence civil servants who are in middle management (Ouimet, Landry, Ziam, & Bédard, 2009) or in policy functions (Lavis et al., 2003) may have the wrong primary target. Rather, to influence elected officials productively, community-university partners should harness their knowledge of government and engage constituents in applying external pressure.

Future Research

Future work about research use in government settings could benefit from a more detailed evaluation. Specifically, more knowledge is needed on how to harness internal insight to inform external pressure. Research questions may include: What internal insight is important to garner from those working within government?; What external efforts are most persuasive to decision makers, and when?; What is a suitable role for researchers in applying external pressure?; How can constituents coalesce over mutual concerns so that shared expectations can be presented to government authorities in unity?; How should iKT partners involve constituents in driving change to reduce pervasive social issues, such as poverty?; How can iKT partners overcome resistance underpinned by public ignorance/misconceptions?; What else is needed, beyond awareness, to motivate the public to push poverty onto the political agenda?

Limitations

Elected officials, who were not directly involved in PRW, are not represented in our study. These individuals could lend further insight and description into the phenomena under study. Notwithstanding, our results amplify and distil the voices of iKT partners who have a long history of work within and close to government,

and its elected officials. These perceptions, which Morse (2001) called "shadowed data," can "provide the necessary generalizations on which to base subsequent work".

Conclusion

The partners in this study began their work at a time when iKT and partnership work was rare and not well understood. Through a deeper understanding of one another's professional spheres, partners identified that external pressure, when informed with internal insight, stimulated political attention, movement, and priority in a way that cannot be generated internally. These findings must be considered when policy action or research use within government is desired. Namely, researchers must recognize when unpopular, albeit necessary, research is needed to challenge the status quo, and simultaneously appreciate the precious knowledge that civil servants hold of the context and diplomacy required for change. The external-internal dynamic described in this paper can be used to instigate change within government. While many organizations contribute to health equity in valuable ways, government bodies hold jurisdiction to make changes that would serve to address the root causes of poverty and associated health inequities, such as raising minimum wage, ensuring affordable housing, and progressive taxation.

Competing Interests

The authors have no competing interests to declare.

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